



Bay 220

THE
MEDICAL TIMES:

A
JOURNAL OF MEDICAL SCIENCE,
LITERATURE, CRITICISM, AND NEWS.

NEW SERIES.—VOLUME THE THIRD.

OLD SERIES.—VOL. XXIV.

JULY 5, TO DECEMBER 27, 1851.

LONDON:

PUBLISHED BY JOHN CHURCHILL, 46, PRINCES-STREET, SOHO,
AND SOLD BY ALL BOOKSELLERS.

MDCCCL.



WELLCOME INSTITUTE LIBRARY	
Coll.	SER
Call	W1
No.	/042

I' Embay.

WE close to-day the present Series of the "MEDICAL TIMES," and commence, with the next Volume, what virtually may be considered a new Journal. It will not be out of place briefly to review the materials which have constituted the Volume whose last pages we are now writing, and whose character will be the best evidence of the zeal with which we have sought to give our readers the most accurate and most important information.

The collateral Sciences, which have grown up with such wonderful rapidity during the last half century, are destined to exert a profound influence on the art of Medicine. It is true that these sciences are, in spite of their recent extraordinary development, still distant from that point where they can give us any very great assistance. But that they will attain that point,—that the time will come, and come speedily, when Organic Chemistry, and Histology, and Physiological inquiries, will change the whole aspect of Medicine,—will enlarge our knowledge of what we already have investigated in part, and will lay open to us new regions, of which we at present see merely the dim outlines,—no one can doubt, who has recognized the direction in which medical inquiries must be pushed, and who has become acquainted with the precise and subtle modes of investigation with which these sciences are studied.

Dissatisfaction has been felt by some at the meagre benefits which have resulted to the most important part of Medicine—the Art of Curing—from the labours of the Microscopist and the Chemist: but such reproaches are unfounded. It is premature, at present, to condemn Chemistry as powerless, or Physiology as useless, in the improvement of Therapeutics. Even if we already could not cite instances to the contrary, it would be sufficient to say that these sciences are still in their infancy, and display as yet scarcely any of those forces which will incontestably be the attributes of their maturer development. It is the function of the present generation to cultivate these sciences; and it will possibly be the office of the next age to apply them. But the application will be made, and already we see traces of its coming. The first results may be destructive,—deep-rooted maxims may be shaken, and time-honoured beliefs dishonoured; but the revolutions of science are not like those of the political world, and old creeds are seldom entirely swept away until their place has been supplied with better attested truths.

It has been with the conviction of the immense importance to Medical Science of Organic Chemistry, and of Histology, that we have placed before our readers, in the present Volume, two Courses of Lectures which must be held to be of the very highest class. No praise of ours could possibly enhance the professional reputation of Dr. BENCE JONES and Mr. QUEKETT; but we may be permitted to say, that their admirable Courses of Lectures merit the attentive perusal of every one who desires to comprehend,—and who does not so desire?—the influence which the science of the day will eventually exert on practical Medicine.

But although we have endeavoured to procure for our readers the most accurate and complete information on these two subjects, we have not neglected those topics which are at the present moment of more immediate and practical use. In our Hospital Reports, and in our Clinical Lectures, delivered by the most renowned Physicians and Surgeons of the Metropolis, we have endeavoured to place before our provincial readers the practice of those great Hospitals in whose wards they may themselves have once observed diseases and their treatment.

We can also point with pride to the numerous and valuable Original Communications which have appeared in the present Volume, and which form one of the most valuable portions of our Journal.

Nor can we pass over, without a tribute to their utility, their eloquence, and their truth, the admirable Lectures of Dr. GUY, on Public Health, which have appeared in this Volume. In publishing these Lectures, we have felt as if we had ourselves contributed to the advance of those great sanitary principles which exert so profound an influence on the happiness of nations. Dr. GUY has advocated this cause with the energy of an active benevolence, and the fervour of a deeply-rooted belief. His Lectures are, in all respects, most valuable, and must assist the cause for which he pleads so strongly. With regard to the other departments of our Journal,—the Reviews, and Analyses of Foreign Journals,—we shall only say that we have reviewed in good faith, and have analysed with care. We may have passed over important papers, have condemned good works, or praised bad ones; but if so, our intentions have yet been honest, and our criticisms sincere.

We have had occasion, in the present Volume, to devote many Articles to a subject of the importance of which to the Profession we are deeply convinced. We have not dreamt that we could by any arguments, however cogent, or by any facts, however incontestable, destroy the extraordinary faith of some portion of the public in that singular and incomprehensible fanaticism, which sees truth in an absurd hypothesis, and miraculous power in an inappreciable atom. He who believes without evidence or thought that the dogma of Hahnemann is true, is not likely to be convinced of his error by any amount of either evidence or thought. But we are happy in the knowledge, that our Articles have been found useful in strengthening the hands of those numerous practitioners who have now to contend, in their several localities, with the mercenary and unlicensed advocates of a quackery which is a disgrace to the intelligence and sagacity of the age.

In conclusion we can affirm, with truth, that we have endeavoured to make the "MEDICAL TIMES" both practically useful and scientifically progressive. It requires no light labour faithfully to reflect the aspect of such a subject as Medicine; but that labour we have cheerfully, and we would hope not unavailingly, bestowed. We have great cause to be thankful to our numerous Correspondents, or their liberal and consistent help; and we feel no doubt, that the energy and good faith which have won for us so many suffrages, will continue to gain for us good wishes and generous support.

ORIGINAL LECTURES.

LECTURES

ON

DIGESTION, RESPIRATION, AND
SECRETION.GIVEN AT THE ROYAL INSTITUTION,
TO THE MEMBERS, AND TO THE PUPILS OF
ST. GEORGE'S HOSPITAL.

By H. BENCE JONES, M.D., F.R.S.,

Physician to St. George's Hospital.

[Continued from last Volume, page 636.]

ON THE BILE.

My subject to-day, gentlemen, is the bile, which has, perhaps, given rise to more speculation among physiologists, and more work among chemists, than almost any other which the animal body could furnish. The chemical composition of the bile has formed a subject of inquiry to the very first chemists that have existed, from Berzelius to the present time; but, until very lately, it has not been at all understood. It has also formed the subject of the greatest speculation on the part of the physiologist; and there is scarcely an hypothesis that can be started respecting it which you will not find defended by writers on the physiological properties of the bile. It has been supposed to have the most opposite qualities; and, in fact, there is no limit to the actions which it has been thought capable of effecting. The chemical composition has been most difficult to comprehend, because the bile is a body which can be very easily changed by the different re-agents to which it has been subjected. Even if left to itself, the bile rapidly undergoes change, and new substances are produced from it. Still more rapidly does it change when subjected to chemical re-agents; and hence the opposite statements you meet with in books regarding its composition. It is my object to-day to try and make clear to you, first, the chemical composition of the bile, and, secondly, its physiological properties.

This analysis of the bile shows the kind of substances in it.

Composition of the Bile.

Water	90.44
Picromel (gallenstoff) including fat	8.00
Mucus of the gall-bladder	0.30
Extractive common salt and lactate of soda	0.74
Soda	0.41
Phosphate of soda and lime, and traces of a substance insoluble in alcohol	0.11
	100.00

You will see from it, that it contains water, salt, and fatty matter; it contains also gallensstoff, a peculiar stuff, of which I shall have to speak in this lecture. The bile may be considered as a compound resembling the soaps, which are combinations of fatty acids and alkalies. The fatty acids have not the same composition as the peculiar acid of the bile, which is combined with soda; but, nevertheless, the bile more closely resembles a soap than any other substance with which I can compare it. The most difficult and most complex substance contained in the bile is that peculiar body, gallensstoff, or gall-stuff. It is this which so rapidly undergoes changes, and so readily gives rise to new products,—products which have received so many names, and created so much confusion regarding the constitution of the bile. You may remember, that, in a previous lecture, I spoke of a body called "glycocol," or sugar of gelatine. If gelatine was treated with alkali, sugar of gelatine was produced; and you remember, also, that I pointed out, that if benzoic acid was taken, it passed off as hippuric acid, the latter being nothing more than a compound of the elements of benzoic acid and glycocol.

Relation of Hippuric to Benzoic Acid.

Hippuric acid = Benzoic acid + Glycocol.



It is found, moreover, that glycocol can be abstracted from the bile if rightly treated. This is a most interesting and important fact; and it bears, as you will see, directly upon

[No. 614.—VOL. III., NEW SERIES.]

the composition of the gall-stuff, of which I shall have much to say. The composition of this glycocol is given in this diagram.

Composition of Substances in the Bile Stuff.

Glycocol	..	C ₄	H ₄	N	O ₃	HO
Taurine	..	C ₄	H ₇	N	O ₆	S ₂
Cholalic acid	..	C ₄₈	H ₃₉		O ₉	HO
Glycochloric acid		C ₅₂	H ₄₂	N	O ₁₁	HO
Taurocholalic acid		C ₅₀	H ₄₅	N	O ₁₄	S ₂

Out of the bile, also, can be formed a substance of which you see here, by the kindness of Professor Liebig, a beautiful specimen; it is known by the name of "taurine." It can be obtained without difficulty from the bile; it does not always exist as such in the bile, but can always be obtained from it by re-agents. The most remarkable fact regarding this taurine is, that it contains much sulphur. You will find that there is another crystalline animal substance, viz., cristine, occasionally found in the urine, which contains the same elements as taurine, only in different proportions. Another substance obtained from bile is called "cholalic acid," of which I have here a specimen in tetrahedral crystals. It is not this acid which combines with soda to form the peculiar constituent of the bile, although it can be obtained from human or ox bile. Cholalic acid has the property of combining with glycocol and forming a compound acid, which may be called "glycocholalic acid." It also forms a compound with taurine, which is called "taurocholalic acid." These two compound acids may be obtained from the bile. The bile is not simply a mixture of taurocholalic acid and glycholalic acid, combined with soda; but these two acids can again combine together to form a still more compound body, which is the peculiar organic constituent of the bile. If this constituent, which has furnished so much work to chemists, be treated in one way, one set of products is formed; and if treated in another way, another set is produced. Hence so many different matters have been said to exist in the bile.

I have here a beautiful specimen of glycocholalic acid combined with potash and soda, forming the crystallized bile of Platner. And in this specimen you may see the glycocholalic acid free, and I have here separate specimens of glycochololate of soda and glycochololate of potash.

If bile is decomposed by a very strong acid, and is then left to stand for some time, or even, it is said, if it is left in the human body, and decomposition takes place, a far more insoluble substance, called choloidynic acid, is produced. This acid can also be formed from cholalic acid by boiling it with strong acid; by heat alone the choloidynic acid is converted into an insoluble neutral substance called dyslysin. This acid is probably one of the substances produced in the human body by the bile in its passage through the bowels. If this acid is oxidised, among other products, it gives precisely the same volatile products as oleic acid. Here is another resemblance between the substances in the bile and the fatty substances, of which I have spoken in a previous lecture. Thus much for the composition of this peculiar substance existing in the bile.

I trust I have made it clear to you that there exists in the bile taurine, glycocol, and cholalic acid; that they do not exist as such in the bile, but that they form compound acids, like sulphovinic acid, sulpho-saccharic acid, nitro-benzoic and others; they form highly compound or conjugated acids, which can be broken up by the action of different agents upon the bile. But the peculiar constituent of the bile, as a whole, consists of tauro-cholalic acid and glyco-cholalic acid, combined together, forming a double conjugate acid, which is united with soda.

A peculiar test for the bile has been given us by Pettenkoffer, which, for its beauty, well deserves to be shown to you. If I take a little ox-bile, freed from all mucus, (which can be done by means of alcohol,) mix it with water, and then add one drop of sugar and a little sulphuric acid, free from sulphurous, I shall have what is known as Pettenkoffer's test for the bile. The strength of the sugar should be one part of sugar to four parts of water. A yellow precipitate is first formed; it then deepens in colour, as you see, until it becomes red, and at last a beautiful crimson. The heat produced by the mixture of the acid with the water is generally sufficient for the test. Instead of sugar, acetic acid, and probably other substances may be used.

There is another peculiar substance in the bile which deserves your attention; it is known by the name of cholest-

terine. It differs somewhat in its re-actions from ordinary fatty matter. I have here a beautiful specimen of this cholesterine in crystals. The substance has this re-action: it is soluble in alcohol by the aid of heat, and when cooled it crystallizes out in beautiful plates. It is a substance containing carbon, hydrogen, and oxygen, and may be represented by the formula $C_{81} H_{69} O_3$. It is easy to be determined, from its crystalline form and chemical re-actions; fusing most easily, and burning with a smoky flame. Cholesterine forms the usual ingredient of most biliary calculi. It is rarely that the highly complex acids of which I have spoken enter into the composition of biliary calculi; but the cholesterine, from its insolubility, is much more apt to do so; in fact, but for this substance, gall-stones would be exceedingly rare. Taurocholalic acid dissolves the cholesterine very easily, but glycocholalic acid scarcely at all. Taurocholalic acid is very probably the solvent of the cholesterine in the bile. If in the gall-bladder the taurocholalic acid should undergo any change,—if there should be any loss of its properties, or any conversion of it into another substance, (and it easily undergoes change,) then the proper solvent for the cholesterine is gone, and the cholesterine falls as a precipitate. Very frequently in gall-stones it is found that a small particle of colouring-matter forms the centre on which the cholesterine crystallizes. I have here many thousands of biliary calculi removed from one patient; and mixed with the gravel are little particles of dark green biliary matter. Moreover, little particles of colouring-matter may be seen to form the nucleus of each little stone, on which the cholesterine has crystallized; sometimes cholesterine calculi attain the enormous size of the magnificent specimen belonging to this Institution. Cholesterine is not peculiar to the bile; in this long tube you see crystals of cholesterine removed from a tumour. It exists in the brain, and is formed in atheroma and in chronic abscesses, in tubercles and in pus.

Besides these substances, the bile contains salts; that is, if burned, it gives ashes; and it is found that healthy bile is always of an alkaline reaction, from the quantity of soda present in it. Lastly, the quantity of water contained in the bile is very considerable, but by no means so much as we found in the gastric juice and the saliva; its specific gravity amounting to 1026 or 1030.

Regarding the colouring matter much has been said, but little work has been given to it, except by Berzelius, who states that the colouring matter of the bile and the colouring matter of grass are identical; and that this is so, whether the bile comes from vegetable or animal feeders. This colouring matter, perhaps, is a most important accessory, of which we do not know the physiological importance. On the other hand, it may be only a substance derived from the colouring matter of the blood, after it has served the purposes for which it was formed. Time only admits of my stating that, as far as the examination of Berzelius goes, the colouring matter of the bile and that of the grass are both chlorophyll, and are therefore perfectly identical.

I come now to the quantity of the bile formed. This probably varies very much in different animals and in different human beings. Of course experiments cannot be made as to the quantity of bile in human beings; animals alone become subjects for research in this respect. It has been found, that a cat weighing $2\frac{1}{2}$ lbs. during the most perfect digestion, secreted 11·8 grains of bile in an hour. It appears from experiments in Germany, that the quantity of bile secreted reaches its height about ten or twelve hours after food; that it then diminishes to what it was an hour or two before food. This is a most important fact regarding the physiology of the bile—that it requires as much as ten hours after food has been taken, for it to reach its highest quantity:—

Quantity of Bile at different hours after Food.

		Quantity of Bile.
Cat after eating flesh	2nd hour	7·5 grs.
"	4th "	9·7
"	6th "	11·6
"	8th "	12·7
"	10th "	13·0

From the 10th to the 24th hour it diminished at the rate of ·4 of a grain per hour.

By continued starvation the quantity of bile decreases; and in perfect starvation, no bile passes out of the gall-bladder at all, though the bladder is always distended with bile. In

cases of starvation in human beings, which unfortunately sometimes occur, the gall-bladder is found full of bile, though none can be found in the intestines.

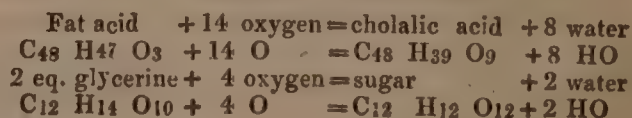
The most remarkable discovery which has lately been made with regard to the bile has been given to us by M. Bernard, a French physiologist, of whom I spoke in a previous lecture on the pancreatic fluid; the discovery is perfectly original, and deserves the very greatest praise; and it will probably be found one of the most important with which we have lately been made acquainted.

Not only does the bile of those who feed on starch and vegetables contain sugar, but sugar is found also in animals that feed on meat only. During the period of digestion the liver always contains much sugar. M. Bernard has found three times, even in man, that this is the case. I have here an extract from the liver of one of the persons on whom he made his experiments. The sugar cannot be long in the liver without undergoing change,—being converted perhaps into lactic, or some other acid. Ten or twelve hours after the death of a man or an animal, no sugar would be found in the liver. One liver experimented upon by M. Bernard was obtained from a woman who was executed in Paris for murder. He found that an extract obtained from this liver manifestly contained sugar; and I hope to be able to show you this on a portion of this extract, as he showed it to me.

If I boil this extract in water, I shall dissolve the sugar, if there be any present, and then I shall have a solution to which I can apply my test—that of sulphate of copper and liquor potassæ, by which a reduction will instantaneously take place, such as you have frequently seen. Here is the rapid reduction. M. Bernard finds that in all kinds of animals—mammifers, birds, reptiles, fish, and molluscs—the liver, during digestion, contains sugar. By continuous abstinence, in warm-blooded animals, very much of the sugar disappears. During the period of digestion, the blood which passes out of the liver by the hepatic vein always contains a very considerable quantity of sugar, whatever the nutriment may have been. This is different, perhaps, from what we might have expected at first sight. We might have supposed that the sugar would be absorbed by the veins, and as the blood passed into the liver, we should have much more sugar than as it passed out. M. Bernard found that dogs kept on flesh alone for three, four, five, six, or eight months, gave no sugar in the blood passing into the liver by the vena porta, but in the blood passing out of the liver sugar was distinctly present. Lehmann, a German chemist of great authority, has also found, in five different horses, from ten to sixteen times as much sugar in the blood that passed out of the liver as in that passing into the liver. When the animal was fasting, the blood of the vena porta gave no sugar. The hepatic vein gave it easily and distinctly. Not only did he detect sugar by the reduction of the copper,—which reduction might be said to arise from some other cause,—but he found that it could be fermented, and that carbonic acid and alcohol could be thus obtained. Sugar has also been found in the liver of the foetus.

M. Bernard says that the function of the liver is twofold: one, the formation of bile, which is thrown out; and the other, the formation of sugar, which is kept in. He has gone still further, and has endeavoured to establish the influence of the nerves in the production of sugar. He thinks that the section of the pneumo-gastric nerves near the heart causes the sugar to disappear from the liver altogether; and that by exalting the action of this nerve, and especially by irritating it at its origin in the brain, the quantity of sugar thrown out can be greatly increased. I shall have occasion to return to this fact in my lecture on diabetes. However this may be, there can be no doubt that by the change which the blood undergoes in the liver sugar is actually produced. The facts are these. Much fatty matter is found going into the liver by the portal vein with but little sugar; and from the hepatic vein there comes out much sugar, with but little fat. The explanation of this has not yet been fully ascertained. A conjecture has been given by one who always abounds in valuable conjectures—M. Schmidt, a German physiologist. I may show you this possible conversion of fat into sugar thus:—

Relation of Fat to Bile.



Suppose that going into the liver we have fat consisting of fatty acid and glycerine, and that coming out of the liver we have bile and sugar; then supposing the process of oxidation to take place—that is, that the fatty matter obtains oxygen—we have fatty acid and 14 eq. of oxygen, which give the elements of cholalic acid and water; whilst from glycerine with oxygen we have the elements of sugar and water. Thus, if we suppose that in the bile a process of oxidation is taking place, we have an explanation of the fat going in and the sugar coming out. I give this simply as a conjecture, I do not say that it is so; for no such change has been effected out of the human body by acting on fat. It is, at any rate, an explanation which enables us to remember the fact, that fatty acid and glycerine go into the liver, and that coming out of it we have bile acid and sugar. The bile acid is thrown out, and is used for purposes of which I shall have to speak; and the sugar passes in, continues in the circulation, and is used for further purposes in the animal economy.

What, then, is the physiological action of the bile? The most opposite and the most important actions have been attributed to it. It has been said to promote digestion, and to stop digestion. Some say that it neutralises free acid, thus lessening irritation; others, that it increases the peristaltic action of the bowels, thus increasing irritation. It has been said to be partly absorbed into the system to support respiration, by furnishing a highly carbonaceous body. Some have said that it promotes the absorption of fatty substances; and by others it has been said to have no action upon fats at all. To solve these questions was the difficulty. Experiments were tried by tying the common duct through which the bile passed; but this is not the way to arrive at a satisfactory result. If the bile is not suffered to pass, a stoppage is put to the functions of the liver; the whole order of the system is thrown out, and general disorder is produced. In 1844 a new mode of experimenting was begun by Schwann, who collected the bile without allowing it to pass into the intestines, by means of an opening similar to that which I mentioned in the case of the pancreatic duct. The action of the liver thus went on as usual, and all the functions of the body were performed without impediment. Twelve dogs lived from sixty-four to eighty days without any bile passing into the intestines; one dog, thus experimented upon, lived four months; and another, belonging, I believe, to M. Bernard, lived a year in this state. It was found that dogs thus treated ate much, and digested badly, partly in consequence of the unnatural fistulous opening. They did not lose much weight at first; but after a little time they lost their appetite, became thin, and ultimately died. The bowels acted as regularly and perfectly as if the bile had passed in the usual manner. Professor Nasse had a dog that lived from the 12th of August to the 27th of January. The quantity of bile varied with different kinds of food between 31 grains and 370 grains daily, with from 16.44 to 19.19 per cent. of solid constituents. Less was secreted when the dog was ill. The dog ate much; digested badly; did not lose weight at first; afterwards lost its appetite, and then became thin. M. Blondlot had a dog that flourished for three months. The bowels acted twice daily. (a)

Even in human subjects, it has been found that when a fistulous opening has been made, owing to perfect obstruction of the common duct, by inflammatory action, the bowels have continued to act when the bile did not pass,—showing that the bile is by no means indispensable for their action.

Many experiments were tried with dogs, as to the quantity of bile secreted. The influence of medicine was also tried; and it is interesting to us to know that the action of mercury was decidedly to increase the quantity of bile secreted, as has long been held by medical men. If animals can live for a year, enjoy tolerable health, and digest their food, without any bile passing into the intestines, the importance of bile, and its necessity for the purposes of digestion have been exaggerated.

The action of bile out of the body on the different constituents of food, tends to precisely the same results as we have seen obtained by experiments in the body. Bile, when mixed with neutral fat or with oil, is found to have no chemical action whatever. It makes a sort of emulsion only, not quite so good as that produced by the pancreatic

fluid. I added to solutions both of pancreatic juice and bile, equal quantities of water and oil, and then left them, after agitation for some time, to see which produced the most enduring emulsion. You see them here; both have caused the fatty matter to be minutely divided; but I think the pancreatic fluid has divided it and kept it divided the best. When fresh out of the body bile has no action on starch; it does not change it into sugar, as we saw the saliva did. When, however, it is allowed to decompose, it has a slight action upon starch; but not more than all animal substances have. It has no action on cane-sugar until after it has stood for a considerable length of time, and then the cane-sugar is converted into acid. With grape-sugar, if left for any length of time, it forms lactic acid; but so do all other animal substances when in contact with sugar. It has no action, even when acidulated on casein, or on the albuminous substances which constitute our food.

It has been said that the liver purifies the blood by removing a large quantity of carbonaceous substance from it. To determine this by absolute experiment was a matter of great difficulty; but Schmidt has endeavoured to solve this question by experiments on forty cats, thirteen geese, many sheep and rabbits, in which he made fistulous openings into the gall-ducts for the purpose of collecting all the bile and of determining the proportion between the quantity of carbonic acid thrown out by the lungs and the quantity of carbon in the bile. He passed a tube into the gall-duct, and could measure how much gall came out per hour; and he could determine the composition of the bile by burning it and collecting the carbonic acid. He made, at the same time, comparative experiments on the respiration, some of which I shall have to detail to you in a future lecture; and he came to the conclusion that not more than from one-tenth to one-fortieth of the carbon which passes out of the body passes by the liver, and that therefore the liver has no considerable action in freeing the blood from carbonic acid or carbon. He found that eight-ninths or nine-tenths of the carbonaceous matter remains in the circulation, and does not pass out by the bile at all, but is thrown out through the lungs; a small portion, however, must escape in the urine, probably not much less than passes out in the bile. But I am unable to give you the proportion of carbon in the urine and bile daily excreted, from want of experiments.

What, then, in conclusion, are the uses of the bile? I have shown you that it is an alkaline fluid, and a body resembling soap. If soap is brought into contact with an acid, you know what happens: the alkali of the soap and the acid combine, and the acid of the soap is set free and precipitated. So, also, is it in the bile. If I take human bile, and mix it with acid, (as you see in the experiment with sulphuric acid,) a greenish white precipitate is formed. Let me show you what would happen to human bile, if mixed with the acid secretion of the stomach. This I can do by adding dilute hydrochloric acid to a portion of bile, or better still by mixing some of the clear fluid obtained from the contents of the stomach, which I showed you in my lecture on the gastric juice; by both a precipitate will be immediately produced. (Experiment.) The alkali which exists in the bile goes to the acid; it neutralizes so far, the acid reaction coming from the stomach; and it precipitates the insoluble acids, which give rise to choleidinic acid, and even to that still more insoluble substance, Dyslysin, in its passage through the intestinal canal. It appears to me, then, that one great action of the bile is to furnish an alkaline fluid, which, when mixed with the acid secretion that has served the purpose of dissolving the albumen, will neutralize it, and lessen its acidity, so as to prevent it from producing irritation and increased action of the intestinal canal. That the stomach can actually bear much stronger acid than the bowels is known to most medical men. That the acid does not pass rapidly out of the stomach I am convinced by the following experiment. To an adult man I gave 162 grains of dry, pure tartaric acid dissolved in two ounces of water. No pain was felt for three hours; no food was taken during this time; and, without doubt, all the tartaric acid would in these three hours have been absorbed, or would have passed out of the stomach. At the end of this time, a pain in the bowels began to be felt, and at the end of the fourth hour there was very considerable pain, coming on in paroxysms. At the lapse of about five hours, if the bowels had been allowed to act, they would have acted from the acid thus taken. A repetition of the experiment, with 84 grains, gave precisely the same

(a) At the meeting of the French Academy, on the 23rd of June this year, M. Blondlot gave the history and *post-mortem* of a dog that lived for five years without bile passing into the intestines.

results. When the acid entered the bowels, pain began to be felt, and, if bile in plenty had been poured out, the acid would have been neutralized, in part at least; the alkali would have combined with the acid; the insoluble bile acid would have been formed as a precipitate, and been thrown out of the body. If this be so, sluggishness of the liver, a deficiency of alkali poured into the duodenum, becomes a reasonable cause of excessive acidity of the intestines; the gastric acid required to dissolve the albuminous food, if sufficient bile is not formed, will pass into the intestines, and produce irritation and increased action. The physician has long held, that want of action of the liver gives rise to acidity, and that alterative medicines correct this state.

But the very great size which the liver attains in the foetus appears to indicate that it performs some additional action independent of food and of digestion. This additional action has been said, by German physiologists, to be the reparation and the formation of blood globules; but this is by no means proved. It seems to me much more probable that it is for the purpose of neutralising the acid, and probably also, for the purpose of removing, when requisite, some of the carbonaceous substances; in certain states compensating for the action of the lungs, though, in ordinary states, removing much less carbon than has been said. The bile gives water, moreover, to dilute the chyle; it tends to the subdivision, in some degree, of the fat and the oil of our food. It acts upon the free acid of the intestine; and some of it may be possibly absorbed, and pass into the circulation again, as Professor Leibig originally conjectured. It is not nearly so important as the gastric juice, which dissolves the albuminous part of our food, or the pancreatic fluid, and the salivary fluid, which convert all the insoluble starch, as I have shown you, into soluble sugar. Lastly, the importance of the bile in forming sugar from fat, is one of those facts which cannot be overrated. By this discovery of M. Bernard's, very important knowledge relating to the physiology and pathology of man will be obtained during the next few years; at least there can be little doubt, that the disease known as diabetes, if not closely connected with this production of sugar in the liver, must at least be influenced by it to a very considerable extent.

CLINICAL LECTURES ON SURGERY,

AT

GUY'S HOSPITAL.

By BRANSBY B. COOPER, Esq., F.R.S.,

Senior Surgeon to, and Lecturer on Surgery at, Guy's Hospital.

Mr last lecture, gentlemen, I concluded by drawing your attention to a case of synovitis of the knee, resulting from an external injury; and I then told you I had another case of synovitis before me, but that time prevented my proceeding with it. It is with this case, therefore, that I shall commence this morning, and shall proceed to it at once, without any preliminary remarks on the subject, presuming that you are still familiar with what I then said to you on the disease in question.

SYNOVITIS OF THE ELBOW-JOINT.

Margaret B—h, aged 23, admitted into Dorcas ward, Nov. 13th, 1850; an unmarried woman, residing in Bermondsey, and occupied as a milliner; is of a sanguineous temperament and strumous diathesis, having red hair, light eyes, a delicate skin, and a fair complexion. Is an inheritor of a gouty tendency from her progenitors on her father's side, and has had two or three slight attacks of gout in her fingers, but has otherwise generally enjoyed good health. A fortnight ago, having previous to this been suffering from a severe catarrh, felt pain and stiffness in the knuckles of the left hand. This subsided, and ten days ago her left elbow-joint became intensely painful and much swollen, accompanied with frequent fits of shivering, and a considerable amount of general constitutional disturbance. From that time until the present, the evidences of inflammation—pain, heat, redness, and swelling—have gradually extended up the arm and down the fore-arm, notwithstanding the application of leeches and poultices.

On her admission into the hospital (November 13), there was a diffused swelling, accompanied with much inflammatory action over the greater part of the left arm and forearm,

and she complained of an intensely agonizing, deep-seated, gnawing kind of pain, sometimes as though her arm were forcibly being stretched, acute sensitiveness to the touch, and great suffering on the slightest motion of the joint. Accompanying these local symptoms, there was a hot skin, a quick and irritable pulse, a furred tongue, thirst, and a loss of appetite and sleep. The inability to sleep arose from the pain, and from the jactitation of the limb, which occurred just as she was dropping off to sleep. Ordered—

R Pulveris opii, gr. ss.; hydr. chlor., gr. j.; fiat pulvis et capeat statim et mane repetatur.

R Liq. ammon. acet., ʒss.; vin. ant. pot. tart., ʒss.; aquæ, ʒss.; M. ft. haustus 4tis. horis sumendus.

Nov. 14.—Scarcely slept at all during the night, from the severity of the pain she endured. Her arm is, if anything, a little more swollen and inflamed than yesterday.

R Vini. colchici, mxx. ex.; mist. magn. cum magn. sulph., ʒj. 4tis horis.; rep. pil. hirud. xij., cubito sinistro appl. et justea cataplasma lini cum decocto papaveris.

Nov. 15.—Expresses herself as feeling easier; arm less painful, and much less swollen and inflamed.

Nov. 16.—Complains of slight pain in the shoulder; but there is no abnormal heat, swelling, or redness there. Her arm is less painful, and is suffering from a much less amount of febrile disturbance.

Nov. 17.—Has been progressing favourably until last night, since when she has fallen back again; the pain in her arm being much more severe, and the starting of the limb on dropping off to sleep such as entirely to prevent her procuring repose.

Nov. 18.—Is in rather less pain. There is a hardness to be felt just above the joint on the inner side of the arm, which is red and painful, and very sensitive to the touch.

Repetatur mistura ut 14. Pulveris opii, gr. ss., horâ omni nocte; hirud. viij., brachio appl.

Nov. 19.—Does not experience so much pain in the elbow as she did, but has rheumatic pains flying about the shoulder and between the scapulæ.

Nov. 21.—Sleeps much better. Has less pain in the arm; the redness has disappeared, but there is still great heat, and she remains unable to flex or extend it, in the slightest degree, without intense pain.

Nov. 23.—The hardness above the joint, on the union side of the arm, which it was suspected would terminate in the formation of pus, is subsiding without any such result, and much of the tenderness over the arm has also disappeared. Was ordered:—

R Extr. colch. acet., gr. xij.; extr. coloc. co., gr. xij.; morph. acet., gr. ij; conf. rosa, q. s.; misce ut fiat massa et divide in pilulas, xij.; quarum j. nocte maneque sumat.

Nov. 25.—Her arm is better, but her bowels have been much disturbed, and she complains of great weakness and depression. She was directed, therefore, to discontinue the pills, and to take instead:—

R Pot. sod., ʒss.; liq. pot., ʒiss; liq. opii. sed., ʒj.; inf. aurant. co., ad ʒviij.; co. ij. ampl. t. d. sum.

Nov. 27.—Feels constitutionally better; but her arm is more painful, red and swollen again, and the hardness is re-appearing above the joint.

Nov. 29.—Still about the same, if anything a little worse; was ordered to return to the colchicum pills, prescribed on the 23rd.

Nov. 30.—Is decidedly better again.

Dec. 2.—Progressing favourably. The pain and tenderness are subsiding, but the slightest motion of the joint occasions her great pain. Subsequently to this period she continued improving till the 16th, when she was well enough to be presented. Her arm was in a semi-flexed position, and she still remained incapable of exercising the elbow-joint without occasioning her intense pain; but otherwise she did not suffer materially from it.

In this case, gentlemen, I prove the just suspected something more than a simple inflammatory action. Her previous history, I say, combined with the acuteness of her symptoms, induced me to regard her disease as produced or modified by some specific constitutional exciting cause, some morbid disposition of a gouty or rheumatic character; and in this view I was fully borne out by the evidence afterwards obtained, from a consideration of the variable nature of her symptoms, and of the action of the remedial means adopted whilst an inmate of the hospital. From the extreme severity of her symptoms one might, at first sight, have been easily led to diagnose the existence of pus within

the synovial cavity; but their yielding, to a certain extent, so readily to colchicum was a sufficient proof of the fallibility of such a supposition. It is seen by the report, that six days after her admission, the pain nearly left the elbow-joint, and made its appearance for a short time in the shoulder of the same side; her knuckles also had been affected previous to admission; indeed, this was the first evidence of any local disease. These facts, combined with the hereditary disposition which has been handed down to her from her father, and the few manifestations of a gouty diathesis, which, according to her history, she had experienced, are the arguments—and sufficient arguments too—in favour of her symptoms depending on a specific, and not on a simple inflammatory action. According to the common definition, gout is said to attack the smaller joints, and rheumatism the larger ones. As, therefore, in this case, both the larger and smaller joints were affected, I think, it may be fairly designated a case of rheumatic gout or gouty synovitis; it is generally believed that the synovial membrane is not primarily affected, but secondarily, by an extension of the inflammatory action, which, in these instances, first attacks the neighbouring ligamentous structures.

In my last lecture, I told you that I recommended colchicum in most cases of synovitis, from having frequently observed the most beneficial results accrue from its administration; but in this form of the disease it is especially indicated, on account of its specific influence over the gouty diathesis; and the case before us is an illustration of its immediate effect in such a condition. It is worthy of attention also, that when the colchicum was discontinued, on account of the diarrhoea it produced, her former symptoms recurred, but were again speedily relieved by its re-administration. In addition to the colchicum, I gave opium to diminish pain and to promote sleep; and employed topically local depletion by means of leeches, poppy fomentations, and large hot poultices of linseed meal.

Quitting the subject of synovitis, I shall next draw your attention to a patient on whom I performed the radical cure for

HYDROCELE.

Edward Norris, aged 27, admitted into Luke ward, November 13th, 1850. A married man, of a spare frame and habit, and of a delicate and unhealthy appearance. According to his own statement, his left testicle began to swell nine months ago, without any apparent cause; was unaccompanied with pain or any disturbance of his ordinary health, and continued progressively increasing in size for six months, at the end of which period he was tapped, and had about half a pint of a clear yellowish fluid drawn off. There soon appeared again a collection of fluid, for which he was tapped a second time about a month ago, since when his hydrocele has been reforming, and is now nearly the size of an ordinary fist. The swelling is on the left side of the scrotum, distinctly fluctuates, and has given rise to no constitutional disturbance. Examined with a candle it is translucent, does not dilate on coughing, and can be felt distinct from the end above.

Nov. 15.—The hydrocele was tapped with a trocar and canula by Mr. Cooper, who afterwards injected into it ʒij. of a fluid, consisting of one part of tinc. iodini co. to three of water, and allowed it to remain. It produced a severe smarting pain which lasted about half an hour, but after this he was easy and comfortable.

Nov. 16.—Has no febrile disturbance, but there is considerable tenderness and swelling, with heat and redness of the affected parts.

Nov. 19.—The swelling has increased but the pain is less. His appetite is good and he sleeps well.

Nov. 21.—Swelling going down; complains of no pain. Gets about during the day, and feels no inconvenience in so doing.

Nov. 23.—Speaks of himself as quite well, and relieved; there is scarcely any tenderness, and the swelling has almost entirely disappeared.

Nov. 25.—Presented. Cured.

Hydrocele, Gentlemen; is a collection of fluid in the tunica vaginalis, which is a serous membrane, and forms originally a portion of the peritoneum, but is carried down by the descent of the testicle into the scrotum during the foetal period of existence; and is afterwards usually separated from the peritoneal cavity by an adhesion of the walls of its upper or tubular part. From the experiments performed by

Sir Astley Cooper, this abnormal collection of fluid has been proved to depend on an increased action of the capillaries, and not on diminished power of the absorbents; for the latter are always found larger in hydrocele than in the healthy and normal condition. It usually proceeds from a blow or other external injury; although it frequently happens that no assignable cause can be traced for its origin; and this is more especially the case in the hydrocele of infants and of old age. In some instances, its formation is accompanied with pain and the other symptoms of inflammatory action, but the presence of such symptoms is an exception to the general rule: so much so, indeed, that their absence may be looked upon as an important sign or indication in diagnosing hydrocele from other tumours of the scrotum—a subject on which I shall now make a few remarks. The diagnosis of hydrocele is usually sufficiently easy and apparent; complicated cases do, however, sometimes occur, which may present much difficulty, or even, in rare instances, leave one in doubt and hesitation. The usual characters it presents are those of a fluctuating, translucent, pyramidal-shaped tumour, with its base below, and gradually tapering off as it rises upwards, so that the end may be felt distinctly above it. Its form may vary from that of a pyramidal swelling; and when there is a hydrocele of the cord associated with one of the scrotum, it assumes an hour-glass shape, the central or contracted part being at the external ring, and one swelling in the inguinal canal, the other in the scrotum. Its translucency, when this is perceptible on examining it with a candle, is a very important distinguishing character; but, in the absence of this indication, you must not always infer, that the tumour in question is not a hydrocele, for it sometimes happens, that the enclosing membrane—the tunica vaginalis—is so much thickened as to obstruct the transmission of light, and give it an appearance of opacity. In Hæmatocele, which is a collection of blood in the tunica vaginalis, the physical characters presented are obviously similar to those of hydrocele, with the exception of translucency; but, independently of this, there is another point of importance. Hæmatocele always occurs after a blow or some external injuries sufficient to produce effusion of blood. It may and does sometimes arise from tapping a hydrocele, so that we have then a hydrocele converted into a hæmatocele. Hydrocele is sometimes complicated with a congenital hernia, which may obstruct the passage of fluid from the tunica vaginalis to the peritoneal cavity. For a hernia itself, there can scarcely ever arise a chance of mistake, if a due and proper examination be made; and I strongly urge upon you the necessity of observing the translucency of the tumour just previous to puncturing or otherwise operating on it, no matter how often you have examined it before. For, simple and unimportant as the disease may seem, its simplicity and unimportance depend on a proper examination and the just observation of the surgeon.

Several methods have been employed by surgeons for the relief and cure of hydrocele, and these I shall now proceed to enumerate, previously remarking, that they are resorted to with one or other of the three following intentions:—To produce absorption of the fluid, by means of discutient or resolvent remedies in the form of local applications; to effect a palliative cure by drawing off the fluid; and, lastly, to accomplish what is termed a radical cure, by removing the serous contents of the tunica vaginalis and injecting it with some stimulating liquid, or otherwise exciting in it a degree of inflammation sufficient to destroy its function as a secreting surface. In congenital hydrocele and hydrocele occurring in early life, it is always most advisable to try first to effect the absorption of the fluid by means of the application of a lotion of sal ammoniac to the scrotum, which is frequently found in such cases to prove successful, although in adults it is rarely sufficient. Operation in hydrocele in children, you must bear in mind, gentlemen, is not unaccompanied with danger, owing to the occasional connexion of the cavity of the tunica vaginalis with that of the general peritoneum, from the tube of membrane in the cord not having as yet closed up and become impervious. If the simple application of a resolvent lotion to the scrotum does not effect an absorption of the fluid, it is best to employ acupuncture. Afterwards gently pressing the tumour, the exudation of its fluid contents with the surrounding cellular tissue excites a moderate degree of inflammation, and becomes absorbed.

The ordinary method employed in treating hydrocele

when a palliative cure is intended, is the withdrawal of the fluid by means of a trocar and canula. In adults it is seldom sufficient to effect a permanent cure; but, in some instances, has proved effectual, however; and therefore, I hold, ought always to be tried before the patient is submitted to one or other of the more serious operations included in what is termed the radical cure, on which I shall now make a few remarks.

The operations which have been introduced into surgery for the purpose of effecting a radical cure of hydrocele are numerous and varied, and all, in turn, have met with their support from some and opposition from others. Since I have employed injections with the *tinctura iodinii composita*, I have never had occasion to resort to other means, nor have I ever observed any ill effects accrue from its use. I have now used it in about thirty cases, and in all, without exception, successfully—in cases, too, where other remedies had proved ineffectual. Port wine, sulphate of zinc, and many other agents, have been advocated as injections, but none act so safely and efficiently as the compound tincture of iodine, and none are attended with less pain and inconvenience to the patient. It is on this account that I now always employ it in preference to anything else, and strongly recommend you to do the same, if you wish to insure success in the radical treatment of hydrocele. The plan I always follow, and which I followed in the case before us, is to puncture with a trocar and canula, to withdraw the fluid and inject into the tunica vaginalis ʒij . of a mixture of one part of *tr. iod. co.* to three of water, which is allowed to remain. The simple tincture or alcoholic solution of iodine, is not fit for injection, as the addition of water causes the immediate deposition of the greater portion of the iodine in a pulverulent form. This is obviated in the compound tincture by the iodide of potassium it also contains preventing such an occurrence. The operation is usually followed by a more or less severe smarting pain, which rarely lasts more than a few hours. An inflammatory action is thus set up in the membrane and is succeeded with a considerable effusion, causing a re-appearance of the hydrocele, which, however, in the course of three or four weeks, or often much earlier, entirely subsides. If the inflammation be excessive, the patient should be made to keep his bed, and such antiphlogistic means be resorted to as will moderate and subdue it; if, on the other hand, it be thought insufficient to destroy the secreting surface of the membrane—the object intended by the operation—he should be made to get up, and walk about, which will soon produce the desired effect.

There are certain unfavourable circumstances which may arise in the performance of the operation which you should be made aware of, and which you should take especial care to avoid: such are puncturing the testicle, injecting the cellular tissue of the scrotum, or injecting the peritoneum. Puncturing the testicle, I believe, always to arise from carelessness and negligence, in not ascertaining its exact position. It should be remembered, that in a hydrocele which has been once tapped the testicle will be found adherent to the cicatrix; such a position, therefore, must consequently be avoided in re-tapping. Injecting the cellular tissue: I have known an instance of this occur where wine was the agent employed; it was followed by extensive sloughing of the scrotum, and ultimately led to a fatal termination. The possibility of the occurrence of such an accident is much less likely from the use of compound tincture of iodine than anything else, as so small a quantity is requisite for the purpose. Simple, therefore, as you may have considered this operation, you observe, Gentlemen, if due care and precaution be not exercised on the part of the operator, it may lead to the most serious, and even, as we have seen, to fatal consequences.

In a case of double hydrocele—hydrocele of the tunica vaginalis of each side, a question might be raised of the propriety of tapping and injecting both, either at the same time or the one shortly after the other. From an instance which occurred to me a short time since, I should now decidedly only inject one, with the impression that this single operation might lead to the cure of both. The case to which I refer was admitted into our clinical wards a few months ago, and may probably be remembered by many present. He was in Luke Ward, and had hydrocele on both sides, but the one considerably larger than the other; the largest I tapped and injected, and in about a fortnight or three weeks afterwards he was sufficiently well to leave the

hospital. I have since heard of him, and both hydroceles have entirely disappeared.

The other operations, as incision, excision, caustic, seton, and tent, employed for the radical cure of hydrocele, I have already told you I do not now resort to myself, and do not recommend you to do so. It would be out of place, therefore—even if time permitted it—to say more about them here, as they do not bear on the case under consideration.

LECTURES ON HISTOLOGY.

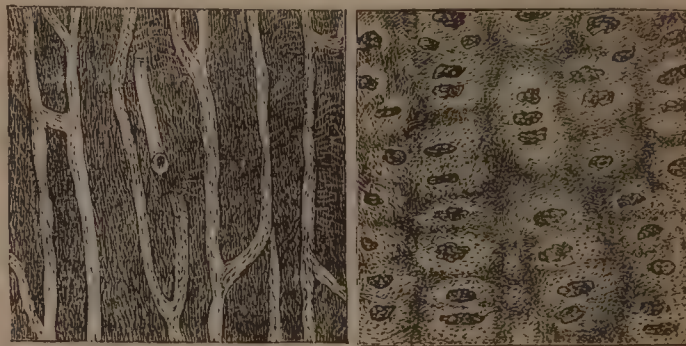
DELIVERED AT THE
ROYAL COLLEGE OF SURGEONS, LONDON.

BY J. T. QUEKETT, Esq.,
Assistant-Conservator of the Hunterian Museum.

(Continued from last Volume, page 663.)

IN order to understand the next series of preparations which I shall show you, it will be necessary for me to give a brief description of the structure of bone. If we take, for example, one of the long bones of the body, we shall find that it consists of a shaft and two extremities; if the same bone be divided transversely, its centre will be found to be hollow, or occupied by a spongy kind of bone, which has received the name of cancellated structure. Within the hollow is contained the marrow, and the cavity, as you are well aware, is called from this circumstance the medullary cavity. If we examine the outer surface, we shall find a series of minute holes or foramina, through which blood-vessels pass towards the interior of the bone. If, now, a slice, sufficiently thin to be transparent be made, and examined with a power of forty diameters, you will notice a series of holes, around which innumerable black spots are deposited in concentric circles, these holes are the canals known as the Haversian, and through them pass the blood-vessels for the nutrition of the bone; these canals are larger on the inner or medullary surface of the bone than they are on the outer; let the same section be next examined under a power of 200 diameters, a concentric arrangement of laminae will be found around each canal, and the black dots before alluded to will now present a spider-like appearance; they are known as the lacunae, or bone cells, and each consists of a central part or body, from which a number of minute tubes termed canaliculi proceed. Those canaliculi that are nearest to the Haversian canal open into it, whilst those more distant from the same canal anastomose with the canaliculi of the next lamina; but those of the outer row of bone-cells do not anastomose with the canaliculi of neighbouring laminae, but nearly all bend back and join those of the preceding lamina. By this arrangement, a white line may be observed to surround the outer part of each set of concentric circles; so that the bone may be said to be built up of a series of Haversian systems. If the same bone be divided in a vertical direction, as shown in *Fig. 53, A*, the course of the Haversian canals may be readily seen; they run in parallel lines, and are connected together by branches running more or less transversely. Within them are situated blood-vessels, from which the nutritious matter is poured out, and is then taken up by the canaliculi opening into the canals, and by them conveyed to the whole concentric arrangement of bone-cells; so that it would appear that each bone-cell is a reservoir of nutriment for the bony matter surrounding it.

A Fig. 53. B



It may now be asked, as all the structures I have described are of a tubular character, where is the bony mat-

ter? To see this, we must have recourse to much higher powers, and it will then be found that the bone consists of a congeries of more or less minute angular particles deposited in an organised matrix. If such a section be placed in dilute acid, these particles alone are removed, and the matrix in which they were embedded will present a granular appearance. I have found, that in the crania of very small birds, where the bone is too thin to admit of bone cells, the earthy particles are not only of large size, but each is of a rhombohedral form. In the cartilage also of the cranium of *rana paradoxa*, minute needle-shaped crystals somewhat like the raphides in the squill and other plants, are found in the interior of each cell, so that we may have ossific matter deposited either in a granular or crystalline form.

In the cartilage of many fishes, as the shark, skate, and saw-fish, the ossific matter is in the form of granules, and occurs principally in the neighbourhood of the cells; in other specimens, as in this from the skate, the deposit is taking place within the cell wall; to the latter I give the name cellular, and to the former intercellular ossification. When a cartilaginous epiphysis is becoming ossified, the cartilage cells first arrange themselves in linear series, and at the time of ossification the cell-walls, as shown in *Fig. 53, B*, become more widely separated from the nucleus, whilst the cells themselves become studded with minute ossific granules; if the section be made at right angles to the shaft, the walls of the cartilage cells, as shown in *Fig. 54, A*, will be found thickened by the granular deposit; and lastly, tubes of bone shoot up between the cells and so enclose them; the spot at which this process is going on may be at once seen by the arrangement of the cartilage cells. I now show you a vertical section of a bone from the foot of a pig, in *Fig. 55, A*, in which you will see a thin layer of cartilage between two pieces of bone; if this object be more closely examined, it will be found that on one side, *B*, where the formation of bone is going on, the cartilage cells are arranged in linear series, but that on the other, *A*, only a trace of such appearance is presented.

A B *Fig. 54.* C



The ultimate osseous granules cannot be well seen in very compact bone unless it has been boiled, but when bone is imperfectly developed they can be readily distinguished. In the specimen I now exhibit, which is a vertical section of a portion of the os frontis, a spot of imperfectly formed bone occurs near the centre; in this the granules are well seen. In certain forms of ossific deposit, as that in the coats of arteries in an early stage, nothing but granules can be seen; the same holds good in ossified fibrous tumours and cysts found occasionally in various parts of the body.

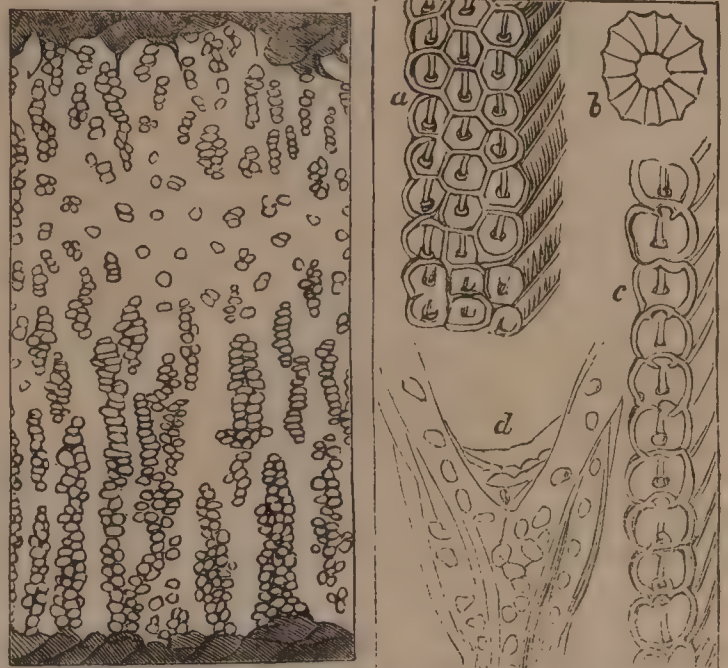
The ossific granules may be well seen in the pus which escapes from a necrosed bone; and if a specimen be examined with a power of 500 diameters, a quantity of minute granular matter, dissolving readily in dilute muriatic acid, may be distinguished among the pus corpuscles. This fact I noticed many years since, but Mr. Bransby Cooper ascertained by chemical examination that a large amount of phosphate of lime was present in such pus, and announced his discovery in this theatre in 1843, when he was professor of surgery; so that it would appear that the pus has a solvent power, eroding or decomposing all the animal matter, while the mineral escapes with the pus in its granular condition.

The bone cells or lacunæ vary in size and shape in the four great classes of animals, and I have ascertained that they bear a direct relative proportion to that of the blood corpuscles; thus, as shown in this diagram, they are largest in reptiles, especially those of the perenni branchiate order. In fishes their shape is very peculiar, and, what is remarkable, they are in some cases very similar to the peculiar cells

found in the specimen of enchondroma from the hand, before alluded to; and I take this opportunity of exhibiting a thin scale of the bony pike, *Lepidosteus osseus*, *Fig. 54 B*, in order that you may see how nearly the cells resemble those of the enchondroma.

In the disease termed mollities ossium, there is a deficiency of earthy matter; and I have ascertained that the change first begins in the bone cells, which become larger and larger, and the bone around them more and more transparent, and finally several cells unite to form one cavity; this, however, does not long remain empty, but is occupied by a soft kind of adipose tissue, so that such bones are always extremely thin and full of fat; hence this disease may be considered as a good example of fatty degeneration.

A *Fig. 55.* C



B

The last form of cartilage which I shall mention is of a very peculiar kind, and is always more or less tubular in its character. It is found in the vertebræ of the vaagmaer or riband-fish,—a specimen of which, about three years since, was met with at St. Andrews. For our knowledge of this interesting structure we are indebted to the late Dr. John Reid; and the account of the anatomy of this fish was the last contribution to science made by that distinguished anatomist. The first specimen I shall show you is a transverse section of one of the vertebræ, as shown by *b*, in *Fig. 55, C*. It exhibits four different structures: the first is an outer coating of dense areolar tissue; the second occupies the centre, and consists of a gelatinous substance somewhat resembling simple cartilage; the third composes the radii which extend from the centre to the circumference; whilst the fourth consists of a firm fibrous structure, occupying all the spaces between the radii, and so making up the great mass of the body of the vertebra. It is to the radii that I would particularly direct your attention, as these are composed of a material very like cartilage. I will now show you a thin section of the same vertebra in which five rays may be distinctly seen, they will be found to be made up of a series of thick-walled cartilaginous cells, arranged in a linear series; some of the rays, as shown by *c*, are composed of one row; others, as shown by *a*, of three rows each. On carefully examining any one of these rows, an aperture of communication between each cell may be observed, and through these a delicate tube passes from the centre to the circumference; whether this be a blood-vessel or an absorbent cannot well be ascertained; its tubular character, however, is very evident. I next show you a longitudinal section of a vertebra of the same fish, in which the radii, as represented by *d*, are divided in the direction of their long diameter: they occur generally in bundles of three or four, and the apertures through which the tubes pass may be observed at nearly equal distances from each other, and in some cases portions of the tubes may be seen in the apertures. Dr. Reid described very accurately the structure of the vertebræ and these thick-walled cells, but he appears to have overlooked the tubes passing through them, as no

mention whatever is made of their presence in his paper on this subject, published in the "Annals of Natural History" for 1849. They may not be present in every vertebra, but they are in all the specimens I possess, which were transmitted to me from Dr. Reid himself, through the hands of Dr. Macdonald.

Before concluding the subject of cartilage, there is another tissue which, from being composed of two elementary tissues, viz., fibrous tissue and cartilage, has been placed by Messrs. Todd and Bowman as the last class in their table, viz., fibro-cartilage; but, as it is so intimately connected with some of the forms of articular cartilage and enchondroma, I think it by far the best plan to consider it in this place.

Fibro-cartilage is principally used in articulations, and occurs as discs between the vertebræ in the human subject; they are highly elastic, and serve to diminish the shocks to which this portion of the body is subject. In the whale tribe these discs are of immense size, and some of you, perhaps, may not be aware, that the articular surfaces of the vertebræ in many cetacea are not anchylosed to the bodies, consequently they may be found detached as discs in the form I now show you; these are smooth and a little concave on their articular surface, convex and rough on their epiphysal; and I recollect when I first came to this College, that the late Mr. Clift told me an amusing anecdote connected with one of these discs, viz., that he once met with a specimen about 3 or 4 inches in diameter in the shop of a dealer in curiosities in the Strand, who gravely told him more than once that he valued this specimen above everything in his shop, as he considered it a most rare and beautiful example of a fossil crummet, which, as you see, it much resembles.

These discs are very abundant on the sea-shore in northern climates; and when Her Majesty's ship *Hecla* was wrecked, they served the crew of that unfortunate vessel as plates, as I was informed by one of the officers. The discs of fibro-cartilage between these vertebræ are often more than two inches thick. Masses of fibro-cartilage exist in certain joints, under the name of inter-articular fibro-cartilages. We have examples in the temporo-maxillary and sterno-clavicular articulations in the human subject. When either of these is divided transversely, and a section made sufficiently thin for examination by the microscope, it will be found that it is composed principally of a net-work of fibres, within which a few cartilage cells are enclosed.

The first specimen I shall show you is taken from the outer portion of an inter-vertebral disc. The cells, as shown in *Fig. 56, A*, are large and tolerably numerous. In the centre, which is more pulpy than the outer part, the fibres are fewer in number, and the cells, as shown at *a b*, larger and more abundant. You may now recollect, that many of the preparations of articular cartilage that were shown you, especially those from fishes and birds, as well as two of the specimens of enchondroma, were composed of fibro-cartilage, characterised by the presence of white fibres and cartilage cells.

A Fig. 56. B



C

We have modified forms of fibro-cartilage in the epiglottis of the human subject, as shown at C, and in the ears of the larger mammalia. In these situations the cells are readily separated from the matrix; in short, they may be said to drop out, and leave the fibrous frame-work entire.

Fibro-cartilage is not so prone to ossification as fibrous structures; for you will notice in these two examples of ankylosis of vertebræ, selected from a large stock in the Museum, that the discs have, in each case, disappeared, and the ossific matter is confined to the fibrous tissue, or anterior common ligament, which binds them firmly together; and, in some instances, you may observe, that the part occupied by the disc is still present, no bone being there thrown out. A striking specimen of this kind I here show you, *Fig. 28, B*. In the two upper vertebræ the ligament has become ossified, and a considerable quantity of bone has been thrown out, so as to cover the anterior part of the inter-vertebral space; but still there is no junction between the two vertebræ, but between the second and third the union is complete; in both cases, the part originally occupied by the inter-vertebral disc is empty. This fact is quite as evident in the spines of the lower orders of mammalia as in man, and is very common both in the horse and sheep.

ORIGINAL COMMUNICATIONS.

AMENORRHŒA.

By EDWARD RIGBY, M.D., &c.;

Senior Physician to the General Lying-in Hospital; Examiner in Midwifery in the University of London.

THE following case of amenorrhœa differs from the preceding, in not depending on any peculiar derangement of the system, but appears to arise solely from the feeble state of the circulation.

Mrs. S—, aged 32, married some years, never pregnant.

Feb. 8, 1847.—Tall, blondine, nervous and excitable, active; her general health appears good, but delicate; bowels regular. The catamenia are very sparing, last only for two days, and come on with little or no pain. The discharge is more copious in summer than in winter. During the late severe cold, she missed one period entirely; this was followed by headache and sickness. She did not menstruate until she was 19, but states that she suffered from constant pain of back from the age of 15.

R Tinct. ferri sesquichloridi gtt. xxv. ter die ex aquæ sodaica.

May 6.—No appearance of the catamenia, tongue glazy, bowels inclined to be irritable.

R Liq. taraxaci ʒi., decoct. sarzæ co., liq. calcis aa. ʒiiss. M. ft. mistura, cujus sumat cochl. magn. ij. ter die.

June 18.—Has had a severe cold, for which she has been depleted with no good effect. Bowels regular; has just had a slight show of the catamenia. Rep. mistura.

R ferri iodidi gr. ij., extr. glycyrrhigæ gr. iij. M. ft. pil. i. omne nocte sumenda.

July 6.—Informs me by letter that she feels and looks better. Rep.

August 11.—Had a return of the catamenia shortly after she wrote, and they have just appeared again at a month's interval. The discharge lasted two days, was sparing, but of a better colour. Her health is much improved. Rep.

March 6, 1841.—Catamenia have continued, though sparing, to appear at the regular periods throughout the winter. Complaints of rheumatic pains.

R Pil. hydrarg. gr. v. semel in 14 diebus. Rep. mistura.

R Pulv. gualaci, magnesia carb. aa. gr. x. M. ft. pulv. primo mane ex aqua sumendus.

March 15.—Writes word that she is very active, both in mind and body, but that the catamenia have ceased for several months, and now each period is marked by intense headache.

Says that she has taken blue pill and calomel since I saw her, but that they only make her feel weak and depressed.

Let her apply six leeches to the labia a few days before the next attack of headache is expected.

R Ferri citratis, ʒij.; acidi citrici, ʒij.; aquæ distillatæ, ʒviiij. M. ft. mist.

R Potassæ bicarb., ʒij.; syrupi aurant., ʒj.; aquæ dis-

tillatæ, ʒvij. M. ft. mist. cujus sumat cochl. magna ij. cum pari misturæ superscriptæ ter die inter effervescendum portione.

R Sodæ potassio tart., ʒj. iss. primo mane ex aquâ.

June 14.—Is looking unusually well, and has gained flesh, but the catamenia have not appeared.

Rep. mist. ferri citratis effervescens.

Many circumstances connected with this case point out how feebly the uterine system performed its functions. The catamenia did not appear till she was 19, and even then with so little power as to be influenced by the season of the year, and even to stop during the cold weather. In the very northern latitudes of Lapland this is the usual course of menstruation, viz., that the women commonly cease to have the catamenia during the winter months. At all times, in this patient's case, the discharge was but spurious, and the pain which she suffered in her back from the age of 15 was, I presume, nothing more than feeble and ineffective struggles of the system to establish this discharge, conjoined with the muscular debility which usually accompanies this period of growth and development in a young female. There were no symptoms indicating *obstruction* to the flow of the catamenia; and, as I was aware that she had been carefully examined by one for whose opinion I have great respect, I saw no reason for subjecting her to an examination per vaginam. The liver and bowels were doing their duty; I therefore put her upon a course of muriated tinct. of iron in soda-water, which is an agreeable mode of giving steel, and resembles the mineral water of Swalbach, one of the strongest aërated chalybeates known. She appears, however, to have progressed better under the action of iodine of iron; the health improved greatly, and the catamenia appeared naturally though sparing. Nor can this be attributed merely to the warm weather of that time, as she continued to be regular throughout the following winter. The general health showed a disposition to become deranged; this was corrected by mild alterative treatment, but the catamenia ceased; and, as this cessation was accompanied by very severe headache, I directed her to apply six leeches to the labia. The health improved greatly under an effervescing mixture of citrate of iron, but the catamenia have not returned: and, considering the feebleness of the uterine system, in her case it might fairly be expected that what is called the "change of life" has already occurred at the early age of 34.

Under circumstances of such general debility, the use of leeches might be deemed questionable, the more so as they had rather done harm than good on a former occasion; but, seeing that the feeble powers of the system were endeavouring to set up irregular action in the form of vicarious headache of some intensity, I considered that a cautious application of leeches to the labia would, as a substitute for the absent catamenia, be the best means of removing the headache. The "change of life," I presume, has occurred, as the catamenia have not returned, and the general health has improved considerably.

Mrs. B., aged 34, mother of three children; pale.

March 20, 1846.—Complains of constant pain and weight in the pelvis, with frequent urging to relieve the bladder and rectum. Bowels confined; great difficulty and pain in passing fæces when solid.

Her last confinement was in December, 1844; she nursed her child for eight months, but the catamenia did not return on her ceasing to do so. In about four months afterwards she first noticed the pain, and other symptoms above-mentioned; after a while she was seized with paroxysms of pain coming on like labour-pains, with severe vomiting; when these had lasted nearly a week a profuse discharge of dark blood appeared, amounting to nearly a pint, followed by clots, and attended with an intolerable fetor; this discharge gave great relief. There has been a slight show once or twice since, preceded by severe pain, but without producing any relief; with this exception no further traces of catamenia have appeared.

Examination per Vaginam.—The canal of the cervix uteri about half an inch up is so contracted that the sound will not pass; I therefore passed the dilator, and gradually dilated it. This was effected without much pain; discharge of dark, bloody, slimy fluid followed.

R Pil. hydrarg. ext. coloc. co., ext. hyoscyami, aa. ʒi. M. ft. pil. xij. sumat. ij. h. s.

R Pulv. rhœi. magnesiz carb. aa. ʒi. o. m.

R Acidi hydrochlor. dil. acidi nitrici dil. aa. ʒi. Liq. ta-

raxaci ʒi.; infusi gentianæ co., ʒviii. M. ft. mist. cujus sumat cochl. mag. ij. bis. die.

March 24.—The discharge has continued freely since, quite as profusely as at an ordinary period; it was nearly black, slimy, and very offensive. She has had rigors every day since, and a good deal of fever, which prevents her coming to see me.

Let her wash out the vagina frequently with warm chamomile tea, and repeat the medicine last prescribed.

27th.—Is better; the discharge is still free, but quite pale, and less fetid.

This appears to have been a case of amenorrhœa produced by an obstructed state of the canal of the cervix, arising probably from cicatrization of some ulceration or other injury connected with her last labour; the consequence was that the uterus had gradually become distended with catamenial fluid, and from its increased size and weight had not only caused a good deal of pain and bearing-down in the pelvis, but seriously interfered with the rectum behind and the bladder before. The rectum had been evidently much flattened by the pressure of the enlarged uterus, for much pain and difficulty were experienced in the passage of solid fæces, and from the imperfect evacuation of the rectum, and irritation caused by the uterus pressing upon it, she experienced a constant desire to relieve the bowels. The pressure of the uterus upon the bladder produced a similar effect, although to a certain extent in a different way. The bladder, being compressed, could only contain a small quantity of urine, beyond which inconvenience from tension was experienced just as much as would have been the case from a large quantity in a state of health.

There can be little doubt that the catamenial secretion returned shortly after she weaned her child, and in the course of a few months began to accumulate in the uterus, and produce such an amount of distension as to cause the symptoms just enumerated. At length, uterine contraction having been excited; and after a long and severe struggle of labour-like pains for a week, a certain degree of dilatation was effected, and a considerable quantity of dark, bloody fluid, excessively fetid, was expelled.

The results of my examination agreed closely with the history of her symptoms since her labour. The upper part of the canal of the cervix was so closed as not to admit the sound. After dilating somewhat, the sound passed easily, and this was followed by a large quantity of dark, slimy, offensive fluid, which was evidently retained catamenia. I regret I did not mark how far the sound entered, and thus ascertain to what extent the uterus had become enlarged; but it must evidently have been considerable from the quantity of fluid which continued to escape for several days.

Finding that she had rigors and attacks of fever, and, fearing absorption to a dangerous degree so as to produce symptoms like those of malignant puerperal fever, I directed her to remove all putrid matters as far as possible by washing out the vagina with chamomile tea. The bowels were regulated by medicine; and, not having heard of her since, I presume that the catamenial obstruction was effectually removed.

ON THE PATHOLOGY OF THE UTERUS, ITS ANATOMY AND PHYSIOLOGY.

By T. SNOW BECK, M.D. Lond., F.R.S.,

Fellow of the Royal College of Surgeons of England.

Physician to the Farringdon General Dispensary and Lying-in Charity.

(Continued from last Volume, page 652.)

III. THE PATHOLOGY (CONTINUED.)

(2) *The Constitutional Symptoms.*—These symptoms, in which are included the symptoms produced by the sympathetic derangement of the various organs, vary considerably, according to different concomitant circumstances. As would naturally be supposed, the severity, and the duration of the disease, as well as the part of the organ which is affected, produces a material difference in the constitutional disturbance. The original temperament of the individual

exercises an equal influence; for, with the same amount of local affection, the sympathetic re-action in the nervo-sanguineous temperament will be sometimes very considerable; whilst in the melancholic it will appear to exercise scarcely any influence. The presence of anæmia or other constitutional states, or diatheses, existing as concomitant affections, again greatly modify the effect of uterine derangement; whilst the hygienic condition of the patient, but more especially the presence of mental anxiety, causes another serious modification in the constitutional re-action of these diseases.

In a general sketch of these symptoms, however, these modifying causes cannot be taken into consideration; nor does it appear necessary that they should, as the effect of each upon the various affections of the uterus will be better considered when treating of the individual diseases.

For the convenience of description, the constitutional symptoms may be subdivided into (a) disorder of the general system; (b) disorder of the cerebro-spinal system; (c) disorder of the digestive system, including the urinary organs; and (d) disorder of the circulating and respiratory systems.

(a) *Disorder of the General System.*—Among the first symptoms which indicate that the affection of the uterine organs is acting upon the general health, is a feeling of languor and of depression, accompanied with inability to continued exertion. In some cases this feeling is so marked as to constitute the chief object of complaint, and to be the reason why medical assistance is sought. (a) In severe and long-continued cases it is described as being sometimes so great, as to impress the patient with the idea that she "must sink down, and die upon the spot" where she may be sitting or even lying.

The features are drawn and lengthened, the eyes watery, with a heavy expression, and frequently surrounded by a dark areola; the complexion is pale, with a red flush on each cheek, or pale and sallow, or, what is frequent, of a dirty muddy hue, which is an object of great complaint, the skin having the appearance as if it had been washed in dirty water. The general expression is that of depression, and of melancholy, with an occasional attempt at a smile, which has such a lachrymose appearance as to render it difficult to determine whether it indicates a feeling of pleasure or of grief. The movements, in marked cases, are slow, measured, and languid; the voice is weakened, sometimes feeble, and measured, and occasionally hesitating and trembling, which latter condition is usually attended with an agitated trembling state of the whole frame. If, during this state, the patient is excited by any sudden emotion, the face flushes, a perspiration breaks out over the body, but especially over the face, the eyes glisten, and a few rapid and quick movements are made, the voice at the same time assuming a tone and firmness which was previously wanting. This condition, however, soon passes away, and is followed by an increased feeling of languor, of depression, and of exhaustion. Trifling extremes of temperature, whether of heat or of cold, which would not influence a healthy person, are very disagreeable, and, in severe cases, cannot be endured. The system is extremely susceptible of "taking cold;" the patient being seldom free, during the cold weather, from the symptoms of catarrh. In a few cases I have met with, placing the hands in cold water, even during the summer months, was always followed by an aching sensation in the arms and in the whole body, which was described as being exactly similar to the feeling induced by an intensely cold day in winter. The skin is, usually, soft, cool, and moist during the day; frequent flushes of heat come over the whole body, which are followed by a feeling of "deadly coldness." After the illness has continued some time, the patient loses flesh, and the muscles become soft and flabby; and although this may not be perceived by a stranger, yet it is very evident when compared with her former state of health. The emaciation is most marked about the upper part of the chest, and in many cases the bosom almost disappears. In longer continued cases, the emaciations of the

whole body becomes very perceptible, and is sometimes carried to that degree as closely to simulate advanced phthisis pulmonalis.

(b) *Disorder of the Cerebro-spinal System.*—It is upon these systems that the effect of uterine derangements are most marked. The reflected pains to which they give rise, have been already considered. In addition to these, pains in the head are much complained of, and are among the earliest symptoms. A sense of heaviness and dull pain is felt across the lower or middle part of the forehead, attended with an aching sensation in the eye-balls; and by a more or less dimness of sight. Sometimes the pain is located to a well-defined spot over one or both eyebrows. After a time, pain at the top of the head comes on, which is described as of a hot burning character, with a feeling of weight or pressure on the part. Occasionally, a dull heavy pain is felt at the back of the head, over the cerebellum; but this is much less frequent than are the former sensations. The sleep soon becomes disturbed; sometimes the patient can sleep at all hours of the day, and when she retires to bed, falls directly into a heavy, though not sound sleep, in which she continues all night, awaking in the morning tired and unfreshed; at other times, extreme restlessness prevails, and, although tired and sleepy, yet the patient turns from one side to the other, after being in bed, unable to sleep, and unable to divine the reason why sleep comes not to the weary frame. If, after many fruitless endeavours, sleep at length closes the eyelids towards the morning, the mind still wanders in frightful dreams, harassing the patient, and causing her frequently to start up from the disturbed slumber, half-unconscious, bathed in perspiration, and screaming from some imaginary fear. In other cases which I have met with, the patient soon falls asleep, after retiring for the night, and enjoys for some few hours a refreshing sleep, yet, early in the morning, she awakes, and then lies in a trembling, anxious, half waking state, until the time comes to arise. Spectres are a frequent source of annoyance, and sometimes keep the patient in a constant frightened, agitated state.

The temper is frequently influenced in a curious manner. A previously amiable lady will become singularly wayward, perverse, and obstinate. She will remain for hours together without speaking, impatient if spoken to, and equally impatient if left alone. When asked if she is ill, she turns perversely away, with the remark, "I am quite well; let me alone;" yet afterwards, she will acknowledge to be suffering from severe pains, the situation of which indicate the existence of severe disorder of the uterine organs. The spirits are dull and depressed; crying being readily induced from trifling causes. In marked cases, the spirits become exceedingly low and melancholy, when there is a feeling, more or less strong, of some unknown danger hanging over; the temper, at the same time, is very irritable, and the nervous excitability great. In extreme cases, the most trifling incident, a look, a word, or even the intonation of the voice, produces a degree of excitement which is truly surprising. A fullness and distension of the head is also experienced, with a confusion of intellect, loss of memory, and inability to mental exertion. In some cases the patient, when left to herself for a few minutes, lapsed into a half dreaming, half stupid state, indifferent of what occurred, and regardless of what happened to herself or to her children. She was further incapable of directing the mind to the most ordinary occurrences, except for a minute or two, the incidents of which are again forgotten the minute after. In some few instances, where the general health had suffered much from the long continuance of the local affection, there existed a constant prompting to suicide, which was so great as to prevent the sufferers from approaching a body of water, lest, impelled by an uncontrollable feeling, they should throw themselves into it. It is worthy of remark that, in every case, the morbid desire was, "to throw themselves into the water." In less marked cases, a strange waywardness of manner and of temper, with an irresistible prompting to do strange things, for which no reason could be assigned, formed a marked feature in the case; nor could they be restrained from following this prompting, except by actual force, the employment of which produced much irritation.

Other states of the nervous system, which are occasionally met with, may, perhaps, be best illustrated by short details of cases.

A young woman, aged 25, of nervo-sanguine temperament and good conformation, came under observation in October,

(a) A patient describing this feeling writes to me in the following terms: "I am very ill; my debility is so great that I cannot sit up ten minutes at a time; nor have I power to relieve my bowels. I was in a sad state all day yesterday; I tried a little weak brandy and water, which roused me for an hour; at dinner I took about a quarter of a pint of bitterale, but that fagged me, and sent me to sleep, and when I awoke I felt as though I were dying. Writing this note has roused me; I feel as though I could do anything, but in about half an hour I shall be as faint as possible. My head has had a very full feeling of late, my forehead as if it would burst through."

1848. She had long suffered from the symptoms of chronic inflammation of the uterus and of the vagina, and for the last twelve months had been subject to "fits," of which she gave the following description. The day previous to their recurrence, she forgot things. She did not forget to do the duties of her situation, but forgot whether they had been done or not, and would go several times to look if they were done. She would also mention the same thing three or four times, forgetting she had previously told it. In the afternoon or the evening of the day, a pain, attended with a feeling of heavy weight, suddenly came in the back of the head, (over the cerebellum) which, gradually advancing, in about five minutes reached the top of the head, when all consciousness was lost, and she lay in a stupid state for about five hours. After this, she awoke with a feeling of great weight at the back of the head, and a full feeling in the front. It was at this time impossible to hold the head up: but these sensations gradually improved, and in about twenty-four hours after the return of consciousness, she was enabled to arise, having the feeling of great weakness, and of dreadful tightness in the head. This continued for three or four days; gradually passed away, and then she felt as before. The attacks had gradually become more frequent, and lately were as often as three in a fortnight.

Whilst under treatment, at the close of each menstrual period, she forgot what was said to her, but did not forget to perform her usual duties; and the face assumed the expression of a "tipsy" person. She also became very talkative, and readily took offence at any remark supposed to be made at her. Towards the evening of this day she became more stupid, appeared unable to comprehend what was said to her, and was very anxious to impress those near with the idea that she was quite well. On the following day the walk was unsteady; a restless desire to be engaged was present, and she performed her usual duties with a singularly earnest attention, whilst mumbling to herself. The features now had a swollen appearance; the expression was vacant and staring. A few hours later the face assumed a leaden hue, a few contortions of the muscles of the face occurred, and soon after she suddenly fell into a state of perfect coma, with dilated pupil, slightly stertorous breathing; pulse about 80, rather full and soft; skin cool and soft. In this state she remained for four or twelve hours, and then gradually became sensible, and stated that she felt great pain in the head. She now turned to one side, and fell asleep for some hours, awaking with the feeling of exhaustion, and of stupid fullness in the head. The ordinary health was regained in about two days, and remained until the termination of the next menstrual period. When these attacks were anticipated, and a few leeches applied to the uterus, immediately on the cessation of the catamenia, they did not occur, and, as the chronic inflammation of the uterine organs was subdued, the attacks only reached the first stage described, and finally ceased to recur when the cure of the local disease was effected.

A young lady, about 30 years of age, rather tall, good conformation, dark hair and eyes, and swarthy complexion, had suffered from symptoms of chronic inflammation of the uterus and of the vagina for many (ten or twelve) years. She attributed her illness to great exertion in superintending a school, taught on the Pestalozzian system. At first she was subject to attacks of severe pain in the lumbar region, down the sides of the abdomen, hypogastrium, and insides of the thighs, attended with simple heavy headache. These attacks increased in intensity, and were accompanied with "insufferable fullness and distension of the head." After they had continued for a few days, she suddenly fell back in an unconscious state, and lay as if in a deep sleep. Her friends, even, could not say whether she was sleeping or not, until they failed to arouse her. Various means were adopted for the relief of those attacks, such as leeches, cupping, blisters, setons, purgatives, etc., but all failed in affording decided relief, except copious bleeding from the arm. In November, 1842, I saw her in one of these attacks, which were always preceded by very sleepless nights. She then lay on the back, as if in a deep sleep; no stertorous breathing; no puffing of the cheeks; expression calm; face very little flushed; head rather hot; pupils natural size, round, equal, and acted sluggishly to the stimulus of the light; pulse 86, full, and rather firm; impulse of heart short and quick, not heaving, and no unnatural sounds. On a previous attack she had been bled to the extent of forty ounces, by weight, before consciousness returned, which was usually evinced by a slight sigh, and by raising the hand to the head. She was

cupped behind the neck, to the extent to produce syncope, after which consciousness returned. For some days afterwards, she lay as if dosing, and gave short answers when spoken to without opening the eyelids. She complained of great fullness and distension of the head, which was relieved by pressing the cold hand on the top of the forehead, and that the light and noise were particularly disagreeable; occasional retching was also present. The reflex uterine pains in the back, stomach, and lower extremities were all strongly marked. Leeches were now applied to the uterus, which presented the local signs of inflammation strongly marked, and great relief was obtained in a few days. On subsequent attacks, this plan was adopted, instead of the previous bleedings, and with more decided relief. As the inflammation of the uterus was relieved, these attacks ceased to appear, yet they could always be induced for many months after, by pressure being made on the uterus. When the increase of the reflex uterine pains rendered it necessary to apply leeches to the uterus, the pressure of the leech-tube upon the organ was sufficient to produce a fit of insensibility, which passed off in about an hour, leaving a feeling of exhaustion and of weakness. The same thing occurred when the elastic tube of an enema apparatus pressed upon the uterus; it being frequently requisite to administer enemata for an obstinate constipation, produced more by resisting the action of the bowels from a dread of the pain induced, than by inaction of those organs.

It would be easy to multiply these examples, and to adduce cases of cerebral disturbance, usually attributed to an hysterical condition of the female, wherein the cerebral state was traced to depend upon disorder of the uterine organs, and passed away as these disorders were subdued; but this does not appear to be advisable. I must, however, guard myself against an interpretation which this statement may receive. I do not wish to say that *all* hysterical conditions have their origin in a local uterine affection, for that would be contrary to my present experience; but only that *many* states, generally included under the term hysteria, essentially depend, for their production and continuance, upon local affections of the uterine organs. The state of paraplegia which these diseases cause, and which appears only to be remedied by their cure, is too important to pass over without an additional example to that already given when describing the origin of the "broken-back pain."

A married lady, aged 35, who for the last ten years had suffered from an uterine affection following her first and only confinement, was seized with an intensification of the usual pains in the lumbar region, sides of the stomach, and inside of the thighs; also with great pain in the back of the neck, and over the cerebellum. These symptoms obliged her to remain in bed for a few days, and when she afterwards attempted to arise, she found she was unable to stand from a want of power over the lower extremities, although she had no indication of this deficient power whilst lying in the bed. When in the recumbent posture, she was unconscious of any loss of power over the lower limbs; she could move them about with the usual facility, and could exert pressure on the foot of the bed as usual. But when she attempted to stand, the legs trembled, the knees bent forward, and the exertion was attended with great pain in the upper sacral and lower lumbar regions, at which part "the weakness" appeared to be seated. The sensation was also distinctly affected. Frequently during the day, the feet and legs felt numb and cold, and were perceptibly colder to the hand of the observer. This, however, was only transient, recurring at intervals. Previous to this attack, she was "intensely ticklish" at the soles of the feet, but now she could bear them touched without inconvenience, and could not distinguish the ends of two fingers, at two inches apart, from one body, when these were placed upon the foot and lower part of the leg. At first the whole of the surface of the body, but particularly the abdomen, and the lower extremities, was exceedingly sensitive to a slight pressure. In the treatment, the uterine element of the affection was attacked, and the paralysis gradually passed away, and finally totally disappeared, as this was overcome.

I have known a similar attack of temporary paralysis to follow acute inflammation of the uterus and vagina, when supervening upon chronic inflammation of the same organs.

9A, Langham-place.

(To be continued.)

AN EXAMINATION OF A DISTORTED KNEE.

By JAMES ROBERTSON, M.D., F.R.C.S., M.B., Lond.,

Physician to the Infirmary, Hitchin.

I am induced to record the examination of the distorted knee of a person who lately died under my care (from ulceration of the intestines) because I find no such examination recorded; and from the growing importance of the surgical treatment of deformities, every item of pathological knowledge is desirable, and because it presented some interesting appearances, the knowledge of which may be useful when writing "On Deformities." Mr. Tamplin (and I know of no more experienced writer on the subject) says, (Lectures, pp. 120, 121, on Deformities of the Knee-joint) "When the deformity is considerable, and has been so for some years, does the articulating surface itself alter in position; or does the internal condyle itself alter or increase in size, or project more than it does in its natural size? I do not believe that either of the changes takes place. I believe no alteration takes place; certainly none by attrition. Yet it is a question on which, from our present experience, I am unable to speak positively."

That these very alterations do *sometimes* take place, the following case proves.

R. P., aged 32, had his right knee distorted for many years; he attributed it to carrying water when young; it presented the usual appearance of genu valgum or knock-knee, of severe grade, the leg and thigh forming a considerable angle, which admitted of being slightly lessened by manipulation; his left leg was straight. After death the angle did not admit of alteration. The tendon of the briceps and the external portion of the fascia lata were tense, but division of these did not allow of any material alteration of the position of the leg. The internal lateral ligament was lengthened. On opening the joint, the interior, except the articular surfaces and the crucial ligaments, presented a dark purple colour, from a layer of enlarged tortuous vessels gorged with blood, ramifying under the synovial membrane, which was disposed in an infinite number of folds hanging into the joint, in form after the fashion of the *valvulae conniventes*, in consistence like loaded plexus choroides, showing, when magnified, innumerable compound—or looped—loops of vessels enveloped by synovial membrane. The joint contained from half to three quarters of an ounce of thick, glutinous, yellow, transparent fluid. The articulating surfaces and crucial ligaments were of their natural colour; a patch on the middle of the patella, as large as a sixpence, was partially denuded of cartilage, and had a puckered appearance. There was a similar but smaller spot on the edge of the articulating surface of each of the condyles in front; these places suggested the idea of old puckered cicatrices. The end of the external condyle, and corresponding portion of the articulating surface of the external tuberosity of the tibia were denuded of cartilage, and the cancellated substance of the bone was bared to an extent equal in size to a fourpenny-piece; around these rough surfaces, for about the sixth of an inch, the cartilage was detached and lay in a thin fringe on the bones. The cartilage became thicker as it receded from these fringes, and on the extremity of the inner condyle was scarcely less than a quarter of an inch thick.

On microscopic examination, these fringes consisted of little else than rows of cartilage cells. Whilst as the cartilage became thicker, the intercellular substance increased and the cells diminished in quantity, till at the thickest part these were thinly scattered. There was no appearance of vessels in the cartilage. The articulating surface of the inner condyle was considerably longer than natural, and more pointed; the outer, shorter and flatter. The semilunar cartilages were mere rings round the outside of the articular surface of the tibia; the crucial ligaments were perhaps rather long. The other parts of the joint presented nothing unusual. Thus, in this case, the internal condyle did project, was increased in size, the position of the articulating surfaces altered, and marked changes by attrition were evident, etc., etc., though not expected in such a case by the experienced writer above quoted. I need scarcely add, that joints similar to this would not promise a very successful result to operative or other efforts to cure the deformity, and that I record this, not as offering the general

condition of the parts in the same disease, but as showing what is sometimes their unpromising condition.
Hitchin.

CASE OF ULCERATION OF THE UTERUS INTO THE COLON.

By CHARLES C. ALDRED, Esq., M.R.C.S., L.S.A.

A., aged 50, enjoyed good health, married late, and never pregnant; was attacked with an acute, deep-seated pain in the hypogastric region, accompanied with much constitutional disturbance. The application of leeches and other remedies relieved the urgency of the symptoms. She still complained of pain in the uterine region, sometimes more so than others, accompanied by a muco-sanguineous discharge. Vaginal examination by touch and speculum discovered nothing abnormal; no tenderness to the touch. By rectum examination, the uterus was found to be somewhat enlarged and high up; a slight hardness might be felt. This state of things continued with little variation for about twelve months. The constitutional disturbance now became aggravated, the bowels costive, sickness very troublesome. It continued for several days, after which the vaginal discharge became mixed with feculent matter. Her strength now rapidly declined, and death ensued about ten weeks after the first appearance of the *fæces*. No *post-mortem* was allowed. The case was seen during its progress by Dr. Ashwell and Dr. Hull, of Norwich. Some years since, she was the subject of severe inflammation of the bowels, during which, in all probability, adhesion of the colon to the fundus of the uterus took place.

Yarmouth.

KOUSO IN TÆNIA.

By T. H. SMITH, Esq., M.R.C.S.

If sufficient evidence has not already been published to establish the fact that kousso will expel *tænia solium*, I beg to contribute the following case:—

D. C., aged forty-three years, residing at St. Mary Cray, first passed, two years since, a few caudal joints of a tape worm, and has, at times, since passed small portions. Twelve months ago he consulted me, when I gave turpentine without the least effect. Others have prescribed for him, and on one occasion he was salivated, but never passed any of the worm when under treatment.

His general symptoms have been giddiness, pain over the brow, irritability, "nervous tremors," lassitude, and latterly general debility.

May 17th, gave him ʒvj. of kousso, obtained from Hooper, at eight o'clock, a.m., in luke-warm water, in three portions, at intervals of ten minutes. No solid food had been taken for twenty-four hours, but he had omitted to take the dose of castor-oil ordered the previous day. Twelve o'clock bowels relaxed several times, without pain or inconvenience; a few joints passed. One o'clock copious evacuation without pain. Passed upwards of 17 feet of the worm entire, and several separated joints. The neck passed, narrowed to about the sixteenth of an inch, and therefore near the head; but the latter not found.

Two mornings after gave ʒiij. more of kousso, which acted freely as an aperient; but I did not find the head, neither did any further portion of worm pass.

27th.—Is perfectly well—all his symptoms entirely removed.

St. Mary Cray, Kent.

THE news from India state that cholera continues to prevail in Kurrachee, particularly in the town, and amongst the Europeans of the 83rd Regiment at the Pendals. There have been also a few cases in the General Camp Bazaar, and one, which terminated fatally, in the 64th Foot. A case of European cholera is said to have occurred on board the Ganges at Malta; there appears, however, to be some doubt about it, and probably it was merely the ordinary cholera morbus: it is attributed to the too free use of unripe wall-fruit, cucumbers, etc. The man recovered. The cholera has broken out again in Jamaica with great violence; but is not so fatal as during the existence of the previous epidemic.

THE LONDON PRACTICE OF MEDICINE
AND SURGERY.

LONDON HOSPITAL.

By NATHANIEL WARD, Esq., F.R.C.S.,

Assistant-Surgeon to the Hospital, and Demonstrator of Anatomy in the
School:

AND

ROBERT BRUDENELL CARTER, Esq.

CASES OF SECONDARY HÆMORRHAGE, TREATED
BY COMPRESSION OF THE MAIN TRUNK.

THE treatment of secondary hæmorrhage, after the amputation of a limb, is one of considerable importance, and varies according to the character of the bleeding, and the position of the part in which it occurs.

Thus, it now and then happens that hæmorrhage comes on after an operation, on the occurrence of re-action, in cases in which the stump has been dressed immediately after the removal of a limb, and particularly in patients to whom chloroform has been administered; and in instances in which the greatest possible care has not been used in the adjustment of and uniform support by the strapping and bandages applied. The treatment here called for is an immediate removal of the bandages, the inclined position of the limb, cold applications, etc. These remedies are usually successful if the hæmorrhage be venous, and if not, the bleeding is in all probability arterial, from one or more vessels; and necessitates the opening of the stump in order to secure them.

At other times, extensive arterial hæmorrhage occurs from one or more large vessels during the apparent progress of a case towards a favourable termination, at various periods, ranging from a short time after the operation to a period when all the ligatures have come away. Bleeding of this character most frequently occurs in individuals of depressed physical powers, dependent on original constitution, low diet, depraved habits, some severe local affection, such as extensive suppuration in and about joints, malignant affections of the extremities, a diseased condition of the arteries, etc.

That a small loss of blood, in these and similar cases is not unfrequently attended with most serious results, is a matter of observation; as also that interference with the stump, so as to secure the bleeding ends of the vessels, is occasionally followed by so severe a shock, that the patient either dies from its immediate effects, or an attack from erysipelas; or else gradually sinks, the powers of the system being totally unequal to what may be termed a second reparative process.

There have been lately in the hospital some cases in which the plan ordinarily recommended for the suppression of arterial hæmorrhage of the character last alluded to, has been deviated from with marked benefit. Two or three of these cases occurred under the care of Mr. Curling, who suggested the propriety of temporarily suspending the circulation in the main vessel of the limb, and then merely moderating the force of the current of blood through it.

One of the cases was that of a labourer, aged 47, whose leg had been amputated for extensive disease of the tarsus, the consequence of an injury from a rusty nail. The man had been suffering from the affection for six weeks before operation was had recourse to, in the hope that the disease might be arrested by the remedies employed. He was at the time of the operation considerably reduced. The first attack of secondary hæmorrhage came on on the second day after the amputation, and, from the size and direction of the jet, flowed no doubt from the anterior tibial artery. The bleeding was immediately stopped by the application of Signorini's tourniquet to the middle of the femoral artery. The instrument was for the first two hours applied tightly enough to stop the pulsation of the artery below it. The pressure was then gradually relaxed so as merely to control the force and volume of the current. The instrument was removed on the fourth day; hæmorrhage again took place, and was controlled in a similar manner; the tourniquet being now kept on until three days after all the ligatures had separated.

Another case occurred in a fat drayman after amputation

of the thigh, the hæmorrhage supervening about a week after the operation. The application of the presse-artère was here also perfectly successful, although it should be mentioned that a small superficial slough resulted, without, however, any bad consequences, the compression having been subsequently applied to another part of the limb.

A well-marked case of the advantage of this line of treatment came also under my own immediate observation a short time ago.

An unhealthy labourer, coal-porter by occupation, aged 45, who had led an intemperate life, and had been used to hard labour for a long time, under exposure to all kinds of weather, came under my care as an out-patient, with a deep-seated abscess at the lower part of the fore-arm, immediately behind the annular ligament and flexor tendons. He could attribute it to no local injury. A vent was given to it by a free incision; the patient was well supported by nutritious and stimulant diet, and tonics. Notwithstanding, inflammation rapidly extended to the wrist-joint, and terminated in ulceration of the cartilages of it, and of nearly all the bones of the carpus, particularly the os magnum. Under this affection his constitution, originally weak, was rapidly giving way. I amputated the fore-arm at the upper third. The stump was dressed four or five hours after the operation with strips of wet lint, and a lightly applied wet bandage covered with oiled silk. The dressings were removed every day. The case, to all appearances, progressed very favourably. The ligatures were removed on the eleventh day after the operation. Two days subsequently, profuse arterial hæmorrhage came on from two distinct parts of the stump, in the situation of the ulnar and radial arteries causing in the track of the bleeding considerable distension of the stump. The presse-artère was immediately applied by Mr. Williams, the dresser in attendance, so as to stop the impulse in the brachial artery, below the point at which the instrument was applied.

This amount of pressure was kept up for nine or ten hours, when it was so remitted as merely to control the force and volume of the current of blood. The tourniquet was laid aside on the fourth day after the bleeding. There was no recurrence of hæmorrhage. Two large coagula came away on the seventh day after the application of the instrument, and a very good stump resulted.

An interesting case, bearing on this method of treatment, is related by Mr. Guthrie.^(a) "A soldier was wounded by a musket-ball, which entered immediately behind the trochanter major, passed downwards, forwards, and inwards, and came out on the inside of the anterior part of the thigh. The ball could not have injured the femoral artery, although it might readily have divided some branch of the profunda. Several days after the receipt of the injury, I saw this man sitting at night on his bed, which was on the floor, with his leg bent and out of it, another holding a candle, and a third catching the blood which flowed from the wound, and which had half filled a large pewter basin. They seemed to think it would stop in due time, having bled once before during the afternoon. I placed a tourniquet with a thick pad as high as possible on the upper part of the thigh, and requested the officer on duty to loosen it in the course of an hour, which was done, and the bleeding did not recommence. The next day I placed the patient on the operation table, removed the coagula from both openings, and tried to bring on the bleeding by pressure, and by moving the limb; it would not, however, bleed. As there could be no other guide to the wounded artery, which was evidently a deep-seated one, I did not like to cut down into the thigh without it, and the man was replaced in bed, and a loose precautionary tourniquet applied. At night the wound bled smartly again, and the blood was evidently arterial. It was soon arrested by pressure. The next day I placed him on the operating table again, but the artery would not bleed. This occurred a third time, and with the same result. The bleedings were, however, now almost immediately suppressed, whenever they took place, by the orderly who attended upon him; care having been taken to have a long thick pad always lying over the femoral artery, from and below Poupart's ligament, upon which he made pressure with his hand for a short time. The hæmorrhage at last ceased, without further interference, and the man recovered."

Had a moderate amount of pressure been applied by

(a) Guthrie on Wounds and Injuries of the Arteries.—P. 69.

means of the pad during the time that there was no bleeding, the attacks of hæmorrhage subsequent to the first would probably not have taken place.

In the following case, the usual treatment recommended for secondary hæmorrhage from a stump was had recourse to:—

A healthy dock-labourer, aged 27, came under my care, having sustained a very severe laceration of the right arm, from the falling of a large bale of wool. The inner and back part of the arm were involved in the injury from a little below the level of the attachment of the deltoid to the elbow-joint. The triceps was to this extent irregularly torn, and inferiorly stripped away from the bone, so that the finger could be passed into the articulation. The nerves were more or less injured; the internal cutaneous being completely torn through, and hanging loosely out of the wound. Though blood was effused in the sheath of the humeral artery, the vessel itself had escaped injury. I amputated the arm by an anterior and posterior flap, just above the attachment of the deltoid. The stump was dressed several hours after the removal of the limb, with warm water dressing and oiled silk. Forty-eight hours after the operation a severe attack of delirium tremens came on, and lasted for three days. It was treated by porter, strong broth, and opium.

During the attacks, the man was remarkably restless, jerking the stump in every conceivable manner, so that it was difficult to keep any dressing at all on it. On the eighth day, the attack having entirely subsided, and the stump appearing to be going on well, most profuse arterial hæmorrhage suddenly came on. The man fainted, and it was several hours before he rallied to consciousness. Pressure was made by Mr. Prater, the house-surgeon, on the subclavian artery, the two flaps of the stump were immediately separated, the axillary artery isolated from the surrounding structures, and tied by a ligature passed round it, a quarter of an inch above the bleeding extremity of it. No recurrence of hæmorrhage took place, and the man left the hospital in six weeks. He could move the stump in any direction.

In this instance there can be little doubt that the hæmorrhage depended on the traction which had been exerted on the axillary artery by the jerking of the stump during the delirious fits of the patient. Owing to the high amputation, there was no room left for the application of pressure as carried out in the preceding cases, and a ligature was re-applied to the artery in the stump with confidence as to its success, because the bleeding did not depend on ulceration of the coats of the vessel, the consequence of diseased artery, or an impoverished condition of the blood. Had, however, a similar hæmorrhage occurred in a patient worn out by previous disease, I should have preferred tying the axillary artery between the great pectoral and latissimus dorsi, to the opening up of the stump, and placing a ligature immediately above the bleeding end.

N. W.

PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

BELFAST GENERAL HOSPITAL.

By A. G. MALCOLM, M.D.

CASES OF PARALYSIS.

No. 9. Samuel M—, aged 43, a carter. Left unrelieved.

Case.—An apparently stout man, of middle height, of general good health. Has been ill nine months; illness commenced with weakness and numbness of left arm; left leg similarly engaged two months since; right arm and leg slightly affected. The debility is general; his speech is imperfect; in walking the left foot is evidently dragged. Pulse 60; tongue foul, white; temperature of extremities low; evacuations passed naturally. He was admitted on 10th December.

On the 19th had a well-marked rigor. Headache and nausea, succeeded by a hot stage. This febrile state continued. On 27th erysipelas appeared on the head, and gradually extended over the face, shoulders, and upper part of the arms, attended with increased febrile excitement, and constitutional disturbance. In five days the cuticle began to desquamate, and the fever left, and in the

course of a few weeks he was discharged, but without any decided relief to the paralytic state.

Treatment.—A seton was inserted in the nape, and a mixture of the bichloride of mercury in bark was administered, which was omitted when erysipelas set in. Purgatives and antim. diaphoretics were now substituted, under which the affection yielded. Not being likely to derive any benefit by further stay in the hospital he was discharged. The case, (one of chronic general, but imperfect paralysis,) is most probably dependent on ramollissement slowly developing itself, which, when matured, will be indicated by more definite symptoms. The evidence here is only presumptive. There did not appear to have been any original apoplectic attack.

No. 10.—Catherine D., aged 45, died.

Case.—She was admitted on October 2, with hemiplegia (left side) of three months duration, and with chest symptoms; these only indicative of bronchitis. In two weeks from this date the state of the lungs became considerably aggravated. Dyspnoea, paroxysms of cough, and bloody expectoration simultaneously ensued; and shortly afterwards spots of purpura appeared on the feet, legs, and arms. When examined on the 5th November these spots had disappeared, but the hæmoptysis continued, attended with distinct signs of pneumonia at the base of the left lung, while the first sound of the heart was clearly roughened and prolonged; for several days prior to her death, which occurred on the 7th, œdema of the paralysed side was observed. A necropsy disclosed an apoplectic cyst close to the cleft of middle and anterior lobes of right hemisphere. Balls of coagulated blood were seen in the right lung, while pneumonia in various stages characterised the left, which was completely surrounded by pleuritic effusion. The mitral valve was thickened and contracted. The liver assumed the appearance of incipient cirrhosis, and several fibrous tumours were attached to the uterus.

Treatment.—This was altogether palliative, as, owing to the amount of complicated lesion, nothing seemed capable of effecting any but temporary relief.

No. 11.—James W., labourer, at 40, left much relieved.

Case.—A moderately stout man, generally regular habits. Took ill suddenly two months before admission, with headache and general weakness of body and mind: has had frequent faint turns. On admission walked with difficulty. Tongue pointed to the right side; white. Bowels confined. Pulse good. Urine passed regularly. The paralysis affected the right leg more distinctly. For the first week after admission he passed his stools and urine in bed, and his mental condition assumed the idiotic form of insanity. He was now put under small doses night and morning of the pil. hyd. with hippo. and the croton liniment applied to the shaven scalp. Under this treatment he gradually improved both in intellect and power of his limbs and sphincters, and he began to lose, in a great measure, the fatuous expression of countenance.

His gums were kept in a tender state for a length of time. Thus improved, he was discharged at his own request, with directions to wear a seton in the nape for some months.

This case I feel positive was one of incipient ramollissement, and, on the conviction that this state is generally one of chronic inflammation, the treatment mentioned was employed, and, it is believed, with decidedly good effects.

No. 12.—Agnes B., aged 17, a sempstress.—Left unrelieved.

Case.—A young girl of fair complexion, but dark hair, rather delicate in appearance; illness of eleven months' duration. It commenced with pains in the arms, then the spine, and afterwards the lower limbs, and soon paraplegia. About two months previously, had noticed a spinal curvature (posterior) of upper dorsal and lower cervical, marked, and forming a projecting angle of about 100 degrees. On admission, there was retention of urine, complete loss of motion, but perfect sensation; pains of arms and breast frequently complained of, and at times excruciating; pulse, 100; abdomen tympanitic; appetite bad; no tenderness over curved spines.

Treatment.—Issues were inserted on either side of spine at part affected, and tonics administered.

The intercostal neuralgia was most distressing in this case, and led to the presumption that the source of the irritation was an inflammatory process going on at the seat of curvature. There was no doubt that pressure was made on the anterior columns of the spinal cord, most probably arising

from the curvature itself in the progress of the absorption of the bodies of the vertebræ. I question whether any permanent effect can be produced in this case.

No. 13. Mary H., aged 30, millworker.—Improved.

Case.—Fresh, clear complexion, and moderate conformation; in previous good health. Was suddenly seized twenty-two weeks before admission with hemiplegia of right side. The paralysis was complete, besides loss of speech and partial inability to raise left eyelid. After cupping of the neck and active purgatives, she was ordered to take four grains of blue pill night and morning. Under this treatment, a marked improvement was soon visible, and in a few weeks she had acquired excellent power of the leg. Counter irritation was kept up over scalp and at nape. Iodide of potassium was administered for a time, and afterwards the compound iron mixture, under which her general health improved, but no addition to the degree of restoration of power mentioned already. The intellect was perfectly sound throughout.

There can be no question of the original existence of a clot, most probably in the left hemisphere, which has passed into the cyst formation. The paralysis may be further removed, but never completely.

No. 14. Thomas M. C., aged 60; improved.

Case.—An average-sized man of stout conformation and fresh complexion. Three years ago had an attack of rheumatism of the chronic form. Ill ten months of paralysis. Ascribes illness to working in a river while warm, as he complained immediately afterwards of a numbness in the left thigh and leg, accompanied with a burning sensation, and prickly feeling in the fingers of the left hand. This sensation continues, and the left leg is plainly dragged in walking. There is no apparent loss of power in the upper extremities. Pulse 72, good; tongue clean; sleeps well; appetite good. He was cupped to 8 ounces in the nape, and put under three grains of blue pill night and morning, under which treatment he felt himself so much improved as to request his discharge, which was granted.

The mind in this case was sound, and speech unaffected. It is doubtful whether there was any extravasation in this case. The history would lead one to suggest some degree of congestion at least; or might it be an instance of local paralysis of the leg? But then, how are we to account for the implication of the arm? A further history of the case will be necessary to decide the point.

The foregoing comprise the cases of cerebral and spinal affections that occurred in the practice of the hospital during the first four months of the present session. Though there is no selection, they present examples of the most interesting forms of the most frequent occurrence, and are therefore such as should interest the student. In observing upon them before the clinical classes, we have ever endeavoured to impress upon the young beginner the importance of attending to the general state of the patient's constitution, the manner of the attack, the engagement of the mind, and the character of the paralysis, or of the sensation when present. It is only by weighing and comparing all these circumstances that a proper *therapeutic* diagnosis can be attained. Having ascertained the seat of the malady, it is much more important to inquire and find out if the cause be one of the form of inflammation, mere nervous irritation and excitement, passive congestion, or that tending to inflammation, or one of softening; and, if so, what stage and what complications are present. All these points are rendered doubly important in nervous diseases, where the guides adapted to the other great organs are useless.

(To be continued.) (a)

(a) The next series will comprise cases of dropsy.

HONG-KONG, CHINA.—We have several times had occasion to draw attention to the unhealthy condition of the barracks at Hong-kong, and the fearful destruction of the soldiery which has been its necessary consequence. Major-General Jervis, who has gone out as Governor of that place, has *carte blanche* from the Horse-guards to carry out any alterations necessary for the preservation of the health and lives of the troops. Accordingly a troop-ship called the Minden has been engaged as a convalescent hospital for the summer. It is to be hoped, therefore, that we shall not again hear of regiments decimated by the climate.

THE MEDICAL TIMES.

SATURDAY, JULY 5.

THE COLLEGE ELECTION.

WE announce with satisfaction the result of the College Election. As we had anticipated in a former Number, Messrs. Bishop and Hawkins have been re-elected. Mr. Benjamin Phillipps proposed Mr. Gulliver, but from that distinguished physiologist being at present on the Continent, Mr. Phillips declined to proceed to the ballot. Mr. Coulson, the Senior Surgeon to St. Mary's Hospital, and Mr. Dalrymple, the eminent ophthalmic surgeon of Grosvenor-street, were next nominated, and also unanimously chosen. The announcement of the President, that Mr. Coulson was elected a member of Council, was received with great applause. We think the Fellows have done well, and shown that spirit of good feeling and independence which ought always to direct so influential and highly educated a body.

CLINICAL MEDICINE.

WE have pointed out, in former articles, the great necessity which exists for improving the system of clinical teaching at our hospitals and medical schools. We have shown that courses of written lectures are too often considered to be substitutes for that practical acquaintance with disease, which can only be gained by a diligent attendance in the wards of the hospital. Now, it cannot be expected that those whose knowledge has been acquired from books and lectures only, or, what is still worse, from the instructions of a grinder, can be adequately prepared for the multiform exigencies of medical practice. We think that the more practical medical teaching—that is, clinical teaching—is enforced, *after* a sound foundation in the principles of the science has been laid, so much the greater will be the attainments of the student.

The present system of clinical teaching is defective in the extreme; here lectures, elaborately prepared upon the patients in the hospital, are delivered to half a dozen listless students—there the students, if anxious for clinical information, are unable to obtain it. Hence arise recriminations between teachers and pupils; the latter in many instances complain of the inattention of their lecturers, while the lecturers, on the other hand, complain of the useless trouble of preparing discourses for a scanty and inattentive class.

Attendance on clinical teaching is as important to the study of medicine, as is the dissection of the body to the study of anatomy. The attendance upon the anatomical lectures is properly considered, by all the licensing and examining boards, as insufficient, without an actual course of dissections performed by the student; and, if it be compulsory that he should make himself acquainted with the form, situation, and texture of organs upon the dead body by the aid of the scalpel, it is surely of equal importance, that he should make himself acquainted with the morbid phenomena presented by the living body in the hospital. It is very easy for a man to learn by rote the characters of the different pectoral *râles*, or the colour and appearance of urinary deposits, but it is only by observation of these phenomena for himself that he can become an efficient practitioner.

Now, what is the remedy for this unsatisfactory state of

things? To answer that question, let us consider the position of a diligent student of medicine, who proposes, at the expiration of his third winter session, to obtain the diploma of the College of Surgeons, and the licence of the Apothecaries' Society. During the first year of his residence in London, he must attend the classes of chemistry, anatomy, and physiology; anatomical demonstrations; materia medica and therapeutics; botany and vegetable physiology; midwifery and diseases of women and children; and during the same period, he must perform the dissection of at least two extremities. During the second year, fresh subjects occupy his mind;—the principles and practice of medicine, the principles and practice of surgery, and forensic medicine; a second course of anatomy and physiology, and of midwifery, and the whole body must be dissected. So far we declare, from experience, that the diligent student is fully occupied,—that no time is allowed him for attendance on clinical medicine or clinical surgery. He may, indeed, walk the hospital wards during his second year, for an hour occasionally, but he has not time to study disease. Nay, more, we are prepared to prove that, till the expiration of his second year's study, the student's mind is unprepared to reap much benefit from clinical teaching.

Those alone who, in the dead-house, have attempted to demonstrate the lesions which death reveals, can comprehend the difficulty of the task, nay, more, the impotence of the effort, till the student is familiar with the minute anatomy of the tissues, and of the several organs of the human body. How can he be made to comprehend the morbid anatomy of a fatty heart, who is unacquainted with the structure of healthy muscular fibre? How can he be made to appreciate the lesions of the kidney, to whom the appearance of the renal tubes and of the Malpighian corpuscles in their normal condition is unknown?

Again, it is mere waste of time for the student to listen to the clinical teacher explaining his reasons for determining that a given case is one of softening of the brain, rather than of hæmorrhage into its substance, and pointing out the peculiarities of each case—the features which unite it with its species, and those which constitute its individuality—until, by a diligent attendance in the class-room, he has learned from the teacher of the principles and practice of medicine the ordinary symptoms of the disease in question. The bedside can be visited with full advantage only when the student's mind has been prepared by attendance on the lectures on the principles of medicine; nor do we believe that an hour could be abstracted from the courses on that subject without detriment to the student. So the second year is past, and clinical medicine and clinical surgery are reserved for the last six months. Now, let the examiners and framers of regulations for the licensing boards, reflect on their own capacity of retaining theoretical knowledge, and candidly tell us if *they* could retain for two years the theory and constitution of voltaic circles, and of atomic proportions, of specific heat, isomorphism, and isomerism; the characters of rosaceæ, umbiliferæ, and amentaceæ; the names of the countries that yield kino, gamboge, and calumba; the decompositions, and the recompositions that attend the formation of ether, sulphuric acid, and white precipitate; the characters of pulegium, of peppermint, and spearmint—*et hoc genus omne*? Yet with all this, and much, very much more, they require the student to be familiar. We do not, for our part, believe the examiners of the Hall could themselves retain all this for two years, if occupied intently for those years in acquiring knowledge on other subjects altogether new to them. We confess, at least, that we could not; we own that, as students, we did not.

What then must the diligent student do? To pass is the *sine quâ non* of his future success. Why, he *must* neglect clinical medicine, and clinical surgery; he must permit the dead-house still to be a *terra incognita*, and refresh his memory on those subjects which formed the special objects of his first year's study. We repeat, the diligent student must either run the risk of rejection, or neglect clinical medicine, clinical surgery, and morbid anatomy. In the majority of cases he chooses the latter course, passes, and receives the compliments of the court; and yet, diligent though he has been, goes forth to practice his profession an ill-educated and really unqualified man. If the Hall and College authorities are in earnest—and we believe the former at least are—in desiring the student to attend clinical teaching, they must place him in a position in which such attendance is possible. To bid him attend clinical teaching with the present regulations, and while the present method of conducting the examinations is continued, is as futile as it was of the tyrant of old to bid his captives make bricks without straw. There is but one mode of enforcing *bond fide* attendance on clinical teaching, and that is, not by abstracting a course of the principles and practice of medicine, but by instituting examinations, at the termination of the second winter, in chemistry, materia medica, botany, anatomy, physiology, forensic medicine, and midwifery,—or, still better, the three first might be disposed of at the end of the first winter session,—and then enforcing attendance during the last six months on clinical teaching, the principles of medicine and surgery, and morbid anatomy, and finally examining on these subjects *only*, at the termination of the third winter or summer session, as the courts in their wisdom might determine. The fault of his imperfect knowledge of clinical medicine and surgery, lies not with the student any more than it does with his teacher, but with those who have the power to determine the curricula of medical education, and regulate the examinations that are to test the acquirements of the future practitioners of medicine and surgery.

STREET-CLEANSING.

THE inertia of parish vestries, in all matters of improvement, has become a proverb. These bodies are generally ruled by a junta of jealous and obstinate manœuvrers for influence, well trained in the ancient routine of parish business, and looking askance at every proposition not immediately issuing from the oracular crypts of the privileged upholders of parochial independence. Every judicious proposition, not their own, is a reflection upon their forethought, and an attack upon their power. The softest-toned suggestion causes the official hierarchy to fidget on their seats, draw closer together for mutual defence, or to plot an attack upon the unfortunate wight who has ventured to molest the otiose supremacy of Messrs. the Churchwardens' Sidesmen and their satellites.

We must not be surprised, therefore, that Mr. Cochrane's plan of street cleansing should have been treated with the disdain it has received. That gentleman has generously expended large sums of money on the practical working of his system, with the hope of demonstrating to the rate-payers its superior efficiency to the ordinary modes of street cleansing, and of forcing its adoption upon the various parochial boards. In one part of his object he has succeeded, for there are few persons that have had an opportunity of witnessing the plan, who are not convinced that it is admirably adapted to its end; but, alas! he has had

but small success in propitiating the support of local boards. True to their hereditary reputation, these gentlemen shut their eyes to the light. They hold their heads so high, that they cannot, or will not, observe the evidence that the very stones offer to all who tread them; but, unless they do look about them, it is not unlikely that they too may be swept off with the rubbish they so obstinately patronise. One of these illuminati lately observed, in our hearing, that he could see no use in this system, except that "of keeping a parcel of idle fellows hanging about the streets." At any rate, it is better that they should be engaged there in useful employment, than in picking pockets, or in filling our Union-houses with paupers, and our prisons with thieves. The employment of these men directly diminishes the amount of pauperism; and it has been asserted, that 10,000 men could be employed in this way in the Metropolis with a profit to the rate-payers.

The City of London has been just as incredulous and supine on this subject as other local bodies. We are told, in a "Report" recently published by the "National Philanthropic Association," that the Commissioners of Sewers of the City were invited a few years ago to send an officer to witness the operations then going on in Regent-street and Oxford-street, but that they replied, "that they did not consider the same worthy their attention." Curt and courteous as our good citizens no doubt thought that this reply was, it was not, after all, the utterance of wisdom and resolution it pretended to be. Two years afterwards the City relented, and gave permission that the experiment should be tried in the principal thoroughfares around the Bank and Mansion-house; and the trial was attended with so much success, that the Lord Mayor granted the use of the Egyptian Hall to consider the adoption of the plan. The inveterate antagonism to improvement was, however, too strong for the enterprising assailants to surmount; and the City, loath to surrender unconditionally, came to a compromise, by increasing the number of scavengers from thirty to three hundred, and making new arrangements with regard to the ashes, which saved them from four to five thousand pounds in their cleansing contract for the next year.

The Corporation, however, must give way. They do not love filth better than other people; although, perhaps, they may have a livelier sense than others of official dignity. We look to Mr. Simon for support; for street cleansing is but one of the measures of sanitary relief. Operations have been recently renewed with the most admirable effect in Cornhill and Cheapside. These streets are, in the wettest days, free from mud, and, in dry weather, almost exempt from dust. The inhabitants of the ward of Broad-street, and others, are so much gratified with the improvement, that they have memorialised the Commission of Sewers to arrange for the employment of street orderlies in their several wards. If the Commissioners of Sewers consider the interests of their constituents, these appeals cannot be rejected. The removal of dust and mud from the streets will necessarily exempt the inhabitants from the losses they now sustain by injury from dust to the colours and the texture of goods exposed in their shops for sale, and also by the perpetual cleansing to which a metropolitan house is now subjected to make it endurable as a residence for decent people. These, however, are economical reasons, that concern us less than the housekeepers themselves; but, as medical men, we cannot refrain from adding our testimony to that of others in favour of the salutary influence of the street-orderly system on the health of the community. Cleanliness is the hand-

maid of health, but it is idle to expect personal cleanliness amid slimy streets and dirty homes. Filth should have no place of refuge; much less should it defy us in our open streets and public places.

We think that if the street orderly system were applied to the cleansing and whitewashing of the tenements of the poor, it might be made more extensively useful than is now contemplated. By this means a large amount of disease might be prevented, the poor's-rate diminished, and the humbler classes placed in a condition calculated to promote the advancement of their moral and social status.

REVIEWS.

On Diseases of the Urinary and Generative Organs. By W. Acton, late Surgeon to the Islington Dispensary, etc. 1851.

Mr. Acton's work professes to be a practical treatise upon the diseases of the urinary and generative organs in the two sexes; but it is more especially devoted to the subject of venereal disease, with which the first chapter commences. We dread the historical remarks, now somewhat trite, with which this interesting subject is generally introduced. We have heard enough of lazar houses and leprosy; syphilis among nuns, monks, knights, and sovereigns; of the Countess of Provence, John of Gaddesden, and Cardinal Wolsey, and we thank Mr. Acton for sparing us a long trot over this well-beaten highroad. Mr. Acton's remarks upon the extent, the universality of the venereal disease, as it exists at the present day, deserve careful perusal. About one half of the surgical out-patients of St. Bartholomew's Hospital are cases of this description. "In the army, one man in every five, or, more correctly, 180 per 1000, is attacked with the complaint." In the upper classes of society some sad facts might be told of the propagation of the disease, were we in a position to arrive at statistical information.

As regards the idea that true syphilis, that is, the contagious disease, dependent upon a specific morbid poison, has been introduced from the domestic animals, such as the horse, all that we can say is, that such an assertion is destitute of proof, and is injurious, in so far as, by assigning a plausible but bad reason, it satisfies a certain number of non-inquiring minds. We know not how this or any other morbid animal poison is first formed.

That prostitutes do not constitute the miserable class which has heretofore been supposed, is doubted by Mr. Acton. They are, as a body, healthy, active young women, who have seen much of society above them. Unencumbered by children—not liable to the brutal treatment which married women of the same rank experience from their husbands—in the receipt of money enough to keep them well, both in food and clothes, they pass a few years of dissipation; and then, tired of the life and its uncertainties, they become "the wives of the mechanic, the clerk, or the petty tradesman; and, as they are frequently barren, or have only a few children, there is reason to believe they live in a comparative state of affluence unknown to many virtuous women burdened with families." "Whether, as the Bishop of Oxford says, they amount to 80,000, or whether the late magistrate, Mr. Colquhoun, computed them correctly at 50,000 in the Metropolis, I shall not," says Mr. Acton, "stop to inquire. One thing is certain,—but a few years elapse and they disappear; but they do not perish of want, dissipation, or disease." Perhaps, like the post-boys, they go off with the dead donkeys.

We are obliged to Dr. Tilt for writing, and Mr. Acton for quoting, some interesting remarks upon ladies drawers. The subject is one with which the former gentleman seems especially familiar.

There is no doubt but that a man may contract gonorrhœa from a woman in whom there is nothing more than common leucorrhœal discharge. Indeed, excessive intercourse between the sexes may excite inflammation in the male urethra, accompanied by purulent discharge.

Mr. Acton distinguishes two forms of gonorrhœa: the one resulting from simple inflammation of the mucous membrane, the other dependent upon the presence of chancre.

Now, if gonorrhœa be in most instances a simple inflam-

matory affection of the urethra, how comes it that it is occasionally followed or complicated by rheumatism, ophthalmia, or iritis? Upon this point Mr. Acton is not strong. He acknowledges the existence of gonorrhœal rheumatism, but confesses his inability to understand the relation between "the urethra and the elbow, the ankle, or the mucous membrane." In fact, he has witnessed in his practice that which is not exactly in accordance with his theory of the disease.

Mr. Acton advocates the use of strong injections in the early stages of gonorrhœa. A solution of nitrate of silver, about two drachms, at the strength of ten grains to the ounce, is to be thrown into the urethra and retained there for a few seconds. Then the patient is to sit quiet for about ten minutes or a quarter of an hour, and to withstand the desire of making water, which for the first few minutes is sometimes very violent. The effect, according to Mr. Acton, is various; sometimes there is no further discharge; at others a large quantity of serous or shreddy exudation escapes, which soaks through the lint; this is followed by stringy, yellow discharge, which in a few hours gradually ceases.

With the experiments of M. Ricord by inoculation, the reader is already familiar. We have in the present edition a long note, containing experiments of M. Cullerien and Auzias in their attempts to communicate the disease to animals; the results, however, are unsatisfactory. There is no positive proof that syphilitic sores in their true character manifested themselves after the introduction of the poison even in the monkey, that animal standing next to man in its physical formation. The description given by Mr. Acton of primary syphilis may be perused with advantage; it bears a strong colouring of the French school, in which he was so long a student; and it is an advantage to become acquainted with other views than those which have so long prevailed in this country. The chapter upon urethral sores is interesting. Here, more than in other instances of the disease, utility may be derived from inoculations to aid our diagnosis. The treatment is to be guided by the same principles as in the cure of chancre elsewhere.

In syphilitic alopecia, the hair becomes crisp and dry, and loses its glossy appearance; in many instances it will be found broken off close to the scalp, and patches here and there of baldness would be seen. The surface of the head is not necessarily scurvy, and it is only in the latter stages that pityriasis is troublesome.

Speaking of syphilitic iritis, Mr. Acton observes with a candour highly creditable to him,—

"My own opinion has been greatly modified since I have practised in England. During the period I carried on my investigations on venereal diseases in Paris, although my opportunities of seeing the disease were immense, I witnessed so few cases of iritis, compared to the number of syphilitic complaints, that I was induced to deny any relation between them. . . . On my return to London, however, my confidence in these views became shaken."

The reason of this apparent immunity of the French from iritis is interesting, and deserves investigation.

The work concludes with a chapter on Infantile Syphilis, containing many interesting cases of the transmission of the disease from parent to offspring, &c. To this we must refer the reader, as it would require, to do it justice, too long an analysis for our present limits. The whole work is carefully written, shows great industry and research, and does much credit to the author.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

VOLKMANN'S HÆMADYNAMICS.

(Concluded from last Volume, page 681.)

THE *Eleventh Chapter* discusses some *Anatomico-Physiological Circumstances of the Vascular System*, in connexion with the results previously obtained.

As regards the semilunar valves, the author shows that it is impossible that these should absolutely hinder the reflux of blood. According to the Author, the valves of the veins have not the office of preventing the reflux of blood, in obedience to the law of gravity, but only of preventing it under extraordinary circumstances, as for instance, under external pressure. In the arteries, as well as the veins, the blood

flows very swiftly; in the capillaries, very slowly; arteries and veins, then, are nothing but canals, serving the purpose of conveying the blood swiftly, and unchanged, to its destination. And in accordance with the very different amounts of pressure which the different vessels have to sustain, they are required to be of very different thickness. Hence the coats of the arteries assume, as they proceed, an increasing tenuity; and the veins are much thinner than the arteries, while the capillaries, which are much thinner than the veins, in spite of their having to sustain a greater pressure than those, are protected both by their greater number and lesser diameter. As already mentioned, subdivision into many collateral vessels, diminishes pressure; and since the pressure of a fluid is the product of the degree of pressure multiplied by the amount of surface which experiences it, it is evident that, since the latter factor is in the capillaries extremely small, the product must be similarly inconsiderable. According to the Author's calculation, a segment of a capillary vessel of the size of a blood corpuscle, sustains a pressure of only .000135 gramme. It is true, that there is no *determinate* proportion between the thickness of the walls of a vessel, and the pressure which they have to sustain; nevertheless, they are everywhere of such a solidity as to sustain easily an amount of pressure such as never occurs in the organism. The carotid of a sheep was not torn by a pressure amounting to fourteen times the normal one; and the jugular vein of a bullock was only burst by a pressure 100 times stronger than that natural to it. The lesser pressure on the veins, and the circumstance that their capacity is always greater than that of the corresponding arteries, makes it easily explicable why they should be so much thinner.

Chapter Twelve.—On the Forces which move the Blood.—At the commencement of this Chapter, the Author premises, that he does not believe that all phenomena of the circulation and partition of the blood are dependent on the mechanical operation of the heart alone; but that there is no doubt the phenomena of the circulation must be regarded as physical, and dependent on the force of the contracting heart; and in so far as this suffices to explain the phenomena observed, we have no right to assume another and more recondite power. He next obviates the objections which have been deduced from different phenomena against this mechanical method of explanation; and proceeds to show how the continual and arhythmic stream in the veins is a necessary result of the great resistance in the capillaries, causing the loss of rhythm, just like that which the author was able to produce in his tubes, by interposing in their middle an arrangement which somewhat obstructed the stream. Under these circumstances there was never any rhythmical current in the part lying behind the obstacle. He next removes two other objections to the mechanical theory, one of which is derived from the emptiness of the arteries after death; the other, from the supposed magnitude of the resistance in the capillaries, being too great to be overcome by the unassisted heart. It is undeniable that the heart works as a forcing-pump, and not as a suction-pump; for this could only be possible in the supposition that the auricles possessed an active force of expansion. But from the arrangement of the muscles in the heart, an active force of expansion, *i. e.*, a dilatation of the organ by means of the contraction of any muscles whatever, is altogether impossible. And hence it is only the *vis-a-tergo* which extends the relaxed ventricles and auricles during their diastole. In an experiment of Poiseuille, a pressure of 65 millimetres of liq. potassæ was sustained by the vena cava during systole, while during diastole one of only 55 was present. But this only proves that the blood in the first condition was somewhat driven back and obstructed, and from this cause indicated a greater pressure; which, during diastole, losing the cause that had excited it, accordingly disappeared. It does not prove an active suction effected by the heart; and there is not the least ground for assuming that the circulation is assisted and maintained by the vital forces of the vessel. This is well shown by the experiment of Hales, in which a column of water $4\frac{1}{2}$ — $5\frac{1}{2}$ feet high sufficed to drive a resinous injection through the mesenteric artery and capillaries of a dead dog, and into the veins. But a force of attraction for the blood on the part of the capillaries would not in the least assist the circulation, since this force would inevitably, in some degree, retain the attracted blood, and would thus render difficult its deflux into the veins. But some authors assume that the capillaries possess a force of attraction for the arterial, and of repulsion for the venous blood.

This, however, is impossible, since the circulation often continues in absolute independence of the respiration—in tortoises, for instance, during many days. Finally, after refuting many objections against the mechanical theory, he gives the following experiment, as a striking proof that it is to the contractions of the heart alone that the blood owes its movement. Having brought the web of a frog's foot under the microscope, the sternum was removed, and the pneumogastric nerves were electrified, which had the result of bringing the heart to a state of complete quiescence in the diastolic condition. As often as this was done, the movement of the blood in the membrane quickly ceased, to return again when, after the exhaustion of the electrical influence on the nerves, the heart recommenced beating.

From all this it follows that it is the heart which moves the blood; but how this fluid divides itself for different parts of the body must depend on other causes, which are, for the most part, unknown to us at present. It is certain, however, that the elastic condition of the vessels has the greatest influence in this respect, and that a diminution of this will result in distension and repletion; but whether, and by what means, a local and momentary change of this kind is produced, is to a great extent unknown. By a contraction of the blood-vessels a contrary condition would obtain. In this way, direct hyperæmia and anæmia may begin, and in a secondary manner the presence of the first in one place must produce the second in another, and *vice versa*.

The influence which the breathing has upon the circulation is fully illustrated. First of all is the question, whether the mechanism of respiration supports the heart in its activity, and thus contributes to the movement of the blood? It is most convincingly proved that no such support really exists. As regards the *greater* circulation, a pressure is exerted on the vessels of the chest by the contracting thorax during expiration, which, on account of the valves present in the vessels, will have a predominant tendency to drive the blood towards their periphery. But conversely, from the dilatation of the chest, which occurs during inspiration, an adspiration must obtain, which exactly counterbalances the previous pressure. In the veins, a quickening of the movement of their blood would be produced during the inspiratory act; but it is only on those vessels which lie nearest to the heart that this can be at all considerable. And since (as observation of the jugular shows) such veins, under these circumstances, collapse, the distal blood must evidently become obstructed in its course. This is well shown by an experiment of Poiseuille, in which the pressure in the iliac vein was considerably raised by a powerful inspiration. Thus it may be generally stated, that expiration necessarily furthers the movement of the blood in the arteries, and obstructs it in the veins; while inspiration favours its course in the veins and prevents it in the arteries; advantage and disadvantage are thus tolerably equalized. The same may be shown of the *lesser* circulation. The observation that, in cold-blooded animals, no such inspiratory movements are present to assist the circulation of the blood, although their hearts are not the less proportionally weakened in structure, shows that the heart alone is sufficient to effect the circulation, and that respiration affords no assistance to the process. The foetal circulation proves the same fact; while the kymographion gives full particulars of the influence of the respiratory act upon the heart and its activity.

By means of this instrument wavy curves are frequently obtained, which are, however, not simple wavy lines, but each such greater wave is composed of many smaller. The smaller are the effect of the heart's stroke, while the larger are produced by the respiration. But just as frequently other curves arise, which show that the proportion between the influence of the stroke of the heart and the respiration on the circulation of the blood is not so simple as might, at first sight, appear; to say nothing of the many instances where the influence of respiration, even in the larger arteries, altogether disappears. This relation is especially obscure when the frequency of the pulse and inspiration in a definite time remains tolerably uniform, or when the waves of the pulse and the breathing are of an equal magnitude. On this account Ludwig has devised a procedure for recording, by means of the kymographion, two curves simultaneously; one of which gives the oscillations of the blood, the other the change of respiratory pressure in the pleural sac. It resulted incontestably therefrom, that the ascent of the blood's pressure in the arteries did not by any means always correspond with expiration; but that frequently an ascent

of the pleural curve occurred simultaneously with a descent of that of the pulse, and conversely. The explanation of these phenomena becomes easy when it is considered that the stream of blood is subject to the influence of two furthering (systole and expiration) and two obstructing (diastole and inspiration) forces, which, in respect of duration, force, and rhythm, may vary extremely. It is evident that, according to the various possible combinations, and the various strengths of these forces, results altogether different will obtain; and thus it becomes possible that a sinking of pressure may happen during a weak expiration, if the diastole be very long and strong.

The influence of respiration on the circulation in the veins has already been partially treated of. In many persons it may be easily observed in the veins of the neck; but, even in the temporal veins, the influence of adspiration and expiration can no longer be noticed. It was believed that the force of adspiration in the veins could be measured by means of the hæmadynamometer. But the author shows that this opinion is erroneous. The influence of adspiration is obviously dependent on the degree of resistance which the fluid undergoing suction has to overcome. But the resistance which the blood has to overcome in the veins, and especially in the rapidly collapsing jugulars, is much greater than that which is opposed to the fluid in the hæmadynamometer introduced. Hence, the column of quicksilver contained in the instrument sinks much more, and the adspiration is shown as of much greater force than that which it really has in the blood in the veins themselves. Similarly, during expiration, the blood presses more easily into the instrument, since it offers less resistance to the regurgitating stream than the blood in the vessels. And hence, if one connects the vessel with the hæmadynamometer by a very narrow canula, by which the obstruction to the movement of the fluid in the instrument is somewhat increased, the influence of respiration, and even the difference between systole and diastole, almost entirely disappears.

Everything which alters the coefficients of the blood's adhesion in the different parts of the vascular system, will have a local influence on the movement of the blood. But this cannot depend upon the blood itself, since, in that case, the results would not be local only. The author believes, that the stagnation of blood which arises from irritation may depend on an alteration of the adhesion of the vessels' walls.

Chapter Thirteen.—On the Activity of the Heart.—The author here speaks of the general phenomena observable in the heart, and enters into a detailed criticism of the different opinions and theories which have been enunciated concerning them: always stating the view he adopts, and the reason why he does so. His contrivance to determine the proportions of systole and diastole is of special novelty and interest, as is also the result which he has thus obtained. He regulated two pendulums in such a way, that one gave the exact interval between systole and diastole, while the other gave that between diastole and systole; he thus found that, in man, systole had to diastole the proportion of 99 to 100. He obtained pretty much the same result by the kymographion, where he compared the abscissæ of the ascending parts of the curves, (the systole) with those of the descending (the diastole.) Of course, he here made use of such curves as did not show the influence of respiration. In cold blooded animals the proportion of the two acts is a very variable one; from 1:2 to 1:11. The author also explains how it is that the ear deceives itself so greatly about these proportions. After refuting the theory of irritability which Haller brought forward, and which even yet finds so many supporters (*viz.*, that it is the irritation of the blood which excites the heart to its rhythmical contractions,) the author offers his theory before mentioned as the only one possible, and seeks to invalidate the objections brought against it. According to him, the heart itself includes a central nervous organ, by means of which its rhythmical movements are effected. An important reason for seeking this organ in the heart itself is found by the author in the fact, that by irritating any part whatever of an excised heart, distinctly reflex movements are produced; movements which have exactly the same rhythm as the ordinary pulsations. Thus mechanical irritation of the heart's apex calls forth contractions which do not, as might be expected, commence at that apex, and thence propagate themselves in a variable degree over the rest of the heart, but which show themselves first at the auricles, and then

pass on to the ventricles. But such reflex movements cannot arise in the excised heart, unless this possesses in itself a central organ. This central organ the author discovers in the ganglia of the heart; which, however, certainly stand in a certain dependence on the brain and spinal cord, and can, through the intervention of these parts,—as, for instance, through the vagus,—experience modifications. But these modifications are expressly shown by the author not to be of such a kind as to stand in the way of our assuming a central organ in the heart as the cause of its activity.

Chapter Fourteenth.—Of the Pulse.—The pulse is an effect of the heart's stroke on the elastic arteries; and it is therefore governed by all those laws which were developed in Chap. 4, for the sudden movement of a fluid in filled and elastic tubes. The assumption of an independent arterial pulse is most decisively refuted by different experiments. So likewise that deviation of rhythm of the heart's stroke from the pulse in some arteries, which is said to have been observed by some pathologists, is easily explained by the experiments communicated in Chapter 4. It was there shown how, from the stroke in elastic tubes, a double system of waves arose, one in the fluid, the other in the walls of the tube itself; how these propagated themselves with different velocities; and how, in this way, many pulsations might arise from one stroke. In animals, the influence of respiration may give rise to yet another system of waves, and any want of harmony in the number of the heart's strokes and the pulsations in the arteries is thus easily explained. The author communicates, in his accompanying tables, a series of pulse-curves, which were drawn by the kymographion, and which variously exhibit this want of harmony.

The arteries must be extended by the systole, both in length and breadth; but the eye only takes cognizance of the extension in their length. According to the well known experiments of Poisseuille, the transverse extension amounts in the carotid to only $\frac{1}{2}$, but he was wrong in assuming this as the general ratio of extension. This not only varies in the different arteries, but also in one and the same artery under different circumstances. The author instituted his experiments on the transverse extension in the following way. A portion of artery, firmly closed below by a cork, was provided above with a brass tube, capable of being closed by a cock. This was now filled with water in its relaxed condition. The volume so introduced was determined by weighing; and this mass, divided by the length of the artery, gave the surface of section, and thus the diameter of the vessel in its unextended state. The artery was now strongly extended by the injection of water through the brass tube, the weight and length again determined, and from hence its diameter also calculated. This gave, as a result, the proportion of the longitudinal to the transverse extension, the latter being always relatively more considerable. Thus, taking the transverse extension as 1, the longitudinal extension amounted in

The aorta of man to	0.46
The brachial artery	0.62
The brachial vein	1.22
The iliac artery . . . . .	.63
The iliac vein	1.23

The author undertook a great number of researches into the frequency of the pulse, and the influence of height and of sex upon it. He gives a Table of the ordinary number of pulsations in a minute at all ages. It results therefrom, that, in opposition to the ordinary opinion, the diminution in its frequency only continues to twenty years; from the twentieth to the twenty-fourth year it retains a minimum of about 71 beats; from thenceforth it gets an inconsiderable increase to the age of 80, when it amounts to 79 beats. Other things being equal, a greater height of body is connected with a lesser number of beats. According to the calculations of the author, the frequency of the pulse has a tolerably constant proportion to the height; being inversely as the $\frac{5}{8}$ th power of the length of the body. (a)

(a) It may be useful to our readers if we add a word of illustration. Supposing $5\frac{1}{2}$ feet the average height, 70 the average pulse, required the pulse of a 6 foot and a 5 foot man respectively. Reducing these heights to inches gives 66, 72, and 60. Raising these numbers (of course by logarithms, or the work would be endless) to the $\frac{5}{8}$ th power, we get the numbers 10.2525, 10.76, and 9.724 respectively. Then for the inverse proportions,—

10.2525	corresponds with	70	$5\frac{1}{2}$ foot man.
As 10.76	: 10.2525 ::	70	: 66.7 pulse of 6 "
As 9.724	: 10.2525 ::	70	: 73.805 " 5 "

—Ed. Med. Times.

Individuals of different age, but of equal stature, have a different frequency of pulse: the older have a less frequent pulse than the younger. (a) The general greater frequency of pulse in the female sex does not depend solely on the difference of stature. The author compared individuals of equal size, but of different sex, and found that even in these cases there was a greater frequency in the pulse of females. The author calls attention to the fact, that even in altogether healthy individuals of the same age, a difference of more than 50 beats may occur. Thus, out of 54 individuals, from 21 to 22 years of age, one had a pulse of 41, another of 96 in the minute; a difference which it is very important that physicians should be aware of. The distinction between a frequent and quick pulse ("pulsus frequens" and "pulsus celer") he regards as having some foundation in theory, but none in fact; since the sense of touch is unable to appreciate a quicker or slower ascent of the pulse wave; and he thinks that the difference which has been mistaken for this is due rather to accidental external conditions (of the skin, etc.) than to an altered state of this wave. The "pulsus dicrotus" finds its explanation in the different systems of waves already spoken of.

Chapter Fifteen.—Mechanical Disturbances in the Vascular System, and their Results.—Here the author only speaks of those disturbances and their results which are accessible to a physical consideration, and are capable of elucidation by experiment; and, first of all, of the influence of *ligatures*. To his apparatus of subdivided and finally re-united tubes before mentioned, he adjusted cocks, which, when shut, would operate like a ligature on the vessels. The following changes were thus produced:—(1.) In respect of the *pressure*. The sum total of the resistances was increased. The pressure increases in all those tubes which conduct fluid to the point where the closure existed; while, *vice versa*, it falls on all those which lead from this point. The greatest disturbance in both respects occupies the seat of the ligature, and diminishes from hence on both sides. The nearer the ligature to the orifice of entrance of the fluid, so much the more considerable are both disturbances. The nearer, on the contrary, to the orifice of outlet, the greater is the increase of pressure above, and the less the decrease of pressure below. The magnitude of the disturbance increases generally with the importance of the occluded channel. (2.) In respect of *velocity*. The velocity is generally diminished in the vessels leading to and from the site of ligature, but in the collateral branches it is increased. The duration of the circulation is lengthened, on account of the general diminution of velocity.

Every *partial* occlusion, and therefore every *narrowing*, has precisely the same results, only in a diminished degree. The author believes that many pathological circumstances may be explained by these phenomena.—The increased pressure in all vessels above the ligature will result in an extension of the walls of the vessel, which will render them thinner, and increase their exosmosis. So, also, cold will narrow the external vessels, and many of the ensuing exudations and increased secretions from the deeper vessels may in this way be physically explained.

The physical results of withdrawal of blood have also been submitted to research by the author, who has studied the phenomena exhibited by his apparatus after opening one of the tubes. During the "venesection," as he calls the operation, for brevity's sake, the following circumstances may be noticed:—(1.) In respect of the *pressure of the blood*. The pressure undergoes a diminution through the whole system of tubes; a diminution which is greater the more and quicker the fluid escapes. The amount of disturbance increases in the conducting vessels up to the point of opening, and from thence onwards decreases. (2.) In respect of the *velocity of the stream*. The velocity of the stream is enhanced in all the vessels leading to the opening, and diminished in all those leading from it. But in the collateral branches it may be increased; and it certainly is so when the opening is practised at a part of the apparatus which corresponds to the veins in the vascular system. But a lasting diminution of the blood's pressure, and thence an alteration in the tension of the walls of the vessels, must be a necessary consequence of venesection. The author believes that a change in the condition of the nerves which are distributed to

(a) We presume that this is an indirect result of the greater general frequency below the age of minimum pulse (20-24) overbalancing the very slight increase which occurs after that age.—Ed. Med. Times.

the vessels is also produced, which is capable of throwing them into quick and extensive activity. Many phenomena which occur after bleeding, which appear very quickly, and are not very easily explained by mere loss of blood, may be thus explicable. A necessary result of the diminished pressure is an accelerated entry of chyle into the blood, which, after long-continued and considerable withdrawals of blood from animals, may be seen to occur at the time of bleeding. The Author has not neglected to compare, as far as possible, the results obtained by his apparatus (and mentioned in this chapter) with the phenomena witnessed in animals under similar conditions of experiment. He has found them confirmed by these. The Author himself acknowledges that not much has been gained towards the elucidation of pathological phenomena; but the few results are, perhaps, for this very reason, more to be depended on.

It is indeed a special advantage of this work that it contains nothing but what is immediately deduced from observations and experiments; and that, even in these, it is accurately stated in how far they may be depended upon, and how far they are tainted with unavoidable though small errors.

[The admirable monograph thus abridged shows the importance of commencing the study of the mixed phenomena of the organism from their most accessible and physical side; and thus in physiological, as in algebraic problems, proceeding gradually from the known to the unknown. And whether we consider the accomplishments this course of research presupposes, the industry and talent which it exhibits, and the vast importance of its results; we cannot but regard it as a large addition to physiology as a science, and to the Author's already European fame as a physiologist.

With such researches as Bernard's in France, and many others in Germany, an Englishman may be excused regretting that there is so little hope of our emulating them, because in this money-making country there are so few means by which a scientific man can live. By a few among us such researches are snatched in the intervals of exhausting professional labour; by the many they are regarded as a sort of practicable stage trap-door, by which an aspirant may spring suddenly into practice, and attain that apotheosis of British medicine, a fine house and a neat brougham. We doubt whether there is a single professorship of Anatomy or Physiology in all London which is sufficient to support its professor, and which (*en revanche*) gets anything like a tithe of his time. While a Government, expending enormous sums on the souls and property of its subjects by vast endowments of the two respective professions, looks on with bland indifference at medical science struggling to understand and treat their bodies; or at most, rewards the exertions of one or two fortunate individuals, with a pittance which, compared with the ordinary income of the middle classes, may be described as a crust,—compared with the labours which have generally preceded it, may be regarded as a tribute of admiration to tenacity of life.—*Ed. Med. Times.*]

GENERAL CORRESPONDENCE.

MEDICAL EDUCATION.

[To the Editor of the Medical Times.]

SIR,—I observe that the Society of Apothecaries have imitated the College of Surgeons in giving fresh recognition and increased importance to Latin and Greek in their curriculum. Latin and Greek! What upon earth has Latin and Greek, Sanscrit or Coptic, Celtic or Double Dutch, or any other language, dead or alive, to do with the cure of an ague, the removal of a placenta, or the tying of an aneurism?

It is impossible to point out any kind of knowledge less necessary for a medical man than a knowledge of dead languages. It is impossible to point out a mental discipline

more inappropriate for the youth in training for our art than this gridding of the extinct remains of singularly inconvenient vocal symbols. How all the world would laugh if music and painting were introduced into the medical curriculum; yet they would be really more to the purpose. Music leads the mind to observe natural laws of sound; painting and drawing impel the mind to contemplate colours and form,—all natural facts. Even dancing and needlework would be more fit acquirements for a surgeon or physician than a knowledge of the arbitrary and artificial sounds whereby our unfortunate forefathers imperfectly expressed their imperfect ideas. Such studies appropriately co-exist only with crabs' eyes and mummy in the *materia medica*,—with herbs gathered at the full of the moon.

That physicians and consulting surgeons should cherish these time-honoured bamboozlements is not surprising, for they have a vested interest in prescriptive mystification; but that the representatives of the General Practitioner, whose word is, "forwards!" whose interest is, "improve," should have imitated them, surprises and grieves me exceedingly. They have hitherto been always in the van of improvement, and, I trust, will yet think better of this retrograde step.

Surely a body of men who have usually shown themselves so intelligent and practical cannot have failed to perceive that language is the vehicle, merely, of knowledge. And of all lingual vehicles, I hold the dead languages to be the most lumbering, crazy, and defective, the least fit to convey a precise scientific idea, speedily, uninjured, and certainly, to its proper destination. Lumbering and crazy as an advertising van or a horse organ—meritricious, puffing, quackish as the one, wearisomely sonorous as the other, and as obstructive as either.

In the life-time of these languages, science existed not; and yet they are to be dragged mangled from their grave, where *requiescat in pace*, for aught surgeons have to do with them, in order to assist in conveying glorious scientific ideas, which in their time were not yet born nor conceived. The cumbrous fossils of these antique tongues are, no doubt, highly interesting objects of study to the lingual palæontologist; they are conventionally necessary to the parson and the lawyer; but facts and things, not words and sentences, are the doctor's business. We have naught to do with the past, no precedents are needed to guide nor hinder us; the truth lies before us in things and phenomena, and we have to understand it.

It will be said, that Latin is needed for writing and reading prescriptions. It is a time-honoured, though perfectly valueless conceit to write prescriptions in Latin; but I have known a woman learn to understand them in a few months. And, heavens! d'ye call prescriptions Latin?

Then our technical terms—they are all derived from Latin or Greek, and if we do not know their etymology, we do not know their meaning. Not so my friend. The meaning of a word depends upon its application, not upon its etymology; the etymology is generally an embarrassment—a snare that misleads.

When a technical term is needed, is when a *new* thing has to be named, or a *new* idea enunciated. In vain you search among *old* dead verbs and *post-mortem* nouns; it is not there; it is new. You combine, you inflect; at length you think that you have succeeded, when the unallayed ghost, or ghosts, of the previous meanings rises before you. Avaunt! you do not want it. You strive to avoid it by twists and turns. You produce a cross between a Latin verb and a Greek noun, and just when you are able to rid the etymology of all meaning, to make it complete nonsense, are you able, unembarrassed, to define your word and make it bear exactly the meaning you want. You find, in fact, that if you had taken Coptic or Ojibbeway sounds at random, or spelt your wife's name backwards, you would have succeeded much sooner, and all the better.

Technicals we must have, but they need not be derived from Latin or Greek, and generally need have no more meaning than a surname. A cat would not be at all the more clearly indicated if its name meant mouse-catcher, but, on the contrary, would be confused with an owl or a trap; and the words "strong wind," "black hawk," or "grey bear," would not denote my individuality better than my unmeaning and homely name Oliver.

The geologists are aware of the inconvenience of classic technicals, and they pick up provincialisms or invent sounds *de novo*; such are "warp," "till," "wealden," "crop out," "dip," "strike," &c., words which are infinitely more useful and definite than our high-sounding classics, involving no hypothesis, denoting no two things, but simply meaning what they mean—bearing the definition which their originators gave to them. Such words, also, have the advantage of being easily woven into the formulæ of our English phraseology.

It is more easy to state truth than sophistry in Saxon English—

the contrary in Latin; and hence, when a writer or speaker is sophisticating, he always uses that Latinized English, called from its originator Johnsonese—graceful and flowing, but indistinct and cloudy. In science we want precision, not grace. I believe, therefore, that the study of the classic languages gives not only a kind of superstitious bias and vain-glory to the weak-minded, but an unconscious habit of sophistry and prevarication even to the strong, and hence, that it is not only useless, but positively mischievous.

Then, as to reading Greek or Latin books,—what Greek or Latin sentence is there containing one particle of medical knowledge but what has been translated over and over again? When Henry VIII. was King, matters were different—there were no English books then. Poetry, I know, cannot be translated, but science can.

Still, it will be said, can any man be considered well educated—is any man fit for a high social position,—who is ignorant of the classic languages? Yes, certainly,—why not? The Duke (Dux) of Devonshire does not talk Latin, and her Grace of Sutherland does not converse with the Queen (*Βασιλεια*) in Greek. Prince Albert considers him the best painter who produces the best picture, not him who can point out its excellencies in *hic hæc hoc*. He is the pet engineer who can build the Britannia bridge; he the worshipped warrior who can vanquish Buonaparte; he the bishop who is the best classic; but he is, or ought to be, and will be, the greatest surgeon who can operate best,—the greatest physician who can cure best. In proportion as we earnestly give our energies to doing good in our own proper style shall we be respected; and in proportion as we ape the conventionalities of classes to which we do not belong, and professions with which we have nothing in common, shall we incur the ridicule accorded to vapid and pedantic flunkeyism. Fitness for polite society consists in good breeding, defined to be a combination of good manners and good sense, the result, it may be, of good education, that is to say, of good mental discipline; but classic languages by no means furnish the only good, nor in fact the best, training for the mind. The study of the sciences is immeasurably more civilising, more apt to produce an ingenuous, humble, courteous temperament. What greater bore, what more ill-bred bear, than your learned pedant?

One word more to flunkeys and tuft-hunters. Who will lead the fashion in such matters presently? Who, why he, at whose fiat the Crystal Palace rose. Will he patronise your classics? This glorious Prince shall be our Prince and patron if we show ourselves worthy of him.

Let us strive for extended knowledge, brightened and progressive intellect, a high and independent morale. Our day is just dawning. Shall we, who ought to be the *élite* of this new world of science and of steam, compromise our high prospects, and render ourselves ridiculous by committing the absurdity, the affected nonsensical absurdity, of not only retaining, but actually returning to, a system manifestly exploded, superannuated, and gone by.

Teach our young men comparative anatomy, botany, natural history, by all means,—mechanics, optics, hydraulics, astronomy, geology, mathematics, if you have the time, but never mind Latin and Greek. Sciences, the observed, the experimental, the inductive, but not dead languages. These, with us, ought to be buried and d—d to boot. I am, Sir, &c.

OLIVER.

THE KEY-TSI-SING.

[To the Editor of the Medical Times.]

SIR,—Another additional testimony of the efficacy of the key-tsi-sing has been forwarded to Dr. Williams this week, the insertion of which will oblige,

Yours, &c.

C. J. THOMAS.

2, Bucklersbury, Cheapside.

Blackpool, June 12, 1851.

Sir,—I am happy to forward to you a stubborn case of amenorrhœa, in which the key-tsi-sing has proved satisfactorily successful.

Mrs. R., aged 35, has had nine children, the last being born October 16, 1849. On the day of her confinement she lost a favourite daughter, which acted most painfully on her nervous system, since which time the catamenia has never appeared, and she has continually been suffering severe uterine and lumbar pains, with constant strangury arising from congestion of the uterus and its appendages from the want of the natural discharge. Every means were used for relieving the painful symptoms, and at the same time causing the uterus to resume its

healthy functions, but all without effect, until I luckily read of the key-tsi-sing, for which I immediately applied, and was kindly furnished with it and directions by Dr. Williams. My patient took thirteen doses, when I was glad to find the discharge ample; first, she says it was of a brown, sandy colour, afterwards a free, florid, healthy discharge.

I consider the key-tsi-sing a safe and effectual emmenagogue, producing its specific effects upon the uterus without interfering with any other viscera.—I am, Sir, &c.

JOHN COCKER, M.D., L.S.A. (Lond.)

P.S. You are at liberty to insert this letter in the Medical publications, as I think it well for the Profession to be assured of the certain effects of this valuable medicine.

J. C.

To Dr. Williams.

THE CENSUS.—A DIMINISHED RATIO OF INCREASE IN THE POPULATION.

[To the Editor of the Medical Times.]

SIR,—Some apology is due for the favour I ask, of your placing the subjoined remarks before your readers. They were written prior to the appearance of your able article on the Census; and, as they relate to topics which have not been discussed therein, I trust you will feel disposed to comply with my request.

Not to the Medical Statist alone, but to all who are interested in the welfare of their native land, the recent Census affords serious matter for reflection, and can scarcely fail to take by surprise those politicians who have been at so much pains of late years to point out the increasing prosperity of this country, if we are to regard as true that which has been almost universally admitted by those most conversant with such matters, viz., that the sure test of thriving communities is a steady increase in the population. The ratio of increase for the last 50 years is stated thus:—"In the 10 years ending 1811, it was 15·11 per cent.; in the 10 years ending 1821, 14·12; in 1831, 14·91; in 1841, 13·18; and during the last 10 years, 12·10 per cent. Emigration and cholera, according to the *Times*, are the "disturbing causes," and are to account for such a serious rate of decrease.

Admitting the first of these, the second forms a very doubtful element in the category of causes which may have reduced the average ratio of increase to 12·10 per cent. during the last 10 years, for there would be no difficulty in showing that during the decennial periods included in the preceding statement, epidemics have existed quite as fatal as the cholera of 1849. Take, for example, the first outbreak of it in 1832, and the influenza of 1833. In the present Census, the navy, merchant seamen, and persons on board vessels are included; in the preceding one they were not. This circumstance contrasts it still more unfavourably with that of 1841. There must be more causes than those stated which have tended to diminish the ratio of increase. Among others, one may be mentioned which is not without considerable importance, viz., the restraint from marriages in the higher and middle classes from prudential motives, which has generally been acknowledged to exist for many years past. A decreasing ratio in the amount of population, and an increased ratio of longevity is also a fact of some significance. "Of course it is natural to expect (says the *Times*) that the more thickly peopled any country should become, the greater the difficulty it should find in accommodating the increase of its population on the scale of living they have been accustomed to." *Ergo*, emigration is a panacea for the evil—depopulate your country to make food abundant? A truly Malthusian doctrine this. Whence, it may be asked, has arisen our commercial industry and enterprise,—our Colonial possessions,—the excellence of our machinery and manufactures,—our increase of agricultural products,—if not from a numerous and industrious population? Without a demand will there be a supply? Are the necessities of life more obtainable in a sparse population? Does the American squatter produce more than supplies his own immediate wants? Let those who encourage the deportation of the young, active, and able-bodied, beware of the dangerous pitfall, "incidit in Scyllam qui vult vitare Charybdim." Let the startling fact which has just now transpired from the Census, viz.,—"the crowding together of the poor in close habitations,"—act as a warning to such that emigration, whilst it has abstracted much of the pith and sinews of labour from this country, has failed to meliorate the condition of the poorer classes who remain behind, and this, as the *Times* observes, in the face of increased and increasing exertions to better their state in respect of habitations; etc. etc. Might not Mr. Sidney Herbert pause to consider whether he has so much

cause to felicitate himself (as he did a few days since at the meeting of the Society for the Propagation of the Gospel) on his part in the "Great Work of Emigration," (?) and whether his philanthropic intentions would not be better carried out by turning his energies towards the conservation of the able-bodied poor at home; and by joining the Earl of Shaftesbury in his truly Christian exertions for their moral and physical advancement, whether he might not be aiding in the introduction of a new element in the prosperity and well-doing of his country?

It has never yet been satisfactorily shown that a surplus population existed at any period in this country, or that any distress which has arisen from time to time was due to such a cause. The results of the depopulation of Ireland by famine and emigration have yet to be learned, as hitherto the returns have not been promulgated. It is, however, a fact not to be silently passed over, that in the last twenty years, during which period this country has attained the highest point of civilisation, such a notable decrease in the rate of population should have occurred. Whatever the causes may be, this much is certain, that to the patriot, the philanthropist, and the statesman, the recent Census affords matter for profound study and anxious investigation.

Admitting that there are some 10,000 births every year unregistered in London alone, a fact upon which you have so justly commented, we may take it for granted that the present Census has been more perfectly given than any of those which preceded it; and, whilst such a circumstance as neglect of registration of illegitimate births must materially affect the returns throughout the country in a numerical point of view, yet we may presume that a similar deficiency would apply to all preceding Censuses, as it is only of late years that registration has been fairly carried out. Assuming this to be true, then the diminished ratio of increase in the population of this country only becomes more apparent, and being so, I earnestly desire that it may not escape the observation of more able and qualified commentators than, Yours, &c.

QUERIST.

DR. WARBURG'S FEBRIFUGE.

[To the Editor of the Medical Times.]

SIR,—In the last number of your journal you have published a letter from Dr. Warburg, in commendation of his febrifuge drops, "Tinctura Warburgii," with testimonials in favour of the efficacy of the medicine.

You have added, as Editor, some remarks deserving of all attention, on the impropriety of using secret medicines, and on the indiscretion of recommending them.

You say, "It is generally supposed that the active principle of Dr. Warburg's nostrum is bebeerine, an alkaloid obtained from the bebeeru, a tree of British Guiana." If so, doubt may be well entertained, that the new medicine will prove a substitute for quinine. Bebeerine, I know, has had a fair trial by my friend Dr. Blair, of George Town, Demerara, under circumstances every way favourable for testing its comparative remedial power in the fevers of that country. The result, he has assured me, has been unsatisfactory; and, consequently, bebeerine has not come into use there.

In Dr. Blair's monograph on the Yellow Fever of British Guiana, edited by me, he remarks, in the appendix "on the employment of quinine in the treatment of the fevers of the West Indies," that "cinchonism is not peculiar to quinine. By other vegetable febrifuges, such as salicine, Angostura bark, and bebeerine,—cinchonism can be induced, but not with the same certainty as by quinine, neither in the same uniform series of phenomena, neither with the same harmlessness. I am, &c.

Lesketh How, Ambleside.

J. DAVY.

[To the Editor of the Medical Times.]

SIR,—I have to inform you that Dr. Warburg's fever drops were formerly publicly sold in a shop in King William-street, Strand. The speculation having failed, the more knowing dodge of "gratuitous circulation" was had recourse to, probably in the hope that John Bull's sympathies would be excited, and a grant of public money bestowed, in consideration of "personal sacrifices," "love of science," "philanthropy," and similar cant expressions.

With many thanks for your well-timed comments, I am, &c.,
A LONDON APOTHECARY.

[To the Editor of the Medical Times.]

SIR,—Under the head of "Guy's Hospital Reports" we had, some short time since, cases of typhus given, as having been treated with Dr. Warburg's fever-drops, by Dr. Babington; fur-

thermore we have, under the title of "St. Bartholomew's Reports," notice of Warburg's drops having been administered by Dr. Burrows in ascites followed by ague.

How is it, Sir, that countenance is given to such arrant quackery by the publication in our medical periodicals of such reports, unaccompanied by similar temperate and very wholesome castigation to that given in your last Number?

In Guy's reports we have the following in reference to a pamphlet by Sir Andrew Halliday on the Sickness and Mortality in the West Indies, published in 1839. We find, says the reporter, passages bearing upon the fever-drops which will throw some light on the subject. Sir Andrew Halliday, after stating that quinine had failed in the treatment of intermittent fever in Demerara, says, at page 21 of his pamphlet, "I was induced to have recourse to a remedy which had already become known in the colony, and was much talked of as Dr. Warburg's fever-drops." These drops Dr. Warburg assured me, says Dr. Sir Andrew, were prepared from plants, the virtues of which he had ascertained during his sojourn (?) with the native tribes. (Fudge!) It was administered, says Dr. Halliday, in about fifty of our worst cases, and under my own eye, with the most perfect success.

Now, Sir, with reference to Dr. Warburg's drops, to the disgrace of the Profession, it is true, that a trial was made of them on some soldiers of the 25th Regiment, or King's Own Borderers, also on some men of the 86th Regiment, in the Military Hospital at George Town, Demerara, British Guiana; but, in spite of Dr. Sir Andrew Halliday's (the then principal medical officer in charge) certificate, as also that of Dr. Gibson, his assistant, Dr. Carl Warburg's drops proved a failure,—yes, a dead failure on the trial in question. In this assertion I shall be borne out by a reference to the medical register, or case-books, of the 25th and 86th Regiments.

Again, why have we no certificates or medical testimony offered by Dr. Warburg from the medical gentlemen of the 86th regiment; and how is it, pray, that such an infallible remedy for intermittent fever as Dr. Warburg would wish one to believe his drops to be, has never obtained in private practice in British Guiana, or in the British military service, after the experimentalising of Dr. Sir Andrew Halliday, and Dr. Jobson, now of the 17th Lancers?

Further, how does it happen, that Dr. Warburg, after hawking about the Continental States his nostrum, comes to this country? Is it on account of the notorious gullibility of John Bull?

Really, Mr. Editor, when we see men who have arrived at a certain status, lending themselves to nostrum vendors, well may we with Garth exclaim,—

"Now sick'ning Physic hangs her drooping head,
And what was once a science now's a trade;
Her sons ne'er rifle her mysterious store,
But study Nature less and lucre more."

Just you, Mr. Editor, repair to the head office of the Army Medical Department, and get a sight of the Case Book of the 25th Regiment, and that of the 84th Regiment, while those regiments were stationed at Demerara, when you will be enabled to judge of the value of the certificates put forth by Dr. Warburg in the recommendation of his nostrum.

Apologising for the length of this epistle, I forward you my name and address, and for the present beg to subscribe myself your obedient servant,

ANTI-HUMBUG,

OR ONE WHO HAS CAREFULLY PERUSED THE
CASE BOOKS ALLUDED TO ABOVE.

Belgravia.

[To the Editor of the Medical Times.]

SIR,—In your comments upon a communication from Dr. Warburg, on the subject of his tincture, contained in the *Medical Times* of last week, you censure, somewhat severely, myself and others, for having made trial of this medicine, expressing your conviction, "that those physicians who have used a remedy of, to them, unknown composition—a nostrum, and therefore a quack medicine—have lost sight of the position they hold, and the respect due to the College of which they are members." You further add, that, "by using a secret remedy, the physician encourages that which acts most injuriously on the whole Profession—quackery; and he can no longer, consistently, refuse to try Morrison's pills or Holloway's ointment."

I hope to prove that a remedy is not necessarily a quack medicine, because it is secret; but the contrary being your opinion, let me ask, before I proceed to do so, How you have reconciled it to your conscience to publish Dr. Warburg's communication, by which act you practically deny that there is any quackery in the case, and do Dr. Warburg and his remedy ten times more service than I could possibly render him by merely recording the results of my experience of its effects. The daily newspapers, not without some

feeling of shame, excuse themselves for giving publicity to quack medicines, on the plea that they cannot refuse to publish advertisements which are brought and paid for as a matter of business. May I ask, if you have been paid for inserting this address from Dr. Warburg; and if not, whether, according to your view of the character of his tincture, you have not acted in opposition to your own principles?

But to my purpose. I deny that a secret remedy is necessarily a quack remedy, and that the trial of a secret remedy is necessarily an encouragement of quackery. To constitute this forbidden thing, which I detest quite as much as yourself, I hold that there must be an additional element, namely, a sordid motive—a desire of dishonest gain—gain disproportioned and exorbitant in comparison with the benefit offered as its equivalent. Why, there are at least three articles of the *materia medica* in our pharmacopœia which are secret remedies, so far as regards our knowledge of their origin, and six or seven of those in the commonest use respecting which we know not the species of plant which produces them: yet no one objects to employ these remedies. Nay, there are some medicines, such as James's Powder, Ruspini's Styptic, and Battley's Liquor Opii Sedativus, which, though secret and quackish too, are so excellent as to be in general use—though I will not commend the practice. All I contend for is, that the secrecy alone is not the objection. Is it then the fact, that the secret is possessed by one who can, if he pleases, divulge it? This, too, I deny, because he may have an adequate and just motive for concealing it. A man may have strong grounds for believing that he has made a useful discovery, yet be by no means so certain of it as to warrant him in staking his reputation on the result. In common prudence, therefore, he keeps his discovery to himself, until its value shall have been tested by the experience of others. Now, this happens to be Dr. Warburg's case. He has made what he has much reason to believe a valuable discovery, and he is taking a legitimate mode of having it extensively tried by what he supposes competent authorities—physicians attached to large hospitals. He does not puff his remedy by advertisement—he does not sell it—he does not in any way endeavour to make it a source of pecuniary profit. His language to me was, that he wished the tincture to be fairly, and without favour or prejudice, tested in practice; and for that purpose he supplied me, and the hospital to which I am attached, with a liberal, almost an unlimited, quantity of the tincture. He did the same, I believe, at St. Bartholomew's and St. Thomas's Hospitals, at least he expressed an intention of doing so. He assured me it was as safe as well as a successful remedy, and he supported that assurance by official reports and proofs from numerous hospitals, and from some of the most distinguished physicians in Austria, in Belgium, in France, and in some of our own colonies. He, moreover, stated that the Austrian Government had authorised its insertion in their Imperial Pharmacopœia. On this last ground alone I conceive that I was entitled to try its merits. Lastly, he promised that, as soon as the virtues which he asserted to belong to this medicine should be fully proved in this country, he would make known its composition and mode of preparation. I am really at a loss to perceive anything savouring of quackery in this; but, setting aside Dr. Warburg altogether, whom I consider an upright man, and worthy of high reward for the time, money, and talents which he has bestowed on a useful object, is the public not interested in the investigation of a remedy which has been tried with so much success in other countries? It is of such a remedy—not offered for sale, not purchasable for money—that I have made numerous trials, and a faithful, though, I admit, a very meagre report. I demur to your opinion, opposed to your practice, that I have encouraged quackery by so doing.

I request that you will favour me by inserting this letter in your next number; but I do not authorise you to publish some parts and omit others, as you did with Dr. Warburg's communication.

Should you decline a full compliance with my wishes, have the goodness to return my letter at your earliest convenience.

I am, &c. B. G. BABINGTON.

31, George-street, Hanover-square.

[We regret to find that Dr. Babington holds opinions so detrimental to the interests and to the honour of the Profession, as those expressed in the above letter. Although Dr. Babington may demur to our remarks, he will learn that they are thought "deserving of all attention" by others. As to the insinuation, that we were paid for the insertion of Dr. Warburg's letter, the character of our Journal enables us to laugh at it, and to regard the idea as one of those straws at which a drowning man will sometimes catch. Had not Dr. Babington's certificate been appended to the epistle of Dr. Warburg, we should

most certainly have refused its insertion; but we did not feel justified in declining to lay before the Profession the experience of a Fellow of the Royal College of Physicians, and physician to one of the largest Metropolitan Hospitals, even although that certificate presented the novel feature of testifying to the virtues of a *nostrum*. Had we been aware of some facts that have since come to our knowledge, we should certainly, notwithstanding that Dr. Warburg was endorsed by Dr. Babington, have declined his communication. With reference to the two last paragraphs in Dr. Babington's letter, we shall most assuredly expunge all irrelevant or personal matters from letters inserted in our journal, especially when we feel satisfied that such matters could not fail of being highly offensive to others, while they did not bear upon the subject at issue. In virtue of the right we thus claim to purge our correspondence, we have expunged from the letter of "Anti-Humburg," irrelevant and very personal remarks upon Dr. Babington himself. But to the matter in question.

"A man," says Dr. Babington, "may have strong ground for believing that he has made a useful discovery, yet be by no means so certain of it as to warrant him in staking his reputation on the result. In common prudence, therefore, he keeps his remedy to himself, until its value shall have been tested by the experience of others. Now, this happens to be Dr. Warburg's case."

Now, is this the fact? Most emphatically, we answer "No." Dr. Babington must have been grossly deceived. Dr. Warburg not long since opened a *dépôt* for the sale of a specific for continued fever, remittent fever, intermittent fever, consecutive dropsy, and neuralgia. Had he any doubts about the virtues of his arcanum, as he calls it? None. He boasts in every page of his numerous little productions of its virtues. *He* conceal its composition, because he entertains a question as to efficacy! *He* require further trials to prove its power to check the progress of these diseases! *He* doubt the importance of a remedy which caused patients on whom a cachectic appearance was strongly marked, to have, in forty-eight hours, a good appetite, an excellent digestion, and a very greatly improved physiognomy! Dr. Warburg fear to stake his reputation on the virtues of "his remedy!" No, Dr. Warburg has no doubts; he boldly affirms that his arcanum has cut short, and will at any time cut short, typhus fever, with and without abdominal complication; that the contents of one bottle, price 2*fl.* 30*kr.*, or 5*s.* sterling, has stayed, and will again stay, the progress of any intermittent; that it has cured otherwise incurable neuralgia;—the Austrian Physicians have declared in its favour, the Austrian Government sanctioned its sale, some of the most distinguished Physicians in Belgium and in France have reported in its favour, and Sir Andrew Halliday announced, in plain language, its mighty potency. What more certificates, then, does Dr. Warburg need before he makes known the composition of his arcanum? Is Dr. Babington willing that his testimonial should be hawked through the United States as a bait to buyers, at 2*fl.* 30*kr.*—5*s.* sterling, or a dollar a bottle? We own we are unwilling that a name always held in respect by the Profession should be so degraded. Does Dr. Babington remember, that, times and often, testimonials given in simplicity have been used with guile? If so, let him ask of those who testified to "Frank's specific." We aver, then, that Dr. Warburg's object is to make money,—that his *nostrum* may be had for money—for 2*fl.* 30*kr.*—for 5*s.* sterling the bottle; that he keeps its composition a secret to us, after *he* is satisfied that the publication of its composition would be beneficial to the human race; and we repeat, that all who *willingly* encourage, directly or indirectly, this mercenary spirit, are not fitted to occupy the high places in a liberal Profession—a Profession which should be practised for the benefit of mankind, and not for lucre. The object of trade is money; the object of a Profession, to advance the welfare of humanity, spiritually, morally, or corporally. We trust the Profession will speak out on this subject. Dr. John

Davy, and a highly respectable Practitioner, who has forwarded us his card, but signed himself "Anti-Humbug," have set them an example. This nostrum mania *must* be cured. We shall return to the subject.—*Ed. Med. Times.*]

ON THE USE OF AURIFIC PREPARATIONS, AS THE BEST THERAPEUTICAL AGENTS IN VENEREAL DISEASES, ESPECIALLY WHEN COMPLICATED WITH SCROFULA, ETC.

[To the Editor of the Medical Times.]

SIR,—I think I may venture to assert that there are very few medical practitioners who have, in the same course of time, had under treatment so many patients affected with the lues venerea, in all its degrees, forms, and complications, as myself; and probably I alone can boast of never having had recourse to mercurial preparations to subdue these dangerous affections. Early in my medical career, I was initiated by my excellent master, M. Lallemand, into the treatment of venereal disorders by the hydrochlorate of gold and sodium (muriate d'or); and, also, I had the good fortune to become the pupil and friend of the celebrated Dr. Chrestien, who first discovered the value of the preparations of gold as therapeutical means. Thus have I witnessed the immense and successful practice of two of the best and most judicious medical practitioners France ever produced.

I have never required mercurial preparations; and my satisfaction from this cause increases every day. I find the aurific treatment to possess all the advantages of mercury without any of its inconveniences. Sometimes, however, it is necessary to vary the preparations of gold,—to prefer the oxide to the muriate of gold, and with the precaution of alternately or simultaneously giving these remedies, they have always answered my purpose most satisfactorily.

Moreover, during nine years' experience in London, I have received proofs that the aurific preparations are more valuable here than elsewhere, because of the great liability of the pulmonary organs to be affected with chronic congestion, engendered by this cold, moist, and variable climate.

Therefore, it is equally my duty and ardent desire to give publicity to these important medicaments; and I entreat my worthy fellow-labourers to read and meditate deeply upon the books of Messrs. Chrestien's "Methode Jatraleptique," etc.; Niel's de Marseille, and most especially Dr. Legrand's, "De l'Or et du Mercure," etc.; "De l'Or dans le Traitment des Scrofules;" for in these will be found the most admirable theoretical and practical details. But here, I must add my testimony to that of my learned friends, who assert that the inconveniences which have been attributed to the use of the preparations of gold, are to be referred to other causes; for, on no occasion have I detected the least untoward symptom,—on the contrary, I find almost invariably an increase of strength and appetite.

Much more might be said, did time and space permit; but I think enough has been said to invite experiment: and I rest satisfied with the comforting assurance, "Magna est veritas et prevalebit."

I am, &c.

D'ALEX.

60, Berners-street.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS.—The following gentlemen have been elected Fellows of this Institution:—Dr. T. Thompson, Dr. Macintyre, Dr. Wegg, Dr. R. Quain, and Dr. Barclay.

ROYAL COLLEGE OF PHYSICIANS.—At a quarterly meeting of the Comitia Majora, held on Wednesday, June 25th, the following gentlemen having undergone the necessary examinations for diploma, were admitted members of the College:—Dr. Sweeting, Abbotsbury, Dorset; Dr. Hooper, Grove Hill, Camberwell. Also Dr. Sluden Davis, Filloryley, Coventry; Dr. Jones, late of St. Leonards-on-Sea; and Dr. Wilson, Whitley, Yorkshire, were admitted extra licentiates.

THE ROYAL COLLEGE OF PHYSICIANS SOIREE.—If the exercise of the warmest feelings of social intercourse, and of the most liberal hospitality, be evidence of the possession of unimpaired mental and physical health, then, indeed, may this ancient Institution be said still to retain both in the highest perfection. On Saturday evening last, the spacious and beautifully proportioned salons of the College received within their walls a more numerous,

and, perhaps, not less distinguished company than had ever before assembled there. The President and Fellows had provided for their guests—the eminent in every branch of our Profession, not only at home, but among the foreign visitors now among us, and in every department of science—a splendid entertainment, in which more substantial fare was not superseded by the abounding delicacies of the season. Rare exotics displaced the cobwebs, and the brilliancy of wax lights dispersed the misty haze which has too long hung about the portals in Pall-mall. Various objects, articles, and instruments of scientific and practical interest were placed on the tables in the libraries, and the several preparations in the museum which had passed through the hands of Harvey, Baillie, &c., were examined with deep interest more especially by the foreign guests. On the whole, this reunion was as agreeable as it was splendid, and we are happy to hear that it is but the first of a proposed series. This is as it should be. The College has too long stood aloof in mute as aristocratic dignity. Hereditary rank even the highest, can only retain its place by the exercise of those qualities by which such rank was originally obtained. Every friend of the Profession—whatever place he fills in it, must rejoice, therefore, to see such evidence of life and energy in the College of Physicians, not only on this occasion, but on others. It will not be forgotten, that the College was not idle, when the character of the Profession was in some degree assailed by the non-medical Board of Health during the visitation of cholera, neither has it been remiss in endeavouring to collect information, from which we hope, ere long, to receive a valuable report on the nature and progress of this devastating disease. The College is, then, evidently bestirring itself; it feels, we repeat, that dignity, unsupported by energy, must droop. We congratulate the College most sincerely on its present position; it has but to lead the way in the path of liberality and justice, of truth and science, to retain the rank committed to its charge, and in supporting and raising its own dignity, to elevate that of every department of our Profession, which is full willing to leave with it its just precedence. Among the foreign visitors, we observed M. Magendie, whose physiological pursuits have gained, if not a most enviable, at least a most extensive reputation; and Dr. Horace Green, of New York, whose work on "Diseases of the Air-passages, and on the Application of Caustic within the Larynx," have attracted here and in America considerable notice. We might mention, for the satisfaction of our readers, that we have seen him make the application within the rima glottidis in the most complete manner; and further, we must add, that we heard the Doctor express his profound regret that the practice should have been adopted by certain parties in London, whose proceedings have brought disregard on what he looks on as a most valuable application in a great number of cases.

SOIREE AT THE COLLEGE OF SURGEONS.—The second reunion took place in Lincoln's-inn-fields on Wednesday last, which was numerously attended by many of the eminent foreigners now in London, resident medical men, country Fellows brought to town by the College election of the following day, and lay persons of eminence and repute. The "creature comforts" were on a very inferior scale to those of the College of Physicians, from whom her very rich sister might with advantage learn a lesson of gentlemanly and fitting hospitality. The President and Fellows, no doubt, thought "the feast of reason and the flow of soul" in Mr. Paget's lecture, with cold coffee and weak tea, quite equivalent to their elder but much impoverished sister's "dainty dishes set before the Prince." We were glad to observe that a better style of dress prevailed upon this occasion; but still there were many blots to mar the harmony of gentlemanly evening costume.

CHARTER OF THE ROYAL COLLEGE OF SURGEONS.—A meeting of members of the Royal College of Surgeons was held lately, at the Town-hall, Manchester, "to take into consideration the present state of the Charter of the College, previous to the introduction into Parliament of a Bill for the regulation of the Medical Profession." The gentlemen present were Dr. Sinclair, Messrs. W. W. Beever, D. Noble, G. Southam, John Hatton, G. Bowring, Henry Winterbottom, J. M'Keand, Trafford Whitehead, John Walsh, R. H. M'Keand, G. V. Birks, W. Briggs, W. E. Manley, of Tyldesley; Fawsitt, of Oldham; Leah, of Gee Cross; and Bellot, of Stockport, etc. etc. Mr. Beever was called to the chair, and resolutions to the following effect were unanimously agreed to:—That the resolutions of the Royal College of Surgeons, passed on the 19th and 24th of March last, are of so just and conciliatory a character that they should be accepted, so far as surgeons are concerned, as the basis upon which a final settlement of the medical reform question should rest. That, as the resolutions in question concede the proposals submitted to the Right Hon. Sir George Grey, Bart, in May, 1850, by a deputation of provincial physicians

and surgeons, with the exception of the points relating to the payment of a fee, and the standing of members on admission to the Fellowship, this meeting deems it right that a decision upon these two questions shall rest with Her Majesty's Government. That this meeting reiterates the condemnation of any measure of medical reform that provides for the establishment of what has been designated a College of General Practitioners, etc. That a Memorial, embodying the substance of the above resolutions, and signed by the Chairman on behalf of this meeting, be forwarded to Sir George Grey, Bart., with a request that he will proceed with the subject of medical legislation during the present session of Parliament, and that the following be adopted as the Memorial to be signed by the Chairman:—

To the Right Hon. Sir George Grey, Bart., Her Majesty's Principal Secretary of State for the Home Department.

Sir,—The undersigned, as chairman of a public meeting, held in the Town Hall, Manchester, of members of the Royal College of Surgeons of England, begs respectfully, on behalf of the same, to call your attention to the following circumstances. Certain resolutions, adopted by the Council of the College in March last, are deemed by the members residing in Manchester and the immediate neighbourhood, to be of a character so just and conciliatory that they may be accepted, so far as surgeons are concerned, as the basis upon which a final settlement of the vexed question of medical reform should rest. You will have noticed that, with the exception of two points, the resolutions in question concede the several demands submitted to you by a deputation of provincial physicians and surgeons, in May, 1850; these points, involving the payment of a fee on admission to the fellowship, and the standing rendering members eligible to it, the surgeons of this locality respectfully submit should be determined by yourself on on behalf of Her Majesty's Government. And tendering to you, Sir, our grateful acknowledgments for the anxious consideration which you have given to this subject, we have once more to urge that, that in any measure of medical legislation which you may introduce, all provision be excluded for a separate incorporation of general practitioners so called. Believing that the differences upon the subject of medical reform that have hitherto obstructed the several attempts at legislation, may now be satisfactorily accommodated, the undersigned, on behalf of those whom he represents, most respectfully prays you to introduce a Bill for the better regulation of the medical profession, during the present Session of Parliament.—Signed on behalf, &c., of the meeting.

Manchester, July 1, 1851.

W. W. BEEVER, Chairman.

The proceedings concluded with a vote of thanks to the Mayor, for his kindness in granting the use of a room for the purposes of the meeting, and to Mr. Beever, for the able manner in which he had presided.

UNIVERSITY OF CAMBRIDGE.—At a Congregation held on the 30th ult., the following degrees were conferred:—M.D., W. H. Fuller, Caius College; Dr. Hawkins, of St. John's College, Oxford, was admitted *ad eundem*.

TRINITY COLLEGE, DUBLIN.—At the summer commencement, held on the 30th ult., the following degrees were conferred:—M.D., Edward H. Maul, Robert C. Smythe; M.B., Willoughby F. Wade, Samuel Gibson, Robert M'Donnell, John Eustace, Wm. Haughton, Thomas Bray, Arthur E. Jacob, Robert C. Smythe.

OBITUARY.—On the 8th ult., at Edinburgh, Dr. R. A. Miller, F.R.C.S.E.—On the 23rd ult., at Sidmouth, aged 80, Sir George Smith Gibbes, M.D., F.R.S., Fellow of the Royal College of Physicians, and Physician to Her late Majesty Queen Charlotte.

MILITARY APPOINTMENTS.—60th Foot, Assistant-Surgeon Brinsley Nicholson, M.D., from the Staff, to be Assistant-Surgeon 85th Foot; Acting Assistant-Surgeon John Knox Leet, to be Assistant-Surgeon vice Bain, appointed to the Hospital Staff; Hospital Staff Assistant-Surgeon David Stuart Erskine Bain, from the 85th Foot, to be Assistant-Surgeon vice Nicholson, appointed to the 60th Foot.

NAVAL APPOINTMENTS.—Surgeons Edward Nolloth, M.D. (1848), to be superintendent of the *Hempsyke*, convict-ship; Thomas E. King, M.D. (1838) to the *London*, 90, flag-ship at Sheerness; Assistant-Surgeons Thomas Hunter (1845) and John Jeffcott (1842), from the *Ocean*, 80, to the *London*, 90, at Sheerness. Joseph Henderson, M.D., (1850,) to the *Waterwitch*, 8, sloop, at Chatham, and James Niven, M.D., to the *Express*, 6, at Devonport; Assistant-surgeon Robert Mungle, (1846,) to the *Myrmidon* steam-vessel, at Deptford.

NAVAL CHANGES.—The following changes have taken place in the fleet at Malta:—R. D. Mason, surgeon, from the *Firebrand* to the *Albion*, vice Douglas, invalided; E. D. Auvergne, assistant-surgeon to the *Queen*, to be acting surgeon in the *Firebrand*, vice Mason.

MEDICAL APPOINTMENTS AND VACANCIES.—The house-surgeoncy to the Royal Free Hospital is vacant; salary fifty guineas a year, with board and residence; candidates must be M.R.C.S. The salary for the surgeoncy to the Marylebone Workhouse is 60*l.* for the first year, 70*l.* for the second, and 80*l.* for the third, with board, lodging, and washing. The last-mentioned advantage may be very necessary, if the workhouse be in so bad a condition as it is said to be.

MIDDLESEX HOSPITAL.—The annual distribution of prizes at this school took place on the 11th instant, Sir R. H. Inglis presiding. Dr. Seth Thompson, the professor of medicine, read an address, in the course of which he spoke of the success that had attended the hospital and school, and of the good conduct of the students. He mentioned the foundation of new prizes, and expressed a hope that Fellowships might be founded for the senior students, and that they might have a collegiate establishment. The Chairman, after giving the students some good advice, proceeded to distribute books, microscopes, and instruments as follow:—Mr. W. R. Rean, the prize in medicine; Mr. E. R. Denton, surgery; Mr. E. Vernon, physiology; Mr. H. J. Ellerby, anatomy; Mr. E. J. Collins, first prize; Mr. W. Saville, second ditto, practical anatomy; Mr. W. Lucy and Mr. H. Rose, chemistry; Mr. W. A. G. James, midwifery; Mr. W. H. Rean, *materia medica*; Mr. A. Davies, forensic medicine; Mr. W. H. Rean, botany; Mr. S. W. Sibley, clinical surgery; Mr. E. R. Denton, Mr. W. H. Rean, and Mr. H. J. Ellerby, the visiting apothecaries' prize; and Mr. W. H. Rean, the treasurer's prize; together with several certificates to the next highest candidates in each class. The anniversary dinner followed at the Freemasons' Tavern, at which, among others, donations were announced of 100*l.* from the Queen; 100*l.*, Mr. Peashell; 20*l.*, Mr. John Pepys; 25*l.*, the Duke of Buccleugh; and 20*l.*, General Clark.

THE NEW LUNATIC ASYLUM AT COLNEY HATCH.—The new asylum for the county of Middlesex, at Colney Hatch, was opened on the 1st inst. It is the largest asylum in Europe. The Hanwell asylum contains only 800. The galleries have octagon ends, pierced with windows, in accordance with Dr. Conolly's suggestion, in order that the patients, when walking in them, may escape the dreary aspect of a dead wall.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—The foundation-stone of this building was laid on the 25th ult., by Prince Albert, on the spot where once the house of the persecuting Bishop Bonner stood. The building will be 214 feet long, by 40 wide, and 50 high. It is to be in the Queen Anne style, three stories high, of red brick, with stone facings. There will be a campanile in the centre. The estimated cost is 10,400*l.*, and it is expected that it will be completed in twelve months. It is to contain about 80 beds, but, if the funds should ever allow of the erection of wings, the number of beds will then be about 200. In addition to the hospital, Mr. Paxton showed designs for a minor Crystal Palace, as a Sanitarium, where the patients might take exercise in all weathers. By a process of artificial filtration, the purity of the air is secured, and, by an ingenious apparatus, an agreeable temperature is obtained. Mr. Paxton purposes further to stock his Sanitarium with those plants that are known to give out the largest quantity of oxygen, to act as a stimulant to the diseased lungs. (?)

THE LATE MR. JOHN HELLING, of the Hampstead-road, has left a legacy amounting to 200 guineas, free from duty, to University College Hospital.

DR. ALEXANDER VANDONI, provincial physician of the delegation of Milan, has been stabbed in the open streets of that city in two places, and expired in consequence.

MR. DYCE SOMBRE.—The question respecting the alleged lunacy of this unhappy man has been put at rest by his decease, which took place on the 30th ult. He came to this country to submit himself to a medical examination, as to the state of his intellect, but soon after his arrival was seized with the illness which has proved fatal. We observe in the daily papers, and in the place usually appropriated to births, deaths, and marriages, that Mr. Dyce Sombre's decease is registered with the names of the three eminent medical gentlemen who attended him. With whom this unusual procedure originated we do not know; but perhaps it is henceforth to be the fashion to place after such announcements—"Dr. Highman *fecit*."

THE PHARMACY BILL has been read a second time *pro formâ*, and ordered to be printed. It will not be brought forward again till next Session.

MARYLEBONE BOARD OF GUARDIANS.—At the weekly meeting, held on the 28th ult., a Report was read from an association in the parish, denying Mr. Keyworth's charges; and afterwards

another Report was brought forward respecting a statement made by the Commissioners in Lunacy, complaining of the confined state and indiscriminate admixture of lunatics, insane and others, in the lunatic wards. From the Report it appeared, that No. 30 Ward, appropriated to males, partly idiots, is long, narrow, and very close, and the beds too much crowded together, and the floor of stone. Wards 49 A and B, beds too close together, ventilation imperfect. No classification of patients in these wards, and only one wardman to the three, and he a pauper, sixty-two years of age. In the two female wards there were double beds, two in one and six in the others, all occupied by adults. In both, the beds are too close together, but the wards are clean and the ventilation not to be complained of. The wardswoman is a pauper, fifteen years in the house, sixty-six years of age. The Committee recommended the removal of at least four beds from Ward 30, of the screen near the door, and that it be used exclusively for idiots; and further, that the wardsmen and women be paid servants and not paupers. The removal of the double beds on the female side was also advised, and that all the lunatic wards be under the special superintendence of the workhouse surgeon. The Committee regretted that they could not point out any locality for airing courts. The Report is to be taken into consideration next week. It is rather singular that this Report, showing so disgraceful a condition of the lunatic wards, followed closely upon one denying the allegations made by Mr. Keyworth against the general state of the workhouse. The lunatic wards being so utterly unfit for the purposes to which they are devoted, it is fair to presume the other parts of the house are equally unfit for the accommodation of diseased and suffering human beings.

QUALIFICATION OF DRUGGISTS.—On the 12th, on the motion of Mr. Jacob Bell, the House of Commons went into Committee, and agreed to a resolution, upon which was founded a Bill for regulating the qualification of pharmaceutical chemists, and for other purposes connected with the practice of pharmacy. We presume the Council of the Pharmaceutical Society will be the parties to whom the direction of the druggists will be entrusted. Should the Bill pass, (and for the present it is shelved,) we trust that such a name will be given the incorporated body that the public may not mistake them for medical men, as is the case sometimes with respect to those members of that Society who put their diplomas prominently forward.

CHLOROFORM A PROPELLING POWER.—It appears experiments with chloroform as a propelling power, in the place of steam, are now making in the port of Lorient; and there is reason to hope, from the success which has already attended them, that they will result in causing a considerable saving to be effected in cost and in space.

GOVERNMENT intend to apply for a grant of 7000*l.* on account of the epidemic cholera in Jamaica.

THE HAPPY HOMES OF ENGLAND.—In St. Giles-in-the-Fields, north sub-district, at 60, Dudley-street, on 18th June, the son of a coach-spring-maker, aged three years, died of "infantile fever." Mr. Simpson mentions that "the house is over-crowded, close, and badly ventilated, having no window on the staircase, which is perfectly dark. The lodgers complain of a sickening effluvia from the drains. The deceased child was perfectly well, till removed to the house, but was taken ill three days afterwards; and the medical man who attended, told the mother that he should not be surprised if all the inmates were attacked in a similar way. The habitations in this street are densely populated; and the poor sleep in damp cellars, which the parochial authorities should take means to prevent." In Bethnal-green, sub-district of Hackney-road, at 3, Mead-street, on 14th June, the daughter of a bricklayer, aged 8 years, died of "natural small-pox (5 weeks), dropsy (3 weeks)." The street (says Mr. Murray) is close and crowded, and drainage defective. In St. Martin's-in-the-Fields, sub-district of Long-acre, at 22, Cecil-court, on 23rd June, the son of a painter's labourer, aged 5 years, died of "small-pox (9 days), not vaccinated." Mr. Cobbett states that "this is the second death that has occurred in the same family within four days. Of seven children five have had small-pox, and the mother is now recovering. The house is numerously inhabited; it is airy at the back part. The infection extends to two other houses in the same court.

THE RETURN of the Registrar-General for the past week shows that the mortality from diseases of the organs of respiration continues to exceed the usual amount at this period; the deaths in this class were 124, while the corrected average is 98. Phthisis was fatal to 145 persons, which differs little from the estimated number.

DEATHS in the Metropolis for the week ending Saturday, June 28, 1851.

CAUSES OF DEATH.	June 28.				Sum of Ten Weeks.
	15	60	All Ages.		
ALL CAUSES	496	352	182	1032	9239
SPECIFIED CAUSES	495	352	182	1031	9176
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases	181	14	218	1960	
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat	6	32	12	50	480
3. Tubercular Diseases.	62	119	8	189	1820
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses,	68	29	30	127	1167
5. Diseases of the Heart and Blood-vessels ... ..	...	20	10	30	284
6. Diseases of the Lungs, and of the other Organs of Respiration	60	34	30	124	885
7. Diseases of the Stomach, Liver, and other Organs of Digestion	20	20	14	54	643
8. Diseases of the Kidneys, &c.	2	5	3	13	84
9. Childbirth, Diseases of the Uterus ... ..	...	7	1	8	102
10. Rheumatism, Diseases of the Bones, Joints, &c.	5	1	1	12	78
11. Diseases of the Skin, Cellular Tissue, &c.	1	...	...	1	15
12. Malformations ... ..	...	...	...	...	19
13. Premature Birth and Debility	23	1	...	27	223
14. Atrophy	23	1	1	25	159
15. Age ... ..	...	...	39	39	412
16. Sudden	11	11	7	29	239
17. Violence, Privation, Cold, and Intemperance	30	43	10	85	606
Causes not Specified	1	...	...	1	63
1. Small-pox	24	16	...	...	...
Measles	41	...	...	...	...
Scarlatina	14	1	...	...	...
Hooping Cough	46	2	...	...	...
Croup	5	...	...	...	...
Thrush	4	...	...	...	...
Diarrhoea	19	48	...	...	...
Dysentery	2	...	...	...	...
Cholera	1	13	...	...	...
Influenza	1	1	...	...	...
Purpura and Scurvy	2	...	...	...	...
Ague	1	28	...	...	...
Remittent Fever	4	7	...	...	...
Infantile Fever	2	45	...	...	...
Typhus	38	3	...	...	...
Metria or Puerperal Fever	5	56	...	...	...
Rheumatic Fever	1	6	...	...	...
Erysipelas	5	7	...	...	...
Syphilis	3	5	...	...	...
Noma or Canker ... ..	...	6	...	...	...
Hydrophobia ... ..	...	3	...	...	...
2. [Hæmorrhage] Dropsy	15	1	...	...	...
Abscess	1	1	...	...	...
Ulcer	1	6	...	...	...
Fistula	2	...	...	...	...
Mortification	7	...	...	...	...
Cancer	18	...	...	...	...
Gout	2	...	...	...	...
3. Scrofula	6	...	...	...	...
Tabes Mesenterica	14	2	...	...	...
Phthisis (or Consumption)	145	...	...	...	...
Hydrocephalus	24	6	...	...	...
4. Cephalitis	11	10	...	...	...
Apoplexy	19	...	...	...	...
Paralysis	16	...	...	...	...
Delirium Tremens	1	...	...	...	...
Chorea	2	...	...	...	...
Epilepsy	12	...	...	...	...
Tetanus ... ..	...	...	...	...	...
Insanity	5	...	...	...	...
Convulsions	48	...	...	...	...
Disease of Brain, &c.	13	...	...	...	...
5. Pericarditis	1	...	...	...	...
Aneurism	1	...	...	...	...
Disease of Heart	28	...	...	...	...
6. Laryngitis	7	...	...	...	...
Bronchitis	45	...	...	...	...
Pleurisy	3	...	...	...	...
Pneumonia	56	...	...	...	...
Asthma	6	...	...	...	...
Disease of Lungs, &c.	7	...	...	...	...
7. Teething	5	...	...	...	...
Quinsey ... ..	...	...	...	...	...
Gastritis	3	...	...	...	...
Enteritis	5	...	...	...	...
Peritonitis	6	...	...	...	...
Ascites	3	...	...	...	...
Ulceration (of Intestines, &c.)	1	...	...	...	...
Hernia	1	...	...	...	...
Ileus	6	...	...	...	...
Intussusception ... ..	...	...	...	...	...
Stricture of Intestinal Canal ... ..	...	...	...	...	...
Disease of Stomach, &c.	2	...	...	...	...
Disease of Pancreas ... ..	...	...	...	...	...
Hepatitis	6	...	...	...	...
Jaundice	6	...	...	...	...
Disease of Liver	10	...	...	...	...
Disease of Spleen ... ..	...	...	...	...	...
8. Nephritis	2	...	...	...	...
Nephria or Bright's Disease	3	...	...	...	...
Ischuria ... ..	...	...	...	...	...
Diabetes ... ..	...	...	...	...	...
Stone	2	...	...	...	...
Cystitis ... ..	...	...	...	...	...
Stricture of Urethra ... ..	...	...	...	...	...
Disease of Kidneys, &c.	6	...	...	...	...
9. Paramenia	1	...	...	...	...
Ovarian Dropsy ... ..	...	...	...	...	...
Childbirth (see Metria)	4	...	...	...	...
Disease of Uterus, &c.	3	...	...	...	...
10. Arthritis ... ..	...	...	...	...	...
Rheumatism	6	...	...	...	...
Disease of Joints, &c.	6	...	...	...	...
11. Carbuncle ... ..	...	...	...	...	...
Phlegmon ... ..	...	...	...	...	...
Disease of Skin, &c.	1	...	...	...	...
17. Intemperance	2	...	...	...	...
Privation of Food	2	...	...	...	...
Want of Breast-milk	2	...	...	...	...
Neglect ... ..	...	...	...	...	...
Cold ... ..	...	...	...	...	...
Poison	3	...	...	...	...
Burns and Scalds	7	...	...	...	...
Hanging, &c.	4	...	...	...	...
Drowning	18	...	...	...	...
Fractures	41	...	...	...	...
Wounds	5	...	...	...	...
Other Violence	1	...	...	...	...
All Violence	79	...	...	...	...

BIRTHS AND DEATHS.

	Births.	Deaths.	Births over Deaths.
Males	716	519	197
Females	723	513	210
	1439	1032	407

The Deaths in the several Districts are as follow.—

DISTRICTS.	Population in 1851.	June 28, 1851.	Sum of Ten Weeks.
London... ..	2361640	1011	9239
West	376332	152	1464
North	490441	101	1811
Central... ..	392885	169	1689
East	455335	244	1963
South	616545	266	2312

TO CORRESPONDENTS.

Our Correspondent will find the best account of nymphomania in Zimmerman's work on "Medical Experience," by John Tina. Or he may read one of the Translations of Goethe, who gives an account of this state of mind when Mephistopheles describes poor Margaret's passion.

Mr. William Parker.—Our attention has been called to a correspondence which has taken place between Mr. William Parker, surgeon, at Birkenhead, and the Secretary of St. Luke's Hospital. It appears that Mr. Wm. Parker thinks he has discovered the true cause of insanity, and a specific for the cure of that disease. His theory, he states, "has a basis connected with vital heat—not hitherto recognised," and he solicits the opportunity of discussing his views, and showing the efficacy of his practice, in St. Luke's Hospital. The proposition itself is far more original than the theory, for we cannot conceive the Governors of any well-conducted institution, having an efficient medical staff connected with it, granting such a request. The medical practice in our public hospitals is conducted upon principles which are clearly and well-established, and they ought not to be made arenas for mere speculative experiments. The medical staff of St. Luke's Hospital, consisting of Dr. Sutherland, sen., Dr. A. J. Sutherland, Dr. Philp, Mr. Luke, and Mr. Arlidge, is sufficiently strong to guarantee that the patients in that Institution are treated upon the most approved principles; and we have no doubt they will be happy and ready to avail themselves of any discovery Mr. William Parker may be fortunate enough to have made; but it would be extremely improper for the wards of that or any other public hospital to be opened for experiments by men professionally unconnected with the Institution. Once consented to, there would be no end to such applications from men who are sheer theorists, and ambitious of obtaining a reputation. We do not apply this remark to Mr. William Parker: for aught we know, his discovery may be valuable; but we object on principle to such a request being granted.

F. S. may rest assured that, with the exception of the progress of medical science, we have no other view in the conduct of this Journal than that right should be done, and the Profession protected from quackery, whether it occurs in high places, or is practised by those to whom it is bread. Doubtless some will not agree with us in our ethics; for many men unfortunately have a code of their own, and that of sufficient laxity to be applied to circumstances as they may occur. The "Medical Times" is armed in honesty, and is respected by honest men. The men themselves with whom we differ, respect our motives, and have regard for our honesty.

A Young M.R.C.S.—Be very sure before you commit yourself. Many a man has regretted for life so hasty an act as that proposed by our Correspondent. A case which may be called somewhat similar lately occurred to ourselves. After a dose of kousso, a patient expelled from the intestines a large tape worm, and a bunch of what we supposed to be Bots,—the *Ascaris Œstrus*. They were round, pale green, appeared to have a truncate tail, and tapering head. They must be bots—and we fancied we had got a nice case. But, alas, for the unassisted eye! Under the microscope our bots proved themselves gooseberry skins!

Dr. F. Bird's Ovarian Cases.—The first of these long-promised papers will appear in the course of the present month.

Antiglobulist writes "that Dr. Quin has advertised his clinical lectures on homœopathic practice." "Antiglobulist" wishes to know whether the lectures will be devoted chiefly to diagnosis or treatment. He concludes, that as the lectures are advertised they are open to the public, which the Editor of that anti-Hahnemannian Journal—the "Medical Times,"—can avail himself of in attacking Homœopathy at its head-quarters, and observing whether homœopathic practice corresponds with homœopathic principles and theories. "Antiglobulist" has met with several instances of homœopathic practitioners treating their patients with allopathic doses of morphia, calomel, &c. &c. An allopathic clinical student at the Hahnemannian Hospital could observe whether such frauds as the above are carried on at that Institution, and whether Dr. Quin, in explanation, would say that it was *only* the homœopathic dose that produced the effect, the remaining millions of doses neutralising and stultifying each other,—though it is rather remarkable that the acting dose itself is not neutralised, as well as its fellow-doses. The Profession might be informed whether the cases cured were cases of disease! or whether they were selected cases, such as get on as well or better by themselves, as with medical assistance. Other particulars might be obtained, instructive (?) and amusing (!) and be communicated to a curious and inquiring Profession.

A New Subscriber.—We will give the necessary directions so that the request of our Correspondent respecting the publication in the Journal of the list of newly-received licentiates of the Apothecaries' Company may appear.

[To the Editor of the Medical Times.]

SIR,—The Number for June of the "Edinburgh Journal of Medical Science" reports the rules of the Royal College of Physicians regarding practitioners of Homœopathy, and at the conclusion "reserves its right of dealing summarily with them, if it shall be advised to exercise that right." It seems to be much doubted whether the College has the power of expelling its refractory members. But if the late distinguished and energetic Dr.

Gregory were now alive and President of that learned Body, it appears probable that, from the manner in which he received and treated the late Dr. Solomon, of "Cordial Balm of Gilead" notoriety, he would not have been at any loss how to act in the matter in question. Some forty years ago, or upwards, that empiric having obtained a diploma from Aberdeen, at a period when diplomas were sold by that now reformed University, on the certificate of fitness by *two trading physicians*, he waited on Dr. Gregory, then President, and requested him to call a meeting of the College, to admit him as a licentiate on the production of his diploma and payment of the fees. A conversation to the following effect was then said to have taken place between the learned professor and the quack:—"Look ye, Dr. Solomon, since I must call you Doctor, it is true that we are compelled by our charter to admit any person who has procured the diploma of doctor from any one of the Scotch universities, on the production of it and the payment of the fees; therefore, if you insist upon it, we will admit you, and we will expel you next day by public advertisement. Well, you may prosecute and compel us to re-admit you; we will re-admit, and again expel you by public advertisement, as often as you please. If you choose to persevere, you will be ruined by the expense; for we will apply for a new charter, dissolve our College, or proceed to any possible extremity rather than be disgraced by having the name of a quack on our list. I would, therefore, advise you to have nothing to do with us." The prudent empiric took the Professor's good advice and his leave!

I am, &c.,
Edinburgh.

MISO-OMOIOPATHOS.

[To the Editor of the Medical Times.]

SIR,—In a paper published by Dr. Knox in the "Medical Times" of last week on the subject of "Excision of the Head of the Femur," I find that reference is made to the case in which the operation had been performed by myself some time since, and that an error of importance, which I must not leave unnoticed, has doubtless quite unintentionally been committed by the writer. After having mentioned the striking points in the case, Dr. Knox, in his remarks upon it, speaks thus,—"The femur was dislocated, although the opposite opinion was held prior to the operation." Now, Sir, if Dr. Knox will kindly turn to the "Lancet," for November 25, 1848, page 580, he will find in the report of the examination of this patient by Dr. Milroy and myself, the following:—"There is a shortening of the limb of about an inch, and by laying hold of the lower part of the femur, and rotating it, the head of the bone can be distinctly felt on the dorsum illi, and it is evident that no ankylosis or attempt at such has taken place." And again, a little further on:—"It appeared to me that the head of the bone was the part principally affected, and that, lying as it did in its abnormal situation, it was acting as the source of irritation, and was gradually destroying the patient."

Thus it is quite clear that I had, previous to the operation, come to the conclusion that the head of the thigh was dislocated on to the dorsum of the ilium, and that no error in diagnosis was made as to that point, at least as Dr. Knox states.

There is one other point to which I would briefly allude. Dr. Knox, by referring almost solely to Mr. Walton's paper read at the London Medical Society in the winter, gives that gentleman alone the credit of having brought this subject prominently before the Profession. Now, if Dr. Knox will do me the favour to look back as far as April 1 and 15, 1848, he will find in the "Lancet" of that date the first part of my Essay on the subject. This was the first occasion on which the history of the operation had been gone into, and prominently brought before the Profession; and I am sure my excellent friend, Mr. Walton, will be the first to acknowledge my claim to this, although most indubitably to Mr. Fergusson is the credit due of having revived the operation, and opened up the subject in a brief relation of his celebrated case, before the Medico-Chirurgical Society, and which was inserted in the Transactions. Many of your readers must recollect the fierce controversy there was on this matter, and which, in fact, was mainly brought about by the publication of my memoir, and subsequently of the case on which I operated; and it is with great pleasure I look back upon this, as it has led surgeons to see the propriety, and even duty, of performing this operation in certain cases of morbus coxarius.

I am, &c.,
13, Caroline-street, Bedford-square.

HENRY SMITH.

Mr. Fitzgerald, of University College, is thanked. We have, however, already made arrangements for the publication of the Lectures.

We have received a communication from Dr. Warburg, enclosing a copy of a letter from a German nobleman of exalted social station. We cannot conceive what loyalty and respect for rank have to do with the legitimate practice of medicine. There is no Royal road to medicine; and our experience of the higher classes exhibits them as the very worst judges in all matters connected with scientific medicine. At any rate, Dr. Warburg's letter reached us long after our journal was made up for publication; and since we have elsewhere stated our right to expunge from the letters of our correspondents all irrelevant matter, we have nothing further to say upon that subject.

COMMUNICATIONS have been received from—

Mr. WILDE, of Dublin; Dr. M'WILLIAM, of Trinity-square; Mr. GUTHRIE, of Berkeley-street; A SUBSCRIBER; Mr. GROVE, of Wandsworth; A NEW SUBSCRIBER; Mr. GARDNER, of Worthing; Professor GREGORY, of Edinburgh; A GENERAL PRACTITIONER; A YOUNG M.R.C.S.; Dr. BABINGTON, of Guy's Hospital, and George-street, Hanover-square; Mr. BEALE, of Long-acre; Dr. D'ALEX, Berners-street; Mr. DAVIS, of Brunswick-place, City-road; ANTIGLOBULIST; Mr. FITZGERALD, of University College; Dr. LETHBY, of the London Hospital; Dr. MERRIMAN, of Brook-street; OMOIOPATHOS; Dr. MULLER, of Edinburgh; Mr. BOWRING, of Manchester; Dr. MADDOCK, of Richmond; ANTI-HUMBUG; F. R., &c.

ORIGINAL LECTURES.

LECTURE ON THE RECENT PROGRESS OF
ANATOMY,
AND ITS INFLUENCE ON SURGERY.

Delivered by PROFESSOR PAGET,

AT THE

ROYAL COLLEGE OF SURGEONS,

At the Evening Meeting on the 2nd of July.

MR. PRESIDENT AND GENTLEMEN,—As soon as I had promised to deliver a lecture at one of these evening meetings, I felt the usual first difficulty in such an undertaking—the difficulty of finding an appropriate subject of discourse. Then, thinking what might best befit the Professorship which it is my highest honour to fill, and to which, rather than to myself, I feel the task has been assigned, it seemed to me, that the office itself might be a fair theme. For a professorship of anatomy and surgery is rare, if not unique, in these times, and has been so for many years. I supposed that I should be able to trace its origin to some of the earliest periods in the history of English surgery, when first it began to be associated with sciences; I hoped to find in its records some materials of historic interest, some of Time's old mirrors, upon which, if our thoughts be directed aright, they may be reflected in lessons of wisdom, which we may contemplate to our own instruction, and which may pass on beyond us into the distant future. But in this I was disappointed. The double title of the Professorship is of recent date, and the events in which it had its origin have but little interest. The records of our predecessors, the Worshipful Company of Barbers and Chirurgeons, tell scarcely more than that, in 1645, Mr. Alderman Arris, a freeman of the Company, and subsequently its Master, gave 24*l.* a year, to the intent, and upon condition, that a human body should be once thereafter publicly dissected every year, and six lectures thereupon delivered in this hall; and this he did "through his great desire for the increase of the knowledge of chirurgery." Some years afterwards, a gift was received from Mr. John Gale, another freeman of the Company; and the lectureship came to be called Arris and Gale's. For a century following, lectures were regularly delivered by physicians appointed by the Court of Assistants of the Company of Barbers and Chirurgeons.

In the early history of the Professorship, there is little that needs repeating. The teaching of both anatomy and surgery seems to have been very ill maintained by both the surgeons and the physicians who were successively appointed by the Court of Assistants of the Company. Year after year, the master-surgeons attempted in vain to compel themselves to lecture upon surgery; and, at one time, these principal members of our Profession were so indifferent to the teaching of anatomy, that, at a Court of Assistants, it was resolved unanimously, "That every member of the said Court, who at any time thereafter should attend any of the lectures upon anatomy to be delivered in the theatre, should be entitled to, and receive the sum of 5*s.* out of the cash of the Company."

It was just before this very cheap devotion of themselves to the personal encouragement of scientific teaching, that the Court had required their lecturer upon anatomy to give lectures upon surgery also. From this, therefore, we may believe that the double office of Professor of Anatomy and Surgery arose. The double title was not given till 1803, when the Company of Surgeons, having acquired the title of a College by the Royal Charter, assumed a more appropriate dignity and order; and, among their first acts, the Council regulated the Professorships, and abolished the bounty of 5*s.* for listening to the Professors.

When we look back on a time in the history of our science so barren as this; when we think of the time that was wasted, and of the energy misspent in trivialities (for the Worshipful Company were all this time very busy in their own affairs), we are apt to think hardly of such an age, and to suppose, that if the men of our generation had lived then, scientific surgery would have been now far advanced beyond the state of childhood and uncertain progress. But, perhaps, in all such judgments of the past we may be very wrong. In the early history of sciences, as in that of our

[No. 615.—Vol. III., NEW SERIES.]

organic life, there are periods of repose, brooding times, in which the germs of knowledge show no signs of present life, no change of outer form, but in which their powers seem to be gathering strength, or in which they wait for more genial times, when elder sciences may be prepared to prop and train them. And this may well have been the case with surgery.

But, though the history of the Professorship seemed thus barren, yet both its name and its records suggested many thoughts that appeared worthy to be pursued; and chiefly this,—that, under all variety of circumstances, surgeons have recognised the propriety, or even the necessity, of associating their study with anatomy. They have done this, whatever may have been the form and range of the anatomical science they could pursue; whether it were limited to the dissection of a human body once in a year, and to the public delivery of six lectures thereupon; or whether, with its present larger span, it would comprehend the structures of all the animated occupants of the earth in all its ages, and the laws observed in all; or, with microscopic sight, would search to the extreme boundary of visible organic form; or, with the help of chemistry, would pass even this limit, and dis sever the elemental atoms of the organism. It is surely worthy of thought, that however widely anatomy has ranged, surgeons have claimed it, at least in chief part, as their province,—theirs for labour, for intellectual exercise and recreation; but, above all, as they have believed, theirs for the safety and promotion of their more proper calling.

Now, to a certain point, the necessity of the combination of anatomy with surgery would be very evident. As the artificer should know well the construction of that which he undertakes to repair, so should the surgeon know every line and mark of the body whose damages he must set right, whose errors in form or function he must correct, whose members he may need to mutilate with safety. But this has been said a thousand times, and never has been gainsayed; it was in the conviction of this truth that Arris, in his great desire for the promotion of chirurgery, founded a lectureship upon anatomy; this, therefore, can be no subject of discourse.

But, while every age has thus recognised the necessity of combining anatomy with surgery, so far as its immediate application in practice may be necessary, in every age also,—at least in these latter times,—the seniors in surgery have doubted whether the novel anatomical pursuits of their juniors could increase their fitness for practice. In every age it has been said, "You go too far."

It is not enough to answer to the seniors of our own day, that the same objection was made to them when they, in earlier times, passed the bounds of recognised utility, and that the event has proved the objection wrong. For it must be admitted that modern anatomy has adopted not only new methods, but even new objects, of research; it has not only extended itself largely in its recognised territory, but much more has passed into wholly new fields of inquiry; and in the facts and laws which it has discovered, especially with the help of the microscope and chemistry and large comparisons, however interesting they may be to the student of pure science, it may be doubted whether there be anything that can contribute at all to the advancement of surgery: so that there may be ground for asking, whether the study of modern anatomy, of that, I mean, which is pursued with the microscope, with chemistry, and with enlarged comparisons of lower forms and types of structure, either has been, or is ever likely to become, useful to those who would be surgeons.

Let the affirmative to this question be my Thesis; let it be my endeavour to prove that there are things in the recent progress of anatomy, which it behoves every student of surgery to learn, if he would either promote his art or practise with success.

I know it may be very difficult to adduce such cases as those who would hold the negative of this commonly ask for,—cases in which single facts, connected with the recent discoveries of anatomy, are at once and directly applicable to the promotion of surgical practice. However, there are some of these. The recognition, by the microscope, of the nature of tumours, is at once applicable to practice, by the determination which it may give for or against operations, when portions of the tumours can be removed beforehand. So the examination of discharges from ulcers may be decisive of their character and suggestive of their appropriate mode of treatment. The examination also, by microscopic aid, of

the contents of abscesses and cysts, may assist in the diagnosis of cases which, but for this microscopic help, would be yet more obscure. Again, the fact of the ordinary growth of bones by the ossification of fibrous tissues, (which could not be proved without the microscope,) is applicable in surgery, by assuring us of the utility of periosteum in the repair of the diseases and injuries of bones; of its utility, I mean, for its own sake, as well as for the sake of the blood-vessels which it contains, and by means of which alone, it was supposed to administer to the nutrition of bones. So, the microscopic proof of the muscular structure of the arteries and veins, (though it has only confirmed the truth maintained by Hunter,) and the proof of the proper character of their muscularity, and of their relation to various stimuli, have made us more sure of the natural means for the arrest of hæmorrhage, and of the methods by which we may assist them.

I would be far from endeavouring to prove, that such applications of the microscope as these are sufficient to justify the inculcation of a long and tedious course of study upon those who would practise surgery. Still, these facts must be allowed their proper weight; and whatever value they have should be added to that greater value, which is to be assigned to the improvement of the principles of surgery by the recent studies of anatomy. Let me, then, point out some of what I think we may call improvements in the principles of surgery which have been thus attained; and I will do this chiefly in relation to certain common expressions which we use, such as "modes of organization," "the constitutional origin of local diseases," and the like.

First, in regard to the principle of the question, whether we have any right to judge, by what we can observe in natural structures and their development, of what would be the progress of changes in any morbid structure. Doubtless, it has been always assumed that we may so judge; but, except by the researches of minute anatomy, it has never been proved. Minute anatomy has, however, proved it by finding that all the structures, natural or morbid, are conformed to certain definite laws of development. After tracing, with minute inquiry, the development of the natural structures, it has found that, however diverse from them the outward form of any morbid growth may be, it was in its earliest conditions, and is, in its elemental structures, like them, or not wholly dissimilar from them; and that in its development it may have passed through stages comparable with each phase of the development of the natural parts. We cannot overestimate the value of a principle like this. Unless it had been proved, I do not know that we could have had the right, in any case, to assume what has been the progress of a morbid structure, when we find it in only one phase of its existence. But now, in whatever period we find a morbid growth, we may assume the previous stages and methods of its existence, knowing, by microscopic proof, that its development must have been conformed to the laws which prevail in the development of normal growths.

Then, with regard to the method of organisation or formation of morbid structures, some idea of which must be present in our minds, in the consideration of nearly every case that appears before us;—before the development of cells was watched, it needed to be assumed that something external to the forming mass controlled and directed it; something, that is, external to the materials which were assuming shape, was supposed to be not only supplying or exciting a vital force in them, but even directing it and determining its mode and end. But, let any one examine such a process as that of the development of an ovum, and see there whether the appearance be not much rather like that of spontaneous change—a change worked out by a force which, whencesoever it be derived, is inherent and efficient in the materials themselves. He will find the whole mass of the ovum, or at least the focus of its activity, composed of cells; and these may be, to the sight, nearly alike, although the event proves that they have different properties. As he watches, he will see some among these similar cells arranging themselves in a median line, assuming the character of cartilage-cells, and becoming presently the rudimental vertebral column; others will be, at the same time, arranging themselves in rows, and assuming the function, and then more gradually the structure, of muscles; others among the same cells will become integument and epithelium; others will be assuming the form of blood-corpuscles, and these will be ranged in the order of future blood-vessels, and will wait for the propelling force of

the heart, formed of cells that were like themselves. All this time no blood-vessels are present; there does not appear one of those things to which surgeons were in the habit of referring as the sources of the force by which such changes are accomplished. There is here nothing but a mass of cells with some interposed material; and each cell develops itself to its own destiny and end. So, too, if any one traces the gradual development of the lymph or chyle into blood, he will watch the same kind of changes; he will find them, either as an homogeneous fluid, or as one turbid with minute molecular particles, becoming the seats of development of solid bodies; and these will gradually assume the more complicated character of nucleated cells; and then each will gradually acquire colour till it becomes a perfect corpuscle of the blood. There is not to be traced any source for that directive as well as formative power which has been so commonly referred to in explaining the process of organisation. In short, all that we can see, in processes like these, puts us back upon the intrinsic properties of the materials themselves, for the explanation of the various manifestations of the formative force which they display. The formative force, whatever be its origin, we must assume to be but one; and the various manifestations in which it is displayed, we must, I think, after such microscopic watching of its effects, refer to the variety of the materials in which it is exercised. And, if this be so, we are bound to discard, both from physiology and the study of disease, all such expressions as "action of the blood-vessels," and "action of absorbents;" we can no longer, with these truths before us, speak of arteries as builders, or of absorbents as modellers. All these are but the apparatus by which the materials, so to speak, in their raw state, may be carried to and fro in parts that are themselves forming. Neither can we speak of the materials for organisation as being merely plastic and passive, as so much clay to be moulded by some external force. We can only speak of them as being self-organising, autoplasmic, working with a force which, whencesoever it is derived, is efficient in themselves.

The suggestion which we derive from microscopic examination, of the connexion existing between the forms that are assumed and the previous composition of the materials that assume them, may indicate the true connexion between the minute anatomy and the minuter chemistry of disease, and may be followed out in some facts which have a direct bearing on the expressions we use concerning the constitutional origin of local diseases. It may be proved, for example, that an excretory organ will grow, actually grow, and increase both the bulk and weight of its substance, in direct proportion to the quantity of materials which it will be its office to excrete from the blood. For example, a lung or a kidney will so grow according to the quantities of the materials they are to excrete; and it may be proved, at least of one of these, that the materials for excretion are present already formed in the blood, and are present before the increase of the organ by which they are to be excreted. From several such instances and probable analogies, it may be deduced as a general rule, especially for excretory organs, that their formation is consequent upon the formation in the blood of the materials which it will be their office to excrete.

The same may be proved also of many abnormal structures. The virus, for example, of the small-pox present in the blood induces, as a consequence, the formation of those morbid structures by which itself may be excreted; it is incorporated in the pustules, and the blood is freed from it. So, in the case of vaccinia and other morbid poisons of the same kind, the series of events is, the existence of morbid materials in the blood, the consequent formation of organic structures in which they are incorporated, and thence the clearing of the blood from them and their influence. We may trace the same general phenomena in other cases, in which we cannot have the test of inoculation as a proof that the materials, which were present in the blood, are incorporated in the new-formed morbid structure. But while the general phenomena are the same, we may be sure, from the closeness of the analogy, that a similar series of events has occurred; so that, as a general rule, it may be stated, that morbid materials present in the blood are naturally prone to lead to the construction of certain morbid structures, in which themselves may be incorporated. And as with normal structures so with these; the morbid structures, incorporating the materials from the blood, have each a special form. The elemental forms, indeed,—the cells and

nuclei, and the rest,—may not be always capable of distinction; but the general forms into which they are constructed are in each case peculiar.

Thus, guided by what microscopic anatomy has discerned, and, in some measure, by what organic chemistry has suggested, we seem to be able to prove as principles for surgery, that the formation of morbid structures is, in a large class of cases, a process of organisation analogous in its method with that of the natural structures; that the materials composing them are, in the ordinary conditions of life, autoplasmic, and are transferred from the blood into them; and that the form of morbid structure which is assumed is determined by the composition of the morbid material, although, doubtless, its characters may be, in some measure, modified by the manifold circumstances in which the materials are placed.

Now, I might pass on to mention many other cases of the same kind, in which we seem to have attained to truer principles, or, at least, to clearer expressions of the principles of surgery; but in a temperance like this, some will have already asked, "What of all this? If all this be true, will it improve surgery?" To which I can only answer, If it will not, then all the teaching has been vain which we have heard for so many years, of the constitutional origin and nature of local diseases—all, at least, of that teaching which has not been a matter of vague rule for giving physic,—all has been in vain, although it has been the boast of English surgery since the time of Hunter, if the improvement of the principles which it involves, and of the expressions which are employed in enunciating them, can lead to no improvement in the practice of surgery. Let it not be supposed, in any case, that the improvement of the principles of surgery is of little importance, provided its practice be secure. No one can more readily than myself acknowledge, that many things in practical surgery are more sure than any of its principles. The uses of opium, mercury, and iodide of potassium, in their appropriate cases, are much more certain, much clearer facts, than anything which can be assigned as a principle in surgery; the times and methods of performing certain operations, the treatment of merely mechanical diseases, are much more sure than any surgical principles can be; and, if all the body of surgery consisted in things like these, it might be left for men of scientific taste to pursue its principles. But it is not so. I presume that no one is contented with the present state of surgery; no one who has not often been driven back upon principles in cases of emergency, and upon them alone has rested for guidance as to what his course should be. Principles may be called merely forms of words; but, if they are so, they are such words as, from having been at first only the expressions of our thoughts, have come to be our guides, and our guides in the most difficult passes of our professional calling.

I have not now chosen peculiarly favourable ground for the proof of the good influence exercised by the recent progress of anatomy upon surgery; for I have taken cases in which, if I may so speak, anatomy has stood alone, and not as a mere contributor with other methods of inquiry. For, really, the progress of such an art as surgery must depend mainly upon the combined influences of many methods of inquiry and observation, and upon the results which are thus obtained being brought to bear by the skilful and experienced surgeon himself. Now, as contributing to that accurate knowledge, upon which the future progress of surgery must mainly depend, I suppose no one would hesitate to admit that minute anatomy, and the other means to which we may now have recourse, have been eminently useful. It would be impossible, indeed, to name a department of medicine or surgery to which the recent studies of anatomy have not contributed, at least, useful facts. The pathology of inflammation, the repair of injuries, the production and development of morbid growths, the whole of that vast field upon which medicine and surgery meet and mutually illustrate one another; all these have been illustrated by direct observations with the modern methods of research; and besides all these, one may safely state that the pathology of every tissue and organ of the body has been improved by our better knowledge of its natural structure,—a knowledge which could be obtained only by the methods of research which have been of late employed.

We cannot, I think, in these times, hope to improve very much the practice of our predecessors, unless we adopt methods different from those which they have employed, and methods better than theirs. For years, the acutest intellects

have been employed, with consummate industry and abundant opportunity, in endeavouring to determine some things of the most urgent interest in our art, but in vain; in vain, not for lack of ability, which we can hope to possess; but for lack of those means of which many are now in our power. If we would hope to advance surgery, it can be only by adding the facts which we may obtain by these means to those which our predecessors have accumulated.

It would not be difficult to point out a large number of cases in which we may well hope for progress by these means. In regard to such a disease as cancer, for example, we want to know the proportion of cases in which cancer returns after operation, the average time that a patient lives upon whom no operation is performed, the average age, and all other circumstances connected with the disease; and I would venture to say, that whole volumes of statistics as yet recorded upon the matter, nay, that almost every statistical table yet printed is simply and wholly valueless for these purposes, and valueless, chiefly because of the non-use of those means by which alone we can detect what is and what is not a cancer. The microscope must be used, with all other methods of research, before we can approach the knowledge of one of those truths for want of which we are constantly practising in doubt, still casting upon the patient the responsibility we ought to take upon ourselves, still leaving things unsettled which have been unsettled for centuries past.

I will not venture to anticipate what may be the result, when modern methods of research are more generally used, or, when those to whom they are now familiar come to be the masters in surgery. I would rather point out another utility of the modern study of anatomy, which, if those that I have spoken of were all fallacious, would yet be enough to justify our urging it upon all students of surgery—I mean its utility in forming and strengthening the mind for the promotion of science; for, truly, none but the scientific mind can rightly use the means that are necessary for the promotion of such an art as ours; none other can at all estimate either the difficulty or the certainty of attaining the knowledge of truth by true inquiry; none other can anticipate or elude the fallacies which lie in every path; none other can be at once, and justly, both confident and cautious; none other can maintain in itself that intellectual strength which is requisite in our emergencies. We must not forget that the emergencies of surgery are more those of the mind than of the hand. The dextrous hand is indeed a noble gift; he who wears it, wears the best mark of human form, an admirable symbol and instrument of humanity; and we may well be content that our art should derive her name from the hand, while in chirography its divine mechanism finds some of its best employ. But much better than the dexterous hand is the instructed mind, clear, strong, resolute, and pliant, experienced in struggles against difficulty,—such a mind as can be educated only in the intricacies of some hard science.

We need not look to far distant times for proofs of the utility of the scientific study of anatomy in forming the mind for surgery. We need only remember that Hunter was succeeded, not by anatomists, but by surgeons. Except Sir Everard Home and Mr. Clift, none of his pupils professed to follow him in comparative anatomy or physiology; but among his pupils were Cline, Astley Cooper, Abernethy, Blizard, Lynn,—all the great surgeons of the last generation, all those who in their several schools taught surgery with the strength and clearness they had acquired in the study of the Hunterian physiology. So, too, in France: the genius of Bichat was effective, not in continuing a career of bold and glittering hypotheses in physiology, but in giving thought and well-directed energy to a great staff of surgeons, who in their time improved surgery in France under the influence of Bichat's mind, as those in England did under the guidance of John Hunter. Even among ourselves, the chief places in surgery have been ever held by those who have been the chief students of anatomy. In every school every teacher observes the same among his pupils. And all this, I maintain, is not because of the direct relation of utility between the two pursuits, but because the mind that will devote itself to science, and discipline itself in the school of truth, is that which can best profit by experience, and which is most apt in the promotion and daily practice of a calling such as ours. So that I repeat, if all those other advantages which I have mentioned, as accruing from the recent progress of anatomy,

were fallacious, still this should be enough to show that the study of anatomy, in the comprehensive, laborious, and liberal spirit in which it is now pursued, will best instruct the mind for the promotion and the practice of surgery.

The sum, then, of the arguments that I would adduce in affirmation of my thesis, might be this; that the recent progress of anatomy has added many facts which are of direct and immediate advantage either in diagnosis or in the practice of surgery; that, in addition to this, it has illustrated many of those principles of surgery, upon which we must mainly depend for its future promotion; and for guidance in emergencies; that, more than this, it has contributed facts improving every department alike of medicine and of surgery, facts upon which we must rely mainly for the elimination of some of those thousand sources of fallacy which as yet obstruct our progress; but, most of all, I maintain, that modern anatomy has promoted surgery by promoting in surgeons the scientific mind.

And now, gentlemen, while I speak of our science, let me not lose so fair an occasion as this to magnify our calling. Let us constantly remind ourselves, that, we who are daily practitioners of an art, may also, if we will, be students of a most noble science. Consider to what it admits us. By the science which we may pursue, we may be admitted to the knowledge of the laws which have been observed in the noblest creatures of the earth during all ages. We may discern that one type of structure upon which all of our own race, and those most kindred to us, have been formed since the foundation of the world; amidst the countless varieties of construction, all perfect in their adaptation to their several ends, we may still trace the relation to one common pattern: and from that study of types we may rise to the idea of an archetype, even to that idea which we may reverently believe was present in the Divine mind before man was made, or the earth for his habitation. Where, in any science, shall we find a law so vast in its full expression, or so manifold in its examples, as that which we may study—the law, I mean, of the common origin of all embryos, in the division of germ-cells; or, where one more expressive of the constancy and power of the Lawgiver than that of the transient imitation of lower forms by the higher, as they pass through the successive phases of their development? Where shall we find a science so manifold, so large as ours; which, amidst all the diversities of minds, can yet furnish to each materials for the exercise of its highest powers, and for the enjoyment of its very keenest pleasures?

Then let us think, if these be the advantages of our science, what are its responsibilities? The study of things so large as these should surely raise us above the level of common men. "What manner of men ought we to be?" we who are the recipients of the continuous revelation of God's will in these latest and most glorious of his works; we who can trace the unerring Hand guiding, through all ages, with few harmonious laws, all things that move on earth; we about whose path the gems of science lie, reflecting with unblemished lustre the light that shines on them from heaven; we whose common duties may be in works of charity and alms-deeds. If I may speak according to the occasion and the time in which we are met, what should be our work in the great jubilee of peace? We cannot watch without emotion the rising desire for peace which, as with one voice, swells up now from all the nations of the earth. For in peace our science finds its most congenial atmosphere. In peace alone there can be that free communion of thought which is essential to its rapid progress; and in peace alone we can live in that tranquillity in which we may pursue science with a steadfast purpose. We might almost say, that the recent progress of anatomy and the growing desire for peace have been commensurate. There may seem, indeed, to have been an interval between their first beginnings; but men needed to forget war before they would love peace. The last fierce conflict had long closed the thunderstorm of war, and yet the subdued roll of angry passions might be heard. The earth had borne her fruits for many years, and had covered up the barren places that her master's rage laid waste, and yet men's hearts would burn against those that had been their foes; and the child's early lessons were to hate those who had been the enemies of his father's generation, and to think that nobler honours could be gained in war than in any of the arts of peace. It was reserved for these last times that men should feel how lovely peace may be, and that in this our happy England they may meet in

concord, owning their mutual needs and mutual duties; uniting as if they would strive to show what may be achieved when all the various powers bestowed upon them can be combined; those powers of which we might be fain to think one was given to each nation in perfection, that each might wear the symbol of one of the manifold perfections of their common source. And what should the men of our science do at such a time? How may we best be grateful? Surely by consecrating, with all sincerity and singleness of purpose, ourselves and our calling to the highest uses of which we can be capable. However far our science may range, let us ever keep in view the utility of its applications; for it is our singular privilege that we may, if we will, combine with the study of this science the practice of the most useful and benevolent of the arts; an art in which, when rightly exercised, when cleared from all avarice, alike of reputation and of wealth, there is nothing that any mind, however scrupulous, can detect which is degrading to the purest or most divine sentiments to which our nature can attain. Then, while by our utility we gain men's favourable opinion, let our science help, by her excellent beauty, to purify society from all that is shallow, unreal, or insincere; let her promote that true wealth of nations which is reckoned, not by arms, nor by diplomacy, nor by gold, but by wisdom, by generosity, by pure morals. Above all, let our science render homage to that Christian doctrine by which herself is purified; for its true guidance, let her show loving obedience; let her teach, by the example of our unchanging love for truth, that truth is in itself, and for its own sake, excellent,—a Paradise for the intellectual soul; so, through the paths of obedience and truth, our science shall guide men to the adoration of THE TRUTH himself.

LECTURES ON PUBLIC HEALTH. ADDRESSED TO THE STUDENTS OF THE THEOLOGICAL DEPARTMENT OF KING'S COLLEGE.

BY WILLIAM A. GUY, M.B. Cantab.,

Dean of the Medical Department of King's College, Professor of Forensic Medicine, and Physician to King's College Hospital, &c.

(Continued from last Volume, page 639.)

CONTENTS.—Illustrations of the baneful effects of over-crowding.—The Black-hole at Calcutta.—St. Martin's Round-house.—The Londonderry Steamer.—Church-lane, St. Giles's.—Metropolitan Improvements, and their bearing upon the Condition of the Poor.—Increase of Population in Church-lane.—State of the Houses.—Heavy Burden of Sickness and Mortality imposed upon the Parish.—Prevalence of Fever.—High Mortality from the Cholera.—Contrast afforded by the Model Lodging-houses.—Filthy and over-crowded State of other Streets and Districts in London.—Reports of the Statistical Society.—Overcrowding in the Provincial Towns.—Quotation from the Report of the Sub-Committee of the Statistical Society on Church-lane.

THE first fact to which I must call your attention, in to-day's lecture, as illustrative of the baneful effects of over-crowding, is the melancholy catastrophe which occurred at Calcutta in 1756.

When Calcutta was surrendered to the natives, 146 British subjects were thrust into a chamber 18 feet by 14, having only two apertures through which air could be admitted. They were shut up at eight o'clock at night; and we are told that the bad effects were felt in a few minutes. Before eleven o'clock, one-third of the whole were dead, and at six o'clock next morning only twenty-three came out alive, most of whom were in a high state of putrid fever, and died subsequently.

A similar instance happened in London in 1742, when twenty persons were shut up for the night in a part of St. Martin's round-house, and several died.

The frightful catastrophe on board the Londonderry steamer, which must be fresh in all our recollections, was due to this same cause—overcrowding,—issuing in absolute suffocation of several of the passengers.

From these extreme cases of overcrowding, causing death by suffocation, or lighting up fever in the survivors, I pass on to those more moderate, but still most fatal, cases of overcrowding which lead to impaired health, and increased mortality from fever and other fatal maladies. As this evil of overcrowding is incomparably the greatest of the many physical and moral evils of our times, and one which is

inseparably bound up with some of the worst habits of individuals, some of the greatest negligences of local authorities, and some of the greatest mistakes ever committed by public bodies desirous of effecting improvements in our great cities, I propose to devote the remainder of this lecture, and a part of the next, to the illustration of this topic. Perhaps the best way to give you a comprehensive view of the subject will be to take a case, with the leading features of which I have made myself personally acquainted—I mean the case of Church-lane, St. Giles's. It is a case which admirably illustrates the causes and consequences of overcrowding, both in a physical and in a moral point of view,—a case replete with instruction, and well fitted to furnish the first parallel to the state of prisons in Howard's time,—a parallel (that is to say) to the detailed descriptions of the Bridewells of Dartford, Cambridge, and Marlborough, and the County Gaol of Launceston, which I read to you on Saturday last.

There is, or was, as every Londoner knows, a district in the Metropolis called the Rookery, in the parish of St. Giles, notorious, among other things, as a favourite haunt of the plague; and known, in more modern times, as one of the head-quarters of typhus fever and other epidemic maladies. In this favoured spot a dense population of Irish labourers, with a sprinkling of destitute persons of all sorts, and a motley mob of beggars, thieves, and vagabonds, had contrived to make themselves as comfortable as circumstances would permit, or as they, with their limited wants, and not very refined tastes, could desire. But, unfortunately for them, they were very much in the way. They lay just in the line of a grand Metropolitan improvement. Oxford-street and Holborn must be joined, as became two such leading thoroughfares, by a direct cut, and the unfortunate Rookery must be levelled to the ground. Everybody was loud in praise of the contemplated improvement, and all the world applauded the discretion of the Woods and Forests. Few public works have given more unqualified satisfaction. It would greatly facilitate traffic; it would serve to ventilate that part of the town; it would disperse a nest of thieves and vagabonds, and would replace one of the very worst districts of all London by a handsome and showy street. All this was perfectly true and undeniable, and here the public might have set bounds to its applause; but in this, as in too many other instances, both in town and country, it fell into the error of supposing that, in these improvements, it was promoting the welfare of the poor.

The removal of the rookery was to be a great boon to the poor, by destroying the unhealthy streets and houses in which they were living. Well! what has been the real effect of this boasted improvement on the poor? Why, precisely that which every reasonable man anticipated. They were driven from one scene of filth to another, with this aggravation, that added to a population already overcrowded, they were the means of increasing the rents of their new dwellings, both for themselves and for those with whom they were thus brought into competition. And this, as far as the poor are concerned, has been the history of every one of our boasted metropolitan improvements, including the showy railway termini of our large cities.

You will not, I presume, mistake my meaning so far as to suppose that I, an advocate of sanitary measures, think lightly of wide streets and open thoroughfares. Far from it. But we must beware how we advocate even these improvements upon false grounds; especially if, with all their advantages, they tend to aggravate that great evil of evils, the overcrowding of the poor. What glorious opportunities of good have we not been losing in these improvements. If we had only reasoned thus:—"This new street is much wanted to relieve traffic, and to promote the circulation of the air; it would contribute to the embellishment of the City; and is certainly, in every respect, desirable; but it must, of necessity, destroy a great number of houses inhabited by the poor, and compel them to seek new habitations in districts not one whit better or healthier, and already overcrowded; and we shall thus be inflicting an injury not only on the poor whom we eject, but also upon those among whom they are constrained to take refuge. We will not commit this double wrong; but we will first provide good and wholesome accommodation for the poor, partly on the spot, if possible, and partly on the nearest available plot of ground (for the greater part of the working-classes require to live near their places of work,) and we will there set up sundry good brick-and-mortar definitions of a house, by which we shall improve the condition of the poor them-

selves, and set an example to all who may hereafter undertake to build houses for them. In this way we shall have the double satisfaction of adding to the beauty and convenience of the Metropolis, and of raising the poor from their present degraded condition"—This would be language worthy of a statesman, and such, ere long, will be the practice of all who aspire to that honourable title. What more easy and more reasonable than to cause a clause to be inserted for the future in all improvement Acts and all Railroad Bills affecting town property, requiring that the parties interested shall provide, on the spot, or within a limited distance, accommodation of a specified kind, for a number of poor persons equal to those displaced by the improvement.

To bring about that change in public opinion which is the necessary prelude to these simple acts of justice; to influence public bodies or commercial companies having such works in hand; or, if need be, to move the Legislature, by signing or setting on foot Petitions conceived in this spirit, and aiming at the accomplishment of this object, seems to me to be in an especial manner the duty and the privilege of the clergy, and one, the performance of which, cannot possibly expose them to the charge of indiscretion.

Of the once notorious rookery of St. Giles's only one or two streets remain to show what the entire district once was. With one of these streets (Church-lane, St. Giles's) I am tolerably well acquainted, having been engaged during the latter part of 1847, with other members of the Statistical Society, in a minute examination of it. I shall mention presently some of the results of this examination. At present I will merely state what effect the recent improvements in Holborn have had on the already crowded population of Church-lane. According to the census of 1841, the population of Church-lane at that period was 655 persons. A calculation, based on the number of inhabitants found in twelve houses in the street, gave a population in 1847 of 1095; being an increase of 67 per cent. This fact will serve to show that in what I have just said of the effects of our Metropolitan improvements, as at present carried on, I have not been drawing on my imagination.

Having thus drawn your attention to a very fruitful cause of the overcrowding of the poor in large cities, I must proceed with my description of this notorious locality.

Church-lane, St. Giles's, the almost solitary survivor of the far-famed rookery, runs parallel to New Oxford-street, and at right angles to George-street, from which it opens westward. The back of the new Baptist chapel faces the entrance, and the new model lodging-house for single men, with its striking contrasts, is within a stone's throw of it. The best time in the day to see Church-lane to perfection is about eleven o'clock, a.m., by which hour the accumulated refuse of the houses has been carried into the road-way, which presents a collection of every species of filth,—cabbage leaves, potato parings, fish bones, ashes, and all the offal of the houses, which ought to have been deposited in dust-bins provided for the purpose. This narrow surface, covered with filth, the playground of ragged children, and the loitering place of their squalid and idle parents, is skirted by houses in perfect keeping with it and with their occupants. Dilapidated door-ways, windows patched with rags and paper, and tattered garments hung out to dry, prepare us for the squalor and wretchedness which reign within. There is, however, one solitary exception to this dilapidation. It is the public-house. Here everything is in good repair, clean, and orderly. It has its pump for the accommodation of its customers; and, what is equally acceptable to the very few decent people who live here, a privy. The chandler's shop at the corner, which supplies the wretched inhabitants with the necessities of life, offers almost as striking a contrast to this purveyor of most mischievous luxuries, as do the houses themselves. Let us look into one of the houses—the very first we come to. The ground-floor is let out as a lodging-house. "The landlady, an Irishwoman, has occupied it for twenty-years. It consists of a front-room, lighted by one broken and patched window, looking into the lane; and of a back-room, overlooking a yard six feet square. A tall man can barely stand upright in the first; a man of medium height must stoop as he enters the last. On six bedsteads, covered with filthy rags, two-and-twenty persons, chiefly adults of both sexes, find their nightly lodging, at the exorbitant charge of 3d. a night each." The cellar of this house has eleven nightly occupants, on three filthy bedsteads. The state of

the back-yard, of which I have spoken, and of the corresponding back-yards of the adjoining houses, almost baffles description. In most of them there are no privies, these narrow spaces being used in their place. Where such accommodations are provided, they are in a most dilapidated state, and very little used. So that the broken pavements of these wretched back-yards are covered thickly with human ordure, the interstices are filled with a most offensive liquid, and the whole ground-floor soiled with the one or moist with the other. In the great majority of these houses there is no supply of water whatever; so that the wretched inmates are forced to borrow, beg, or steal it, on the days upon which it is laid on by stand-pipe. Even on those days it is only the strong and vigilant, and those who possess vessels in which to store it for use, who can obtain a sufficient supply. On this filthy yard, the little low back room of which I have spoken looks out. You can imagine the condition of the air of a house situate between such a road-way as I have described on the one hand, and such a back yard on the other. "The single room on the first-floor is larger and loftier than those on the ground-floor. The tenant pays 3s. rent, and sub-lets the corners and sides of his room to three families, comprising in all sixteen persons. For a room on the second-floor the same weekly rent is paid, and the same system of sub-letting prevails; it has twelve occupants; one bed accommodates three females, and a second a mother, and a son twenty-two years of age. The entire house contains a population of about sixty inhabitants." I will not detain you by describing other houses in this street. Suffice it to state, that "the difference between one house and another is only that of almost imperceptible gradations—between bedsteads, chairs, and tables, a little more or a little less broken—rags a little more or a little less dirty—and windows a little more or a little less exclusive of light and air." The state of this wretched property must be seen to be understood; but there are some broad and salient facts to which I must call your attention. You remember my telling you, that, when Howard visited the prisons of England, about the year 1774, he learned that many of the worst of them belonged to persons of rank and consideration. Such is now the case with Church-lane, St. Giles's. The owner of a great part of the property is a gentleman of rank. Most of the remainder belongs to a military officer of good family. The property, however, is not in their hands. It is leased for a fixed annual sum to men who let out the several rooms to individual tenants, who, in their turn, let off the corners, sides, or centres of their apartments, to families, for from 1s. to 1s. 6d. a week, or, in the case of the ground-floors, to lodgers at 3d. per night. Here, then, in the very heart of London, that system of middle-men and sub-letting which is the curse of Ireland reigns supreme. You will not, therefore, be surprised to hear that the bulk of the population are natives of the County Cork.

I have already told you, that in consequence, as it would appear, of the improvements (!) in the neighbourhood, the population of Church-lane has increased 67 per cent. Some idea of the overcrowding which prevails there may be formed from the fact, that one room was found to accommodate 23 persons; three rooms, 22 each; one room, 19; two, 17; and two, 16! Perhaps a still more vivid idea may be formed of the state of these rooms in this respect when I tell you, that from very accurate measurements it appeared, that in a series of rooms the number of cubic feet of most impure air varied from 93 the maximum, down to 52, the minimum; the prison allowance of pure air in a well-ventilated cell being from 800 to 1000 cubic feet! The effect of this state of things upon the health of the inhabitants may be gleaned from the following facts:—Out of 100 children born, there die before they reach the age of 1 year—in Islington, 16; in Church-lane, 31; of 100 children living at the age of 1 year, Islington loses before the expiration of their second year, 7; Church-lane, 46; while out of 1000 children living under 5 years of age, Islington loses 63, and Church-lane, 123. This comparison, as it does not embrace deaths in the workhouse, is far too favourable to Church-lane. But the point most deserving of attention, and one most important to the rate-payers, is the amount of sickness generated in Church-lane and chargeable to the parish. In a period of less than seven months, 139 persons living in Church-lane were treated by the workhouse staff as in or out-patients, of which 88 were cases of typhus fever! One house (No. 5) contributed to this melancholy catalogue

22 cases of sickness and 14 of fever. At this rate this filthy focus of disease would impose a burden on the parish of St. Giles of about 240 cases of illness and 150 of typhus fever in the year. Now, I cannot but think that the rate-payers of the parish of St. Giles' have a strong case as against the owners and lessees of these houses, and that they might with great propriety petition the Legislature for power to abate this costly nuisance. Indeed, I think that it would be as just, as it certainly is expedient, that the Legislature should confer on parishes and unions, full powers, on proof being given that certain houses are in such a state as to occasion a great amount of sickness and mortality chargeable to the parish, to effect a compulsory purchase of the property in question, rase the houses to the ground, and erect on the spot dwellings having certain stipulated conveniences, the rents of such dwellings to accrue to the parish. I am happy to say that similar diversion of the Poor-rates from purposes of palliation to purposes of prevention, have already been sanctioned by the Legislature.

Though I am somewhat anticipating the subject of a future lecture, I may mention, that the cholera did not fail to find out Church-lane, St. Giles's; and that in the interval between the 11th of August and the 8th of September, 1849, it carried off no less than 29 persons, which very imperfectly represents the actual mortality; for, as Mr. Simpson, the Registrar of the district, states, "Many of the inhabitants of the lane had dispersed, and the deaths of several were registered elsewhere, independent of those removed and dying in the workhouse." Several of them, I may add, are known to have died in Kent, where they had gone hop-picking.

Of these 29 deaths, I find, on reference to Mr. Simpson's Report, that no less than 17 occurred in seven houses, which, in conjunction with Mr. Neison and Colonel Sykes, I visited in 1847; the population of which seven houses, at that time, amounted to 207. This gives an ascertained mortality from cholera of nearly 6 deaths to 100 inhabitants; while, in the model lodging-house in George-street, which is within a stone's-throw of Church-lane, only one death, of a man of 75 years of age, occurred from cholera, out of a population exceeding 100. In another model lodging-house for families, situate near Old St. Pancras Church, with a population of men, women, and children, to the number of 500 and upwards, not a single death from cholera was reported.

I have already stated, that Church-lane, St. Giles's, bad as it is, is merely a type of the condition of the dwellings of the poorer classes in other parts of London, and in our large provincial towns. To prove to you that such a state of overcrowding as that to which I have just referred, is by no means confined to Church-lane, St. Giles's, I may refer to a Report of the State of Callmel-buildings, Marylebone, made to the Statistical Society, by Mr. Rawson, in 1837:—"The average number of souls in a house was 34, and in a room $4\frac{1}{2}$; but in one room there were 13: and of 76 individuals, 61 occupied only part of a room: and of 199 rooms, 50 were occupied by more than one family." There is no reason to believe, that this state of things has since undergone any alteration for the better. To nearly the same effect is a Report made by a Committee of the Statistical Society of London upon the state of the working classes in the parishes of St. Margaret and St. John, Westminster, in the year 1840. 275 families were found to possess among them only 389 beds. The families consisted of 1112 persons, so that there were about 3 persons to a bed. Whole families, numbering in all 3,892 souls, were congregated in single rooms."

Before I quit the subject of over-crowding, as it exists in the Metropolis, and especially before I leave altogether the classic region of the Rookery and Church-lane, St. Giles's, I must call your attention to the model lodging-house in George-street, and the extraordinary contrast which it presents to the lodging-houses in Church-lane. This model lodging-house, as most of you probably know, was built by the Society for Improving the Condition of the Labouring Classes, the Society over which Lord Ashley (now the Earl of Shaftesbury) so worthily presides; and I am happy to say, that it is but one of several which that admirable Society has either fitted up or built.

In this model lodging-house of which I speak, a single man, for the moderate payment of 4d. a night, may purchase most of the conveniences of a west-end club-house, with a bed into the bargain. For that small sum he has a separate sleeping apartment, with the requisite bedding, and a chest for his clothes, all under lock and key; the use of a coffee-room, with firing, and a supply of hot-water; of a kitchen,

with every facility for cooking his meals; of a washhouse, where he may wash his own clothes; of a bath-room, at the moderate charge of a halfpenny for a cold and a penny for a hot bath; of a separate safe for his provisions; of washing places and water-closets; and, in fact of everything which he can require, with the exception of the clothes he wears and the food he eats. All this he can procure for 4d. a night, while, in Church-lane, St. Giles's, the charge for 52 cubic feet of foul air, a heap of filthy rags, a fraction of a bedstead, or a few square feet of the floor, society of a very questionable kind, no one convenience of life, the certainty of the itch, and a good chance of a fever, is no less than threepence a night.

The model lodging-house of which I have been speaking is intended solely for single men. Others are provided both for single men and for single women, and others again for families. The model lodging-houses for families provide, in every case where the family consists of more than a man and his wife, three rooms—a living room and two bedrooms. The living room has a kitchen range with oven and boiler, with closets for crockery and coals. There is also a scullery, a water-closet to each set of rooms, an ample supply of water, and a dust-shaft to dispose of the ashes and other refuse. A bedstead is also supplied, and gas is laid on at a moderate charge. For all these conveniences, too, the charge is very moderate, scarcely exceeding the sum elsewhere demanded from the same class of tenants for a single room, with a scanty and inconvenient supply of water, and other accommodation on a very restricted scale.

By the multiplication of these buildings, which, I am happy to say, are found to yield a good interest for the money expended upon them, a part of the working class is being gradually redeemed from the slavery of filth and overcrowding to the liberty of cleanliness and decency. This is a revolution really worth effecting, and one which cannot disappoint those who bear a part in bringing it about. It is not less important in a sanitary than in a moral point of view, and is deserving of the hearty encouragement and co-operation of every member of society, but especially of the clergy.

The last and the largest building, or set of buildings, erected for the poor is almost a curiosity in its way, for the extent and amount of accommodation which it affords, and the general excellence of its arrangements. It will accommodate nearly 250 single men and 60 families, which will probably comprise the same number of persons. Already in this, their second building, the Metropolitan Association for the Improvement of the Dwellings of the Poor, (a commercial association with a benevolent aim,) has made great improvements on the buildings at St. Pancras. For the single men it has provided a separate library and a separate reading-room, in addition to a large and commodious coffee-room, and a cook's shop on the premises, besides the kitchen, in which, if they prefer it, they can cook their own provisions. The rooms for families are also better arranged and more replete with comfort.

To return to the subject of overcrowding of dwellings: As I have proved to you that the overcrowding of Church-lane, St. Giles's exists also in Marylebone and Westminster, and, by fair inference, in every part of London, so it may be well that I should convince you that it is not limited to the Metropolis, but prevails, if possible, to a still greater extent in our populous provincial towns. I will give you a few cases in illustration of my position.

Mr. Langton reported of Liverpool, in 1837, that there were 2271 courts and 7493 cellars, dark, damp, and confined, and tenanted by nearly 30,000 souls; Mr. James Heywood, of Manchester, in 1838, that 165 houses inspected by him contained many cellars,—that there were 11 separate cellars,—and that, of the 165 houses, 34 were just comfortable, 37 uncomfortable, and 9 wretched. The Statistical Society of Bristol examined 166 houses, in 54 of which there were no privies, and in 83 no water, or an insufficient supply, and in 58 no drains, or drains stopped up; 149 rooms were close and confined. In 1839, Mr. Bowles Fripp made a Report on the condition of 6,000 families, and upwards of 20,000 persons belonging to the working class in Bristol. Upwards of 3,000 houses were examined: 556 families were found occupying part of a room only, and 2244 families had each only one room. The state of the privies, drains, ventilation, and supply of water, was very bad. In October, 1839, a Statistical Committee of the Town-council of Leeds made a Report, from which this is an extract:—"In some instances

there are from five to six persons in each bed; that there are generally two or three, and frequently without separation of the sexes, or consideration as to age, brother and sister, up to adolescence, sleeping commonly in the same room, and not unfrequently in the same bed." These facts are taken chiefly from the Journal of the Statistical Society.

Overcrowding, then, in different degrees, from the crowding of an entire family into a single room, (which is the lot of the great majority of our working-classes in large towns) up to the subdivision of the same room among two or more families, or still worse, the promiscuous herding together of men and women, boys and girls, married and unmarried, in the low lodging-house—overcrowding in one or other of these ways, is the normal condition of the great mass of our labouring population in London and our large provincial towns. Perhaps I cannot better finish this subject of overcrowding in towns than by reading to you a passage from the Joint Report of Colonel Sykes, Mr. Neison, and myself, "On Church-lane, St. Giles's." It was written by Colonel Sykes, with the results of our inspection fresh in his memory, and the facts before him; and it had the full concurrence of Mr. Neison and myself:—

"Your Committee have thus given a picture in detail of human wretchedness, filth, and brutal degradation, the chief features of which are a disgrace to a civilized country, and which your Committee have reason to fear, from letters that have appeared in the public journals, is but the type of the miserable condition of masses of the community, whether located in the small, ill-ventilated rooms of manufacturing towns, or in many of the cottages of the agricultural peasantry. In these wretched dwellings all ages and both sexes, fathers and daughters, mothers and sons, grown up brothers and sisters, stranger-adult males and females, and swarms of children, the sick, the dying, and the dead, are herded together with a proximity and mutual pressure which brutes would resist; where it is physically impossible to preserve the ordinary decencies of life; where all sense of propriety and self-respect must be lost, to be replaced only by a recklessness of demeanour which necessarily results from vitiated minds; and yet with many of the young, brought up in such hot-beds of mental pestilence, the hopeless, but benevolent, attempt is making to implant, by means of general education, the seeds of religion, virtue, truth, order, industry, and cleanliness; but which seeds, to fructify advantageously, need, it is to be feared, a soil far less rank than can be found in these wretched abodes. Tender minds, once vitiated, present almost insuperable difficulties to reformation; bad habits and depraved feelings gather with the growth and strengthen with the strength."

Let me once more remind you of the prevalence of typhus fever and cholera in this wretched lane, especially of typhus fever, the true analogue and fitting successor of the gaol fever, as the filth, squalor, and overcrowding of Church-lane are of the filthy and overcrowded gaols of the last century.

I trust that, as far as our large towns are concerned, I have succeeded in proving that the dwellings of the labouring class in 1850, in everything relating to the means of cleanliness, comfort, and decency,—in water-supply, ventilation, admission of light, drainage, and the means of removing offensive refuse, and, lastly, in the important matter of overcrowding,—are in nearly the same condition as the prisons of Howard's time. I have still to establish the same position with regard to our rural districts. Having done this, I shall show that these great evils are not limited to the dwellings of the poor, but that they exist also in some of our public establishments, especially our workhouses.

This will complete my review of the physical circumstances in which the prisons of the last century and the dwellings of our own day resemble each other. The next step of the demonstration which I have undertaken will consist in proving the resemblance of the typhus fever which haunts the dwellings and public establishments of our day to the gaol fever, in every essential particular. The last step will consist in showing, that this typhus fever may be banished from our houses and public establishments, as it has been already banished from some of them by the same simple means which sufficed to drive out the gaol fever from our prisons.

I find I must reserve what I have to say on the prevalence of overcrowding in rural districts, on the physical and moral evils which result from it, and on the remote causes by which it is brought about, for my next lecture.

ORIGINAL COMMUNICATIONS.

CASES OF INVERSION OF THE UTERUS.

BY SAMUEL MERRIMAN, M.D.

THE perusal of Dr. E. Smith's instructive case of inverted uterus has naturally turned my thoughts to some cases of an analogous character, which have been brought under my observation during a long exercise of midwifery practice. Six of these have been, like his, instances of *recent* inversion, and an account of these I now give, as promised in my letter, published in page 682 of the last volume of the *Medical Times*. I have known a greater number of cases of *chronic* inversion, and have had too often to lament that so many excellent and beloved wives and mothers should have been doomed to wear out their lives in pining sorrow and hopeless privation, because the accident was not timely noticed, or its nature not clearly ascertained at the earliest moment.

It has been generally supposed that this calamitous accident is caused by the rashness or hasty intermeddling of the midwife with the after-birth, and, no doubt, it has often been caused by such mismanagement; but evidence is to be found which warrants the belief, that some affection or peculiarity of the uterine system itself contributes its share to the occurrence. In the six cases about to be recorded, only one was in the practice of a midwife; the other five instances were, from the beginning, treated by practitioners of unquestionable experience, watchfulness, and caution, yet the life of each patient was suddenly placed in great jeopardy and hazard. These cases I now present, the two last indicating a condition of the uterus which I do not recollect to have heard of or seen described, as connected with inversion, but I was once called to a case of ruptured uterus, in which a very similar kind of soft, flabby, pulpy texture existed, and the rupture appeared to have taken place during a pain of unusually low power.

Case 1.(a)—Mrs. E. was delivered of her first child in January, 1802, after a favourable labour by a midwife of much practice. Some little time after the child was born the midwife gently, as she asserted, tightened the navel string to remove the placenta, when a very violent pain came on, and the uterus was completely inverted with the placenta attached. On this my friend, the late Dr. Seares, was sent for, who desired that my assistance should likewise be obtained, and I arrived in less than half an hour after the accident had happened. We found that the body of the uterus, with the placenta adhering, was lying without the os externum; blood was flowing profusely from the uterus, especially from those parts whence the placenta was detached; and the woman was in such an exhausted state as made us doubt whether she would survive till the uterus could be replaced. As no time was to be lost, Dr. Seares carefully removed the partially adhering placenta, and replaced the uterus within the vagina, while I was laying bare my arm; I then introduced my hand, carrying the fundus uteri before it, till I had passed my arm quite to the elbow within the vagina; at this moment I found the fundus uteri spring(b) from the back of my hand, and the os uteri begin to contract. I therefore cautiously withdrew my hand, and soon had the satisfaction of finding that the hæmorrhage had ceased. Mrs. E. was in a state of syncope during the whole operation, but on our giving her wine and other cordials she revived, and afterwards recovered perfectly. She has since borne children, and never experienced any inconvenience from this alarming and dangerous accident, unless an attack of hæmorrhage during parturition, five years afterwards, when in labour of her third or fourth child, can be attributed to this occurrence.

Case 2.—Nov. 16, 1815.—I was requested to visit the patient of a surgeon, who had been extensively engaged in midwifery practice. On my arrival, Mr. — stated that he had been called the day preceding to his patient, in her second labour, which was favourable and not of long continuance. After the birth of the child he waited for pains

to expel the placenta, but as no uterine action came on, he at length deemed it necessary to remove it by manual assistance. He told me, that, instead of endeavouring to loosen the placenta by drawing at the funis, he judged it to be a safer course to assist the delivery of the after-birth by introducing his hand into the uterus,(a) and he did so in this case; unfortunately, the adhesion being firmer than he had expected, he had the mortification and dismay of finding, that, as he withdrew his hand, he had inverted the uterus and grievously imperilled the life of his patient. With as little delay as possible he separated the adhering portion of the placenta, and placed the uterus within the pelvis, preparatory to employing means to re-invert it; but the poor lady became so faint and exhausted, that it was considered necessary to defer this part of the operation till, by cordials and restoratives, she could be somewhat recovered. Whether it would have been practicable to re-invert the organ under this state of exhaustion, or whether it would even have been justifiable under such circumstances to make the attempt, it is now useless to inquire. But it cannot be too urgently impressed upon the mind, that one of two consequences must follow, unless the complete re-inversion of the uterus is soon effected,—either the profuse hæmorrhage will destroy life, or the hæmorrhage will be stayed by the contraction of the uterus in its misplaced condition; and this contraction, which prevents the further loss of blood, will also render impossible the re-inversion of the womb. This unhappy event occurred here. An attempt to reduce the inversion was made that same evening, but it was ineffectual. It was then hoped that, if good quiet sleep could be procured, the contraction of the uterus would be less firm in the morning. A dose of laudanum was therefore given to procure quiet sleep and composure. Early the next morning more steady and determined efforts were made, but all in vain, the uterus was too compact to be indented.

About the middle of this day my assistance was sought for, nearly twenty hours after the occurrence of the accident, and I likewise endeavoured to mould the parts, and to press the fundus upwards, but all in vain; I could not make the slightest impression on the solid substance. Finally, we were compelled to draw consolation from the reflection,—the only consolation that remained,—that, although this insurmountable calamity had deprived a young and amiable woman of the most distinguishing privilege of her sex, yet her life had not fallen a sacrifice.

Several years after this event, and after Mr. —'s death, I heard from the medical attendant of this lady that she was still living, and had suffered less from debility and the usual enervating consequences of such a misfortune, than most others who have been so sadly afflicted.

Case 3.—Oct. 31, 1821.—Mrs. H—, of Clarges-street, a hard-working woman with several children, was delivered of a large child, after a labour of no great severity or duration, by a very cautious and experienced accoucheur. Soon after the birth of the child, a strong forcing pain came on, and she cried out that something very large had passed from her. Attention being immediately paid to this, it was discovered that the uterus, with the placenta closely adhering, was inverted and expelled without the os externum. In this emergency I was sent for, and, having satisfied myself that this was the poor woman's condition, I proposed to my friend that we should avail ourselves of this opportunity of ascertaining whether it would be advantageous to re-invert the uterus without first removing the placenta, and, as he concurred in my suggestion, we immediately proceeded to put the plan in practice.

We soon found that this was not so easy an operation as we had expected; all our endeavours were useless; we could by no means return the bulky mass within the os externum. Unwilling, therefore, to risk anything by delay, we peeled off the placenta, and then, without much difficulty, replaced the uterus in its natural position. In this case I did not discover that "spring" from the hand, on re-inverting the uterus, which I have mentioned in the first case, but I retained my hand within the womb till I found it duly contracting, when I withdrew it, and all did well.

(a) Somewhat abridged from the Author's "Synopsis of the various kinds of Difficult Parturition."

(b) The late Dr. Squire, of Ely-place, thus describes the same sort of "spring." "By keeping a steady, firm, pressure at the fundus, the uterus passed gradually before my hand, but when getting just above the arch of the pubis, it shot up suddenly with a kind of spring."

(a) Probably Mr. — has adopted this opinion from the doctrine much advocated by Mr. Cruikshank, in his lectures on the "Gravid Uterus," at the Theatre of Anatomy in Great Windmill-street. Mr. Cruikshank was accustomed to express strongly his disapprobation of Dr. Wm. Hunter's passive mode of managing the placenta, and used also to warn his pupils of the danger of inverting the uterus by pulling at the funis. He appeared to have few or no fears of mischief from introducing the hand to remove the placenta.

Considerable, but not excessive hæmorrhage attended this accident; the poor woman required brandy and other support on account of faintness, but recovered more speedily than, from her condition in life, and the want of many comforts, might have been expected.

Case 4.—March 4, 1822.—I was sent for to see Mrs. G—, in Piccadilly, who had been delivered in this her first labour of a fine living child. The cause of my being desired to see the patient was, that, on her medical attendant attempting to ascertain, in the usual space of time after the birth of the child, what was the state of the placenta, it appeared, on tightening the funis, to be so loose and low in the vagina, as to give assurance that it might be at once safely withdrawn. When, however, traction was made for this purpose, a mass, much more compact than the after-birth, was brought without the os externum. Mr. — soon became convinced, on careful manipulation and consideration, that this was a portion of the uterus adhering to the placenta. The examination I made led to the same conclusion; it was, in fact, a partial inversion or intro-susception, not, however, produced as such intro-susceptions usually are, by a depression or sinking in of the fundus uteri, but a protrusion caused by a spasmodic or cramped condition of the distended uterine parietes, or possibly from the entire suspension of uterine action.

The present case offered a more favourable opportunity than the last, for making the experiment of returning the entire mass, before effecting the separation of the placenta; but my experience on that occasion did not encourage me to recommend a second trial. We, therefore, first removed the placenta, and afterwards had little difficulty in carrying back the protuberant uterus, and replacing it safely in its pristine condition.

Much faintness and debility occurred in this case from rather profuse flooding, but the patient was supported by wine and other nutriment and cordials, and ultimately recovered perfectly.

Case 5.—Jan. 21, 1831.—I received a message late in the evening, to make a visit three or four miles off, to the wife of a clergyman, who had been delivered, by a very able practitioner, of her first child, after a tedious and hard labour, followed unfortunately by an inversion of the uterus, with adhering placenta. The hæmorrhage was profuse, the patient much exhausted and full of alarm; and her father, an old and much esteemed medical friend, who had been present all the time, overcome with apprehension and fatigue, was most anxious that I should be sent for. Meantime the accoucheur in attendance on the patient had with great circumspection and caution kept watch over the case, and had, as much as possible, soothed and tranquillised all parties. He had supplied cordials and nourishment, had removed the adhering placenta, had lessened the hæmorrhage, and deposited the uterus within the vagina; everything, indeed, except the re-inverting the organ, had been accomplished before my arrival. On examination of the patient, I found that the pulse had recovered some degree of firmness, and that the hæmorrhage was not very profuse, but that the uterus, in a very soft pulpy state, had escaped without the os externum.

At the desire of the patient's father, and with her medical attendant's approbation, I proceeded with as little delay as possible to re-invert the uterus, and found this a most difficult operation, from a cause altogether different from what I had ever before experienced, viz., an extreme tenuity of the substance of the uterus, and the size of the inverted bag. I was obliged to mould the uterus with my fingers, to grasp it in my hands, and to press it in various ways, before I could effect the reduction. At one time I feared that I must give up the attempt in despair, but at last I had the happiness to effect the entire re-inversion. Once or twice, from the very flabby attenuated condition of the uterine parietes, it seemed as if my fingers must unavoidably perforate its substance, as it did not possess the slightest degree of firmness or contractility.

This lady remained weak and delicate for a long time, but ultimately got quite well. In about two years she had another child, and suffered greatly from profuse hæmorrhage, with adhering placenta, but there was no inversion; and from this likewise she perfectly recovered. However, the peculiarity in the condition of the uterus proved ultimately fatal; for the lady's husband having been presented to a living in the country, she went thither to reside, and I learned from my worthy old friend, her father, that her

labour in the country was similar to her first, with hæmorrhage and inversion, which proved speedily fatal: but with the full particulars of the case I was never acquainted.

Case 6.—April 13, 1838.—In the afternoon of this day I was called to a case bearing many points of similitude to the last. It was the patient's second labour, and a healthy child had been born by the natural efforts, shortly after which the attending practitioner's attention was directed to her, by her crying out that something was passing away from her. This proved, on examination, to be the uterus inverted, with profuse hæmorrhage, and with the placenta still adherent: without delay the placenta was peeled off, and the uterus immediately re-inverted. In this condition, however, it did not remain, but was speedily expelled again, in a state of inversion. It was just about this time that I arrived, and found the uterus in a state of great tenuity and flabbiness of texture. It was again re-inverted, and restored to its proper position, and was with some difficulty retained *in situ*, perhaps somewhat contracted; but the patient was so much spent and exhausted, that, notwithstanding every possible appliance we could make, or means we could devise, she survived only about an hour. A firmer and more contractile disposition of the uterus in this instance, would probably have preserved a most valuable life.

34, Brook-street.

REMARKS

ON THE

ETIOLOGY OF PHTHISIS.

By EDWARD SMITH, M.D., LL.B., B.A.

University of London,

Lecturer on Botany at the Charing-cross Hospital Medical School, &c.

PAPER IV.

INFLUENCE OF OCCUPATION.

THE elements necessary to enable us to determine the degree of influence which occupation exerts over the induction of phthisis nowhere exist.

The question which we now propose to consider is one which, from a combination of circumstances, is not of easy solution. In no other department of the etiology of phthisis is it so necessary to know the absolute and relative influence which constitution, temperament, tone of system, muscular power, anxiety, confinement, impure air, and defective nutrition exert. Again, it is scarcely, if at all, possible, so accurately to arrange the various processes which take place in each occupation that those persons may be justly classified who are occupied in certain departments only, or in all the departments combined in each trade; and, further, these circumstances, with those previously mentioned, are varied greatly in the different localities in which the same trade is carried on. But if we exclude these important, and yet confessedly minor questions, and regard in a general manner only, the influence which occupation exerts in the production of phthisis, our first assertion is still true, viz., that the elements necessary to enable us to determine this question nowhere exist.

It will not suffice to show, for example, that in certain occupations pectoral affections are frequent. This has been affirmed in reference to the needle pointers of Redditch, the pearl button turners of Birmingham, the cutlers, swordmanufacturers, and other dry grinders, in Sheffield and Birmingham, millers, flax hacklers, hair pickers, and in a variety of occupations in which particles of dust are inhaled. It must be proved that phthisis alone, or with other affections, was the disease. Neither will it suffice to show that phthisis occurred in a given number of cases in each of various occupations in a given locality; as has been shown by M. Lombard in his essay published in the "Annales d'Hygiène," with respect to the hospitals of the city of Paris and the city of Geneva. We must have a basis for the comparison of these results in the various trades, or each statement will rest alone. M. Lombard has presumed that a knowledge of the total number of deaths supplies this desideratum; but, at the most, this would only prove that, in a given number of deaths from phthisis a certain number occurred in individuals pursuing this, and a greater or less number in persons following that occupation; it would not demonstrate the

each other in the material employed, or in the mode of operation, or in the circumstances in which the operative is placed, but they have never given satisfaction to any but the compiler; and, since no two trades present precisely the same circumstances, any composition of them must be so far a departure from truth. It would be far better that the returns thus obtained by the Census should indicate each individual occupation for England and Wales, the large towns and the rural districts, so that any writer may classify them in whatever manner may be the most advantageous to his own purposes; but it would be far more useful to science if such returns were published for each sub-district in England and Wales.

This would constitute the other required element, and the two being obtained we could most readily determine, in general terms, the influence which trades in various localities exerted in the production of phthisis, and therefore could determine their relative liability in this respect.

We have abstracted the occupations of the persons dying in London, in 1847, in the manner now indicated, so far as the returns enabled me so to do; and, although the omissions are few when compared with the insertions, they suffice to render the returns too inaccurate for our purpose. We are, therefore, unable to enter into the one question,—as to the liability of persons engaged in particular trades to the attacks of phthisis,—and must leave that for future inquirers; but the tables which have been prepared indicate with fair accuracy the season at which the victims died, with the ages classified under four periods, and the duration of the disease in each occupation, and at each age, in both sexes. These returns have been prepared for each of thirty of the Metropolitan districts; but since the publication of them would occupy too much space, we shall give only those occurring in the districts combined. The districts which are included in the following Tables are thus designated:—St. George's, Hanover-square; St. Giles's-in-the-Fields, St. George's, Bloomsbury; St. James's, Westminster; St. Martin's-in-the-Fields, Marylebone, Strand, Westminster, Bethnal-green, St. George's-in-the-East, Holborn, City of London, East London, West London, St. Luke, Poplar, Shoreditch, Whitechapel, Chelsea, Clerkenwell, Hackney, Islington, Bermondsey, Camberwell, Lambeth, Newington, Rotherhithe, St. George's-the-Martyr, St. Olave's Union, and St. Saviour's, Surrey.

The following is a list of the numbers abstracted:—

Men	2165	
Sons above age 10, having no other occupation	103	
	—	2268 males
Wives	924	
Daughters	212	
Females occupied, and almost exclusively unmarried	570	
	—	1706 females
Total		3974

The grouping together of the trades was necessary, in order to bring the latter within the limits required for publication; but the arrangement is extremely imperfect. It was discovered, that in certain groups, the greater proportion of all the cases occurred from one included trade, as that of carpenter and labourer; and, therefore, at the district indicated those trades were detached, and each constituted into a separate group through the remaining districts.

INFLUENCE OF AGE AND SEASON IN CONNEXION WITH OCCUPATION.

The first part of the following Table indicates:—

1st. The grouped trades of those men who died from phthisis in the indicated Metropolitan districts in 1847.

2nd. The number of such deceased men who were engaged in each group of trades.

3rd. The number of deceased wives of men engaged in each group of trades, and also of their deceased sons and daughters over 10 years of age: neither the wives nor the children having any other occupation assigned to them by the registrars.

The districts referred to are the 30 already given, and the investigation in each group has been carried through the whole list, except in those instances mentioned in the Table, where certain trades have been removed from the

groups at the district there mentioned, and abstracted separately through the districts subsequently entered upon the list.

The second part of the Table shows the groups of occupations in which deceased females were employed, with the number of such deceased females throughout the thirty districts. The number of deceased females who are returned as widows and spinsters, without any occupation having been assigned to them, is also indicated.

Table No. 29.

Part I.

Number of Group.	Trade of those who Died from Phthisis in London in 1847.	Number of Persons and Families Employed.				In which indicated Districts in the London Division.
		Men.	Sons.	Wives.	Daughters.	
1	Bargemen, lightermen, coal meters, and whippers ...	22	1	10	1	All.
2	Stable, coach, cab, car, and omnibus men; post-boys, cow and milk men, grooms, and farriers ...	112	2	38	15	All, but omnibus, cab, and carmen, group 45, separated at Bermondsey.
3	In-door Servants, footmen, butlers, store-keepers, cellar-men, warehousemen, packers, office keepers, gate-keepers, toll-keepers, helpers, messengers, porters, waiters, beadles, sheriff's-officers, stewards of ships, bill deliverers ...	152	5	76	12	All, but porters, group 40, separated at Chelsea.
4	Plumbers, glaziers, painters, grainers, decorators ...	51	2	21	8	All.
5	Out-door Servants, labourers, draymen, carters, curriers, paviors, scavengers, street-sweepers, drovers, turncocks, lamplighters, police, postmen, letter carriers ...	218	10	81	14	All, but labourers, group 37, separated at Chelsea.
6	Shops, coffee and lodging-house keepers, hair-dressers, pawn-brokers, glovers, umbrella-makers, hatters, capmakers, china dealers, booksellers, slopsellers, furriers, lacemen, chemists, druggists, drapers, bonnet-shape makers ...	87	5	47	7	All, but hatters and cap makers, group 44, separated at Bermondsey.
7	Workers in Wood, carpenters, cabinet makers, upholsterers, rule, chair, picture-frame, coach-frame, pencil, trunk, pattern, clog, mast, billiard-table, last, match, clock-case, saddletree, drawing-pin makers; wheelwrights, carvers, woodcutters, coopers, riggers, shipwrights, lath renders, sawyers, whalebone cutters, furniture brokers, floor cloth planners, French polishers, undertakers ...	133	11	75	22	All, but carpenters and cabinet makers, group 39, separated at Chelsea, and sawyers, group 36, separated at Whitechapel.
8	Stonemasons, bricklayers, builders, plasterers, pipe-makers, marble workers ...	46	...	20	2	All, but masons and bricklayers, group 42, separated at Chelsea.
9	Gentlemen, Professional Men, lawyers, doctors, parsons, captains, military officers, ship owners, agents, tax officers, excise officers, auctioneers, accountants, insurance brokers, linguists ...	91	13	49	35	All.
10	Clerks, customs, draughtsmen, town travellers, commercial travellers, book keepers, post-office clerks ...	103	5	25	1	"
11	Tailors ...	76	1	57	4	"

Number of Group.	Trade of those who Died from Phthisis in London in 1847.	Number of Persons and Families Employed.				In which indicated Districts in the London Division.
		Men.	Sons.	Wives.	Daughters.	
12	Bakers, confectioners, millers, biscuit makers, flour and corn dealers	51	1	16	2	All.
13	Scientific Instruments, Jewellers, watch, musical instrument makers; opticians, chasers, gold and silver washers.	51	■	17	10	All, but chasers, separated at Chelsea, group 43.
14	Soldiers, pensioners	52	...	9	2	All.
15	Mariners	32	1	15	6	"
16	Publicans, brewers, pot-boys, barmen, brewers' servants ...	48	4	15	4	"
17	Farmers, gardeners, florists ...	15	1	11	2	"
18	Butchers, tripe dressers ...	26	■	2	■	"
19	General Dealers, Greengrocers, rag, bone, potato, bottle, and coal dealers; fruit, fish, orange, pickle, bird, ginger beer, and poultry sellers; costermongers	35	2	22	2	"
20	Workers in Leather, shoemakers, saddlers, curriers, bridle, whip-thong, pocket-book makers; cork cutters, mats, comb, and basket makers, skin dressers	82	2	41	4	All, but shoemakers, group 35, separated at Poplar, and curriers, tanners, and skin dressers, group 38, separated at Chelsea.
21	Machinists, engineers, engine drivers, gun makers, gas-fitters, brass finishers, tin, tin foil, and zinc workers; cutlers, edge-tool makers; platers, lamp, pen, scale, metal, blind, boiler, mill, press, secret spring, and lock-spring makers; gold beaters, blacksmiths, smiths in general, plate polishers	90	4	49	9	All, but smiths, group 41, separated at Chelsea.
22	Printers, copper-plate printers, compositors, bookbinders, stationers	51	1	26	3	All, but bookbinders and compositors, groups 33 and 34, separated at St. Luke's.
23	Schoolmasters, tutors	5	...	■	...	All.
24	Turners in wood, bone, metal, and marble; button turners, file cutters, drug grinders, rope and brush makers ...	16	...	4	...	"
25	Founders in iron, brass, type, moulders in iron	13	...	3	...	"
26	Artists, ballet and dancing masters, music masters	23	2	10	■	"
27	Tallow melters, chandlers	8	1	4	...	"
28	Sweeps	3	...	1	...	"
29	Hawkers	18	...	3	...	"
30	Carvers and gilders, silverers ...	8	1	■	1	"
31	Dyers and scourers	5	1	■	...	"
32	Weavers	35	1	18	3	"
33	Bookbinders	11	...	■	1	St. Luke's to the end of the list.
34	Compositors	10	...	2	1	"
35	Shoemakers	44	3	28	■	Poplar
36	Sawyers of wood and stone	8	...	■	...	Whitechapel
37	Labourers	118	7	41	11	Chelsea
38	Tanners, curriers, skin dressers.	11	...	6	1	"
39	Carpenters, cabinet makers ...	35	2	18	4	"
40	Porters	20	...	1	1	"
41	Smiths	13	...	■	1	"
42	Masons, bricklayers	12	...	11	3	"
43	Engravers and chasers	8	...	3	...	"
44	Hatters and cap makers	15	...	7	...	Bermondsey
45	Omnibus, cab, and carmen	10	...	■	...	"

Part II.

Females engaged in occupations in all the Districts.

Group.	Trade.	Number.
1	Servants, charwomen, barmaids	141
2	Sewing, milliners, bonnet makers, sempstresses, gloves; lace, fringe, feathers, stays, stock, dress, flowers, and fancy button makers; shoe binders, tailoresses, fir liners, bookbinders	72
3	School mistresses, governesses	5
4	Laundresses	17
5	Hawkers, market-women, fruit sellers	11
6	Weavers, lint makers, silk and cotton winders ...	13
	Widows	166
	Spinners	136

On examining this Table, we remark the absence of trades followed by the large class of people in London who live on very precarious and very questionable means; and it is not an unfounded assumption, when we infer that many of such may have been registered in the list of "labourers." We shall not enter upon any deductions from the Table tending to show the relative liability of the persons engaged in various trades for the reasons already indicated; but we cannot hesitate to call attention to the few instances which are registered as having occurred in persons engaged in scholastic duties, weaving and sewing; in bakers, sawyers, and others exposed to the inhalation of solid particles; and in publicans, omnibus, and cab-drivers, and others very likely to lead intemperate lives. Judging by comparison, we may also infer a higher ratio of mortality among the wives of shoe-makers, tailors, omnibus, cab, and carmen, masons, and bricklayers.

The following Table represents the connexion with four periods of life, (viz., aged 10 to 20, 20 to 30, 30 to 40, and 40 to 95,) at which the deaths occurred in each group of trades, each arranged in its order of mortality, and the seasons in which the deaths occurred also arranged in the order of their intensity of mortality. The first part has reference to the men only, in Part 1st of Table No. 29; and the second part to Part 2nd of that Table.

Table No. 30.

Part I.

Males engaged in occupations.

No. of Group of Trades.	Four Periods of Life arranged according to their Mortality: the first column representing the highest amount.				Quarters in which the Deaths occurred, arranged in the order of their Mortality: the first column having the greatest.			
	to 10	to 20	to 30	to 95	to 1	to 2	to 3	to 4
1	95	40	30	...	1	4	2	3
2	95	40	30	...	2 & 4	3	1	...
3	95	40	30	20	■	1	3	4
4	95	30	40	20	2	1	3	4
5	95	30	40	20	1 & 2	■	■	...
6	95	40	■	20	2	1 & 3	4	...
7	95	40	30	20	4	1	■	2
8	95	40 & 30	...	20	1	2	■	4
9	30	95	40	20	4	2	3	1
10	30	95	40	20	1	4	2	3
11	30	95	40	20	4	1	■	3
12	95	40	30	20	1	4	■	■
13	30	40	95	20	1	■	3	2
14	30	95	40	20	2	1	4	3
15	40	30	95 & 20	...	1	■	4	2
16	40	95	30	20	2	3	■	1
17	95	40	30	20	■	■	4	1
18	40	95	30	20	1	3	■	■
19	95	40	30 & 20	...	■	1 & 2	3	...
20	95	40	30	20	■	1	4	■
21	40	95 & 30	...	20	4	■	1	■
22	95	40	30	20	1	■	2	■
23	95	40	30	20	1, 3, & 4	...	...	...
24	95	30	40	20	3	1 & 2	4	...
25	40	30	20	...	1 & 2	3	■	...
26	30	95	40	20	4	2	1 & 3	...
27	95	40 & 30	...	...	2	1	3 & 4	...
28	95, 40, 30	...	...	...	1, 2, & 4	...	...	...
29	95	40 & 30	...	...	4	1 & 3	2	...
30	40	30	95	...	2	1 & 3	4	...
31	40	95	...	...	4	■	...	...
32	40	95	30	20	2	4	1 & 3	...
33	30	95 & 40	20	...	1 & 3	2	1	...
34	30	40	...	...	1 & 2	4	...	...
35	95	30	40	20	1 & 3	4	2	...
36	95	30	40 & 20	...	1	2 & 4	3	...
37	95	40	30	20	2	■	1	■
38	95	40	30	...	1	2, 3, & 4	...	...
39	95	30	40	...	1 & 2	4	3	...
40	95	30	40	20	1	1	3	2
41	95	40	30 & 20	...	1	2	■	■
42	95	40, 30, 20	...	...	■	1 & 4	3	...
43	30	95	40 & 20	...	2	1	3 & 4	...
44	30	95	40 & 20	...	■	3 & 4	1	...
45	95	40 & 30	...	...	1 & 4	2 & 3	...	...

Part II.

Females engaged in occupations.

1	30	40 & 95	20	...	1	2	3 & 4	...
2	30	40	95	20	2	1	4	3
■	95 & 30	40	...	...	1 & 2	4	...	...
■	95	40	30	...	■	1 & 3	4	...
■	30 & 40	95	...	...	2	1	3 & 4	...
6	20	30 & 40	...	...	1	3	■	4

Thus among males, the greatest aggregate mortality in the 44 groups (having excluded the one in which it is equal at

all ages) occurred after the age of 40, then under 30, and, lastly, under 40. In no group has the greatest mortality occurred under 20 years of age. In reference to this observation, it should be borne in mind, that the period involved above the age of 40 is greater, and under the age of 20, practically less, than under any other division. The greatest aggregate mortality occurred

Over age 40 in $\frac{29}{44}$ groupes, or 1-1.6 of the whole.

Under age 30 in $\frac{10}{44}$ „ 1-4.4 „

„ 40 in $\frac{5}{44}$ „ 1-5.5 „

The occupations in which the greatest mortality was observed at the earliest periods of life are those of professional men, clerks, scientific instrument-makers, soldiers, artists, book-binders, compositors, engravers, and hatters. Those occupying a medium position in this respect are: marines, publicans, butchers, workers in metals, founders in metals, carvers and gilders, dyers and scourers, and weavers.

The results are otherwise in those occupations followed exclusively by females. If we omit the groups of widows and spinsters, and also those in which there is an equality in the number of cases occurring at two periods of life, we find the greatest mortality

Under age 30 in $\frac{2}{4}$ groupes, viz., manservants and sempstresses.

„ 20 in $\frac{1}{4}$ „ weavers.

Over age 40 in $\frac{1}{4}$ „ laundresses.

It may thus be inferred, that of the two sexes engaged in their respective occupations, the females die at an earlier period of life than the males.

In respect of the season in which the greatest mortality occurred among males engaged in trade, omitting those groupes in which the greatest mortality was equal in two or more seasons, we find—

In the 2nd, or spring quarter $\frac{13}{34}$ groupes, or 1-2.6 of the whole.

„ 1st, or winter „ $\frac{10}{34}$ „ 1-3.4 „

„ 4th, or autumn „ $\frac{9}{34}$ „ 1-3.7 „

„ 3rd, or summer „ $\frac{8}{34}$ „ 1-1.7 „

The slight liability in the various groups of occupations to the greatest mortality in the hot season, is very remarkable, when compared with the general seasonal mortality from phthisis. The groups in which the greatest number of deaths occurs during the hot season are those of farmers and turners, and some of those in which the operatives are very constantly exposed to the inhalation of hard vegetable, mineral, or metallic particles. The same result is yet more evident in respect of those occupations followed by females, since in each of the six groups the greatest mortality occurred exclusively in the winter and spring quarter.

The following Table is similarly constructed to Table No. 30, and refers to the mortality among the wives, sons, and daughters of persons following the occupations before mentioned:—

Table No. 31.

No. of Group of Trades.	Four Periods of Life arranged according to their Mortality: the first column having the greatest.				Quarters in which the Deaths occurred, arranged in the order of their Mortality: the first column having the greatest.			
	to	to	to	to	to	to	to	to
1	40 & 95	30 & 20	...	...	2	1 & 3	2	...
2	20	95	40	30	2	3	1 & 3	...
3	95	40	30	20	1 & 4	2	3	...
4	40	30	20	95	4	2	3	1
5	95	20	40	30	4	3	2	1
6	40	95	20	30	2	4	3	1
7	95	40	20	30	4	3	1	2
8	95	40 & 30	20	...	3	1	4	2
9	20	30	95	40	1	2	3	4
10	40	30	95	20	1	3	2	4
11	...	...	...	...	...	...	...	...
12	40	30	20 & 90	...	1, 3, 4	2	...	...
13	90	30	95	40	1	2	3 & 4	...
14	40	20, 30, 95	...	...	1	2	1	...
15	40	20	30	95	1	3	4	2
16	20	30 & 40	95	...	1	3	2 & 4	...
17	95	30	20	40	1	2 & 4	3	...
18	40 & 30	20	95	...	2	4	3	1
19	20 & 95	40	30	...	1	2, 3, 4	...	...
20	40	30	95	20	3 & 4	1	2	...
21	30	40	20 & 95	...	3	2	4	1
22	95	30	40	20	1	2 & 4	3	...
23	40 & 30	...	...	...	1 & 4	...	...	...
24	30	40	...	...	4	1 & 2	...	...
25	30	95	...	...	1, 3, 4	...	...	...
26	40	20	30	95	2	1	4	...
27	40	90	...	...	1, 2, 3, 4	...	...	...

No. of Group of Trades.	Four Periods of Life arranged according to their Mortality: the first column having the greatest.				Quarters in which the Deaths Occurred, arranged in the order of their Mortality: the first column having the greatest.			
	to	to	to	to	to	to	to	to
28	30	...	...	...	3	...	...	...
29	40	...	...	...	4	2	...	...
30	40	20	30 & 95	...	2 & 3	1	...	...
31	40	...	...	...	1 & 3	...	...	...
32	40	30 & 95	20	...	2	4	3	1
33	90	40	30	...	1, 3, 4	...	...	...
34	10, 30, 20	...	...	...	4	3	...	...
35	40	30	20	95	3	1	2 & 4	...
36	30	40 & 95	...	...	4	2 & 3	...	...
37	20	95	30 & 40	...	2	3 & 4	1	...
38	95	30	20 & 40	...	1, 2, 4	3	...	...
39	40	95	20	30	4	2	1	3
40	20 & 40	...	...	...	1 & 4	...	...	...
41	30	40	95 & 20	...	2	3	1 & 4	...
42	40	30	95	20	3	2	4	1
43	40	30	...	...	1	4	...	...
44	40	20	30 & 95	...	1, 3, 4	1	...	...
45	30	40 & 95	...	...	4	2	1	...

Thus, among wives, sons, and daughters conjointly, the greatest number of deaths in the 39 groups (omitting six in which the mortality was equal at two or more periods of life) occurred under age 40, then over age 40 and under ages 30, and 20 in their order. The greatest mortality was observed

Under age 40 in $\frac{18}{39}$ groupes, or 1-2.1 of the whole.

Over age 40 in $\frac{8}{39}$ „ 1-4.8 „

Under age 30 in $\frac{7}{39}$ „ 1-5.5 „

„ 20 in $\frac{5}{39}$ „ 1-7.8 „

This result differs greatly from that previously obtained in reference to males exclusively.

The occupations in association with which the wives, sons, and daughters experienced the greatest mortality at the earliest period of life, are those connected with the care and use of horses, the professions, scientific instrument-makers, publicans, and labourers.

In respect of the season in which the greatest mortality occurred in these classes (still excluding from the computation those groupes in which the highest mortality was equal in two or more seasons), we find—

In the 1st (winter) quarter $\frac{10}{33}$ groupes, or 1-3.3 of the whole.

„ 4th (autumn) „ $\frac{9}{33}$ „ 1-3.6 „

„ 2nd (spring) „ $\frac{8}{33}$ „ 1-4.1 „

„ 3rd (summer) „ $\frac{6}{33}$ „ 1-5.5 „

It will be observed, on comparing Table No. 31 with Table No. 30, that the relative frequency of the spring and autumn quarters, compared to the whole, agree very closely, while that of the winter quarter differs somewhat, and that of the summer quarter differs very considerably. The greatest number of deaths occurred in the summer quarter in the families of shoemakers, masons, and bricklayers, sweeps, workers in metals, and soldiers. It may also be remarked, that the order of the seasons in their liability to phthisis in this Table, is nearly identical with that for all London during the same year.

REPORT OF TWO CASES OF POISONING BY CYANIDE OF POTASSIUM, AND CYANIDE OF SILVER.

By H. LETHEBY, M.B.,

Lecturer on Chemistry and Toxicology at the London Hospital.

WITHIN the last four or five years, a liquid of a very poisonous nature has been largely manufactured and sold in a few of the low districts of London, under the name of “silver solution.” It is composed of cyanide of potassium and cyanide of silver, dissolved in distilled water; and I find that it is chiefly purchased by the utterers of base coin, who use it for the purpose of giving a pure silver coating to the alloy of which their counterfeit money is made. This circumstance will readily explain how it is that the liquid in question has on several occasions been the cause of serious accidents. Already two cases of fatal poisoning by it have been recorded in the *Medical Times*—one by Mr. Ross, the other by Dr. Hinds—and I have now to direct attention to

the particulars of two other cases which have recently been brought under my notice.

Case 1.—On Friday, May 31st, 1851, a man who is well known to the police as a "smasher," was charged at the Thames Police Court with having caused the death of a young woman named Mary Ann Jackson, by administering poison to her. It appears from the facts elicited, that the deceased was sober and well at about half-past one o'clock on the night of her death; for she was then seen with her paramour at a night tavern in Princes-street. At a quarter before two, or thereabouts, she was found in a dying state close by the house where she had been drinking; and at half-past two she was brought into the London Hospital quite dead. The principal witness in the case informed me that, shortly before two o'clock on the night in question, she was alarmed by hearing a succession of bitter moans, as if some one was in great distress. On turning round, she saw the deceased sitting on a step, and a man was with her leaning over her, but not supporting her: that man was the accused. He asked the woman what she had taken, and her reply was, "I have done it; Oh my child!" After much solicitation on his part, the deceased rose, and with his assistance she managed to walk, or rather to drag herself along in a feeble tottering manner, for a distance of ten or twelve yards, when she fell, and became perfectly insensible. A gentleman who was passing by at the time felt her pulse; and, thinking that she was in a state of intoxication, he advised them to sit her up, lest she should be sick. At that period she was breathing very hard, and the respirations were accompanied with a peculiar choking noise. Those who were about her endeavoured to make her drink some water, but she was unable to do so. At a few minutes before two o'clock, a policeman saw her, and he tried to rouse her by bathing her face and hands with vinegar and water; but, finding that his efforts were unsuccessful, and learning from the prisoner that she had taken poison, he put her into a cab, and took her to the station-house. He then noticed that it was a few minutes after two. Believing that she was dying, for her hands were deathly cold, and her breathing was slow and difficult, he had her conveyed to the London Hospital, where she arrived at half-past two. She was immediately seen by Mr. Burch, the resident medical officer, who found that she was quite dead; and, from inquiries which were made, it was evident that she had died a few minutes before she reached the Hospital; so that about forty minutes, or three-quarters of an hour, had elapsed between the administration of the poison and her death. I am informed, moreover, by the witnesses who gave evidence in the case, that the deceased never rallied after she tottered and fell; that she was not sick or convulsed; and that the leading symptoms were loss of voluntary motion, rapid insensibility, a slow fluttering pulse, a cold surface, a sighing respiration, and speedy death.

The body was examined at ten o'clock on the following, Saturday, morning; that is, about thirty-two hours after death. The countenance was composed, but rather pale; the eyes were open, prominent, and glistening; the pupils were dilated; the mouth was covered with foam; and the jaws were firmly clenched. The *rigor-mortis* was very strong, and the dependent parts of the body were quite livid. The sinuses of the head, and the membranes of the brain, were much congested with blood, though the substance of the organ was not overcharged with it; each of the lateral ventricles contained about half an ounce of clear serum. The lungs were found to be gorged with dark fluid blood; and, when they were cut into, they effused a large quantity of frothy mucus. The right side of the heart was quite full of uncoagulated blood, and the left was empty. The stomach was rather red on its external surface; and it evolved the odour of prussic acid, which was recognised by five persons out of eight, who examined it. The other viscera were natural, and the bladder was empty.

On cutting into the stomach, I found that it contained about half an ounce of a thick jelly-like matter, which had a reddish-brown colour, and emitted the characteristic smell of hydrocyanic acid. The rugæ of the stomach were very prominent, and the mucous membrane of it was discoloured and partly gelatinized. I remarked, moreover, that the contents of the organ were alkaline, and that they effervesced slightly with acetic acid. The stomach and its contents were treated with pure water, then acidulated, and finally the products were submitted to distillation; by which means I obtained a liquid containing one grain of anhy-

drous prussic acid. The residue yielded abundant evidence of the presence of potass; and, when it was dried and incinerated with carbonate of soda, it gave traces of metallic silver.

After these experiments had been performed, the stomach was placed in a stoppered bottle for further examination, and I noticed that the odour of hydrocyanic acid was not recognisable after a period of twenty-four hours. In five days the evolved vapour ceased to manifest any re-action with potass and sulphate of iron; and in twelve days it had lost the power of giving a white precipitate with nitrate of silver; from which it is evident that prussic acid is slowly decomposed by putrid organic matter.

Case 2.—Of this case, the particulars are not very accurately known. It occurred in the practice of Mr. Meeres, of Brick-lane, to whom, and to the coroner for the district, I am indebted for the following account:—

Elizabeth Errington, aged 24, had been living for many years with a man named Corner, who was chiefly engaged in making and passing counterfeit coin. On Tuesday, Feb. 18, 1851, she had been drinking at various taverns in the city, and had thereby become intoxicated. When she returned to her home at seven o'clock in the evening, she was advised by her companion to go to bed; but, instead of doing so, she proceeded to a cupboard in which he kept his chemicals, and took out a bottle containing rather more than an ounce of the silver solution. Before the man had time to interfere with her, she drank off about four drachms of the poisonous liquid. He instantly struck the bottle out of her hand, and by that means wasted a part of the solution, so that he could not positively say how much she had taken. He then raised an alarm, and quickly obtained the assistance of a woman who lived in the same house; but, before she reached the room, the deceased had fallen on the bed, and had become insensible. She lay on her back, and was somewhat convulsed; her countenance was very pale, froth issued from her mouth, and in ten minutes she died. Mr. Meeres was sent for, but by the time he arrived the woman had been dead a quarter of an hour.

The body was examined forty hours after death. It was not decomposed, though the dependent parts were livid. The mouth was covered with foam, and the eyes were partly open. The vessels of the brain were gorged with blood; the lungs were highly congested, and the stomach was somewhat redder than natural. It contained a portion of half digested food, together with a considerable quantity of beer and other liquid matters, so that vomiting had not taken place. I am informed by Mr. Meeres that he could not distinguish the odour of prussic acid in the contents of the stomach; and that he did not submit them to chemical analysis.

From the circumstance that one of these cases was submitted to me by the coroner for investigation, I was induced to procure two specimens of the silver solution referred to. One of them was as limpid and colourless as water, but the other had the appearance of pale sherry. Both of them evolved a strong odour of prussic acid. The colourless solution had a density of 1074. Its re-action was powerfully alkaline. It effervesced with acids, and then deposited a white curdy precipitate of cyanide of silver. Copper and zinc readily decomposed it, and became coated with a layer of metallic silver. On analysis, it yielded 12.5 per cent. of solid matter, which consisted of 5.87 of carbonate of potass, 5.03 of cyanide of potassium, and 1.6 of cyanide of silver.

The other specimen exhibited the same re-actions, though it was somewhat stronger, for its density was as high as 1115; and 100 parts of it yielded 18.6 of solid matter, consisting of 10.86 of carbonate of potass, 6.34 of cyanide of potassium, 1.4 of cyanide of silver, and traces of cyanide of copper.

Remarks.—Most of the cases of poisoning by this liquid have occurred among those who are engaged in the manufacture of base coin, and it is much to be regretted that a poison of so deadly a character should be accessible to a class of persons who are not over scrupulous in their dealings, or even cautious in their habits. It is sold to these persons at the charge of fourpence an ounce; this quantity is sufficient to kill four individuals, and consequently, if murder were contemplated, it might be done at the rate of one penny per head.

The symptoms produced by the liquid are a little different from those which arise from the action of hydrocyanic acid, from pure cyanide of potassium, or even from cyanide of silver; for, in the first place, it does not commonly produce

vomiting, and, in the second place, it does not generally cause convulsions, but, on the contrary, it occasions paralysis, with a perfect prostration of all the vital powers, and finally, death by coma. On making a *post-mortem* examination of the body, we find that the lungs are highly congested, that the bronchial tubes and pulmonic cells are filled with a frothy mucus, and that while the right side of the heart is gorged with black fluid blood, the left is empty, showing that the arrest of the circulation took place at the lungs.

My own experiments show that pure cyanide of potassium generally acts in the same way as prussic acid; for it occasions giddiness, a staggering walk, and an effort to vomit. The animal then falls, becomes insensible, is convulsed, foams at the mouth, labours at respiration, shrieks, and dies in strong convulsions, the eyes being fixed and staring, the limbs powerfully extended, and the bladder and rectum generally emptied. If, however, the animal has been previously exhausted, either by bleeding, by prolonged exertion, or by want of food, death occurs more quietly,—that is, without a struggle or cry. These observations are quite in support of the opinion advanced by Orfila, who says that pure cyanide of potassium acts exactly like prussic acid.

I have elsewhere recorded the results of my inquiries into the action of cyanide of silver (*Medical Gazette*, N.S., Vol. I.,) but I may perhaps be permitted to say, that in all my experiments on this compound, I have found that it always acts as a local irritant, for it produces great vomiting, and a congested state of the vessels of the stomach. If the poison has been dried before it is administered, no other ill effect follows; but if it is given to the animal in a moist condition, it then rapidly becomes absorbed, and produces the effects of prussic acid. Sometimes it causes convulsions, though more frequently it produces paralysis, and it always occasions profound coma. The respiration is generally carried on in a prolonged sighing manner; the action of the heart is fluttering and irregular, and death takes place by a gradual exhaustion of the involuntary acts; that of respiration ceasing first; from which we may conclude that while there are shades of difference in the special effects produced by the several compounds alluded to, yet they all operate in one general manner, and, as I believe, by producing some serious change in the condition of the blood, for, in fatal cases, we always find that this liquid is dark and uncoagulated. In addition to which, it is worthy of note that the vessels of the lungs are highly congested, and that the right side of the heart is full of blood, and the left empty.

Very little can be deduced from these cases in the way of treatment, for the action of the poison is generally so rapid that little or no opportunity is given for the administration of antidotes.

Finally, it may be mentioned, that the cases of poisoning by this liquid hitherto recorded, do not positively show what quantity of it is necessary to produce death. It may, however, be safely affirmed that as one grain of anhydrous prussic acid is sufficient to produce a fatal result, the equivalent of it in these salts is in all probability equally dangerous.

ON THE HEATING AND VENTILATION OF BUILDINGS, BY MEANS OF APERTURES SITUATED IN THE UPPER AND LOWER PORTION OF A FLUE.

By J. NOIRSAIN,
Civil Engineer.

At present I shall confine myself to the enunciation of the physical principles upon which my invention is founded, and by which I have been entirely guided in the course of my investigations, and to a demonstration of their effects, and the rational deductions from them.

I shall arrange my subject under three heads, and shall speak:—

Firstly. Of the temperature of flues considered in relation to the public health, and safety from fire. If the flue, during the burning of the fire, in any kind of grate, be not raised and kept at the temperature of 212° , a portion of the smoke will be condensed; soot, the cause of fire in chimneys, will be deposited in large quantities; the whole volume of mixed air

and gases passing up the chimney will be diminished; and consequently the amount of fresh air necessary to respiration is not admitted into the apartment, the least irregular draught causing the smoke to be poured out from the grate. It must be evident, therefore, that to the condensation which generally takes place in flues we must attribute the presence of soot in the atmosphere, and the frequency of fires in chimneys, two great evils upon which it is not necessary to enlarge.

Secondly. Of the rarefaction of the air in relation to hygiene, or the purification of the air of dwelling-houses.

The effect of the simultaneous operation of fire and rarefied air in a closed chamber, communicating at both extremities with the chimney, is to raise rapidly the general temperature of the apartment, to remove from it impure and vitiated air, to prevent the temperature from attaining an excessive elevation, to cause that motion or circulation in the air which prevents its stagnation, and keeps it in a proper condition for respiration; to distribute the heat uniformly throughout the room, and to render imperceptible the entrance of the cold air.

The question of ventilation is one which has occupied the attention of men of the highest scientific acquirements; the importance of the subject is well and generally understood; its positive necessity is daily experienced in hospitals, schools, and other public establishments; and, if the principles of ventilation are not universally applied in this country at the present time, it is probably because a really practicable means of ventilation has not yet been invented.

Thirdly. Of the concentration of caloric in relation to the economy of heating and personal comfort.

When combustion is produced in a chamber which accumulates the rays of caloric, transmitting them only through an opening of definite size, the atmospheric pressure is forced to act upon the fire, instead of upon the internal sides of the chimney, as is the case with ordinary grates, the condensation of smoke in the latter being a natural consequence.

The current of air acting upon the whole area of the constructed opening, prevents the smoke and gas from issuing into the room.

The radiation of the fire, or, rather, the intensity of the combustion which causes the consumption of smoke, may be increased or diminished by the adjustment of a mechanical means of regulating the draught.

In the present system of heating and ventilation there exist numerous practical inconveniences and difficulties. Who, for instance, has not felt the annoyance arising from the unpleasant odour of the burning fuel, the occasional excess of temperature common in ordinary apartments, the oppressive effects of imperfect ventilation, and the dangers consequent upon exposure to draughts of cold air? Who has not been obliged, occasionally, to open a door or window for a breath of fresh air, and who has not felt the discomfort of a bad fire on a cold day? These are inconveniences for which the remedy is to be found in the judicious application of the three general principles already described.

As the subject of ventilation and safety from fire is one of the highest interest in every country, I shall take a general but brief view of the various kinds of stoves displayed at the present time in the Exhibition at Hyde Park.

The United States, Russia, France, Austria, Prussia, Holland, Tuscany, and Belgium, have all entered the lists of competition. England, above all, is distinguished by the number, the richness, the beauty, the variety, and the finish of her stoves.

Taken as the basis of comparison, it will be seen that my apparatus (491 Catalogue) for heating and ventilating, is the only one in the Exhibition which combines the double action of air and heat.

It would be very difficult, as it appears to me, to point out the physical principles which have regulated the construction of the greater portion of the ordinary stoves. To arrive at a just idea of their origin, we must go back to the time of our ancestors,—to the days in which the fire-places were sufficiently capacious to contain the trunk of a small tree; by reason of the height and breadth of the chimneys, they were rendered capable of uniting the function of ventilation with that of heating. I have traced the analogy between the great fire-places used formerly for burning wood, and those first constructed for burning coal. By examining the dates of the construction of different stoves, I found also that I could trace through all their modifications the

originals of the stoves of the present time; and it is, no doubt, to the irregularity of their progress, as well as to the want of proper principles in their construction, arising out of the labours of many individuals through a long lapse of time, that we must attribute the inconvenience and imperfections inherent in almost every kind of modern stove.

In some the effects of the condensation of the products of combustion have been disregarded; in others, the heat has not been sufficiently concentrated, while in others again, the heat has been too much concentrated. In examining the grates in the Exhibition, it is curious to remark the progressive order in which the efforts of the manufacturer have been directed to the lowering and diminution both of the opening into the chimney and that of the fire-place.

It cannot be doubted that the nearer the opening of the grate is brought towards the floor the greater will be the interruption to the ventilation of that part of the room between the ceiling and the opening of the fire-place, and at the same time the greater will be the draught, or ventilation, in the lower part; while the more the opening is diminished in size, the more will the general ventilation be destroyed. Thus, with some stoves, the head is surrounded by a heavy, stagnant, and, consequently, impure atmosphere, while the feet are cooled by a smart current of air. The principle of hygiene teaches us that the reverse ought to be the case, viz., that the head should be kept cool and the feet comfortably warm. In other systems of heating it is difficult to obtain a sufficient quantity of fresh air to support life; and, with the greater part, we are constantly compelled to inhale air totally unfitted for respiration.

In many countries, less, perhaps, in England than in others, there appears to be a general desire (arising probably out of a feeling of false economy) to prevent the access of cold air into the interior of dwelling-houses. From this false notion has grown the dangerous system of fitting houses with double doors and windows,—a system rendered the more dangerous by the imperfect state of internal ventilation generally. In some countries, the fear of the intrusion of fresh air has been carried to an extraordinary pitch, the inhabitants fastening up every crevice in their houses, and nailing list or strips of cloth over the joints of the doors.

It is true that, by habit, we may become, in some degree, inured to live in impure air,—in an atmosphere in which the elements essentially necessary to life are reduced to a minimum; but in what condition? Let us remark the complexion and appearance of the inhabitants of great cities, compared with those of the country, and the appearance of our own complexion at the approach of winter. Let us compare the colour of the skin and the bodily conformation of the inhabitants of England, France, Belgium, Prussia, Holland, Germany, and Russia; let us cast our eyes upon the dwelling of the Laplander,—we shall easily perceive the effects of proper ventilation.

I shall not pursue this subject. I am persuaded that the members of the Medical Profession will not hesitate to support my feeble efforts when they shall have examined my system, and decided as to the truth and value of my remarks. It is for them to demonstrate the noxious effects of impure air upon health, and to show that the appearance of vigour and the development of bodily strength would naturally follow, if the double effect of heating and effective ventilation were judiciously carried out in our dwellings.

It only remains for me to show what is essentially wanting in relation to health in ordinary systems of heating employed in different countries.

In Russia, the heated air of the rooms is concentrated between double doors, double windows, and double walls. The apartments are inaccessible to the external atmosphere.

What is here wanted; is the vivifying influence of fresh air, combined with the expansive action of heat.

In Germany the air is rarefied over a large heating surface. The reflux of the vitiated and decomposed atmosphere is prevented, consequently the fresh air cannot find entrance. The closed and open stoves of France, Prussia, Holland, and Belgium, are constructed, so as to prevent the action of the fresh air, both at the higher and lower part of the atmosphere of the room.

The grates of England are imperfect, because they do not produce any ventilation in those parts of the room above the level of the fire-place.

In referring to the stoves in the Exhibition, I would direct the attention of manufacturers of pottery to the stoves of baked clay exhibited by M. Cantagalli, of Florence, (No.

71, Catalogue.) If these were glazed, and proved to be capable of withstanding the expansive action of the fire, they would offer an excellent material for the construction of such articles.

Another subject worthy attention in connexion with this matter, is the Belgium sheet-iron, remarkable for its beautifully even and smooth surface, manufactured by M. Delhoye Mathieu, of Huy, (No. 376, Catalogue.)

In bringing my invention before the public, I intend to place it in the hands of one or two large manufacturers in England, and to confide the sale of my stoves to a certain number of respectable ironmongers throughout the country.

131, Regent-street.

COMPLETION OF Mr. WARDROP'S WORK ON THE HEART.

Our Subscribers are informed that this valuable Work has at length been completed, and that they may now receive, on application to our Printer, (Mr. Tyler, Bolt-court, Fleet-street,) the remaining portion, from page 544 to the end.

THE MEDICAL TIMES.

SATURDAY, JULY 12.

THE DWELLINGS OF THE POOR.

It is unquestionable that if our poor population are to have sufficient air and light, they must have suitable dwellings, unless they dispense with houses altogether. That the providing suitable dwellings is the very corner-stone of Sanitary Reform is a fact we have often before attempted to enforce. Better men than we are, hold the same opinions, and among these no one has been more earnest than Dr. Guy, whose admirable lecture on this subject we publish to-day.

We must congratulate the "Association for Improving the Condition of the Industrious Classes," and its illustrious Chairman, Lord Shaftesbury, (we almost regret to drop the honoured name of Ashley,) on the progress their principles have made during the last two years. It might, indeed, have been expected that this great movement, the offspring of Christian benevolence directed by science, would meet with support from a nation who have never failed to respond to the combined summons of justice and of charity. But no one could have foreseen that a merciful Providence, as if to give its sanction to the enterprise, would have so soon swept away the obstacles which usually encumber and delay men's wisest and best-directed efforts.

The historians of 1851 will have to record among the marvellous contrasts of a marvellous period, one of the most interesting that history can furnish. A great Prince, in the execution of a great design, has assembled in these islands a pageant whose undreamt-of splendour dazzles the world. Under the same roof civilisation and barbarism, peace and war, knowledge and ignorance, display their tokens and their trophies. Before the variety of races, the difference of tongues, and the diversities of products, the mind pauses, confused. The imagination recoils from its own thoughts, as it dimly seizes the consequences of this first blending of the human race, of this first peaceful manifestation of divers but harmonious effort.

But it would seem as if the results of this great enterprise, unparalleled as they must be, still fell short of the vast conception of its author. He drew another consequence from his prolific thought. The scheme, which was intended for the common good of the human race, was made contributory to the improvement of the distressed classes of his adopted country. By the side of the palace he reared the cottage:

he called upon Science to aid Labour in showing how the household lives of Labour's votaries could be bettered. He took his rightful place, as our foremost noble, in teaching nobility that brotherly kindness and sympathy are magnified and not destroyed by the utmost grandeur of a mortal's lot. By the side of his grand thought, that the labour of one land claims lineage with that of another, he placed this grander one, that the fruits of labour should be for the common benefit of all. Before the sons of toil he placed the blessed fact, that Royal eyes had not disdained to glance at those of low estate; but that, perchance, tears for their heavy lot had dimmed those noble eyes, and that, perchance, prayers poured forth from a woman's tender heart had risen up to heaven for her people's good.

But Prince Albert's noble example is not the only help this great cause has lately received. By the abolition of the duty on bricks, and by the various inventions which have succeeded this, in particular by the new mode of making hollow bricks, and by the increased cheapness of glass, the erection of new houses has become not only cheaper, but the objects contemplated by the Association are much more easily attained. Still, with all this, the improvement would have gone on slowly had it not been for the removal of the Window-tax; a boon which, in its consequences to the poorer classes, ranks only second to the abolition of the Corn-tax. From this moment the great change commences; for now it is certain, that *the erection of model lodging-houses will be a profitable investment*. From this moment philanthropy is seconded by interest, and in the lower, as well as in the higher sense, this movement "will bless both him that takes and him that gives."

The change which is about to commence in the dwelling-houses of our poor in London is so important, that Government will no doubt study it attentively. Probably it will have to be corrected and controlled to a certain extent, so as to bear the highest amount of good. And there are various questions connected with the extent to which Government should interfere, which demand the attention of every one. We shall return to these points shortly, in considering a very able paper on this subject which has been sent to us in lithograph, and which is said to be written by Mr. Tottie.

Meanwhile, there is one point which possibly may deserve the attention of Lord Shaftesbury, unless it has already received it, as is probably the case. We refer to the operation of the new House-tax on Model Lodging Houses. The aggregate rental of a house holding one hundred families will be very considerable, and if a House-tax is to be paid upon this, either the profits of the undertaking will be lowered, or the rents increased. Besides, a House-tax in such a case would be a manifest injustice, for each set of rooms should be considered as a single house, and therefore exempted, as they would be were they built apart. We trust, then, that a Clause will be introduced into the Inhabited House-tax Bill, exempting Model Lodging Houses from the tax. And in order to prevent any abuse of this, it might be well, on this as on other grounds, to insist on regular inspection by Government of these houses, and to make the exemption only on the Report of the Inspector, that the house in question is a *bonâ fide* lodging-house for the poorer classes. We trust that our readers will show themselves as active in promoting this great reform as members of our Profession have always been, and we would beg them to circulate, as much as possible, Dr. Guy's lecture among their non-professional friends. The subject should be *pressed* on the public, and none can do this so forcibly and legitimately as Medical men.

THE HOMŒOPATHISTS AT HUDDERSFIELD.

THE indefatigable Mr. Ramsbotham, of Huddersfield, has forwarded to us a newspaper, with a note in which there is an homœopathic quantity of politeness. By the newspaper, however, we find that Mr. Ramsbotham and his misguided friends have managed to introduce into the Huddersfield Infirmary rather more than an homœopathic dose of bitterness and ill-feeling. The facts of the case are these:—It appears that some twenty years ago a rule was framed that, with a "view to the extension of the utility of the Infirmary," the Medical Officers be requested to invite professional men in Huddersfield and its neighbourhood, who are Governors of the Infirmary, to view the capital operations. This rule, however, has not been acted upon till within the last year, and since then Mr. Ramsbotham has been excluded. Mr. Ramsbotham's friends have, however, now brought it forward, and an attempt was made at the annual meeting, a few days ago, to make it *compulsory* on the Surgeons to invite all medical men, being Governors, and Mr. Ramsbotham among the rest, to their operations. A very animated discussion took place, in which the general feeling appeared to have run strongly counter to Homœopathy, and finally the proposal was withdrawn.

Mr. Ramsbotham made a long rambling speech in answer to the "imputations which had been thrown upon him;" but we cannot discover that he said anything which alters our opinion of him. He seems to have had sufficient brass to dare anybody to call him an "impostor, quack, knave, and cheat," to his face; and, as no one seemed inclined to take up the glove, Mr. Ramsbotham has so far improved his position that he may say, no one at the meeting called him these ugly names. But beyond that, our peppery antagonist remains where he was.

The question raised at the meeting is, however, of more importance to us just now than Mr. Ramsbotham. We hold it to be quite clear that a discretionary power should be given to hospital surgeons as to the publicity or privacy of their operations. It would be monstrous, if a surgeon were compelled to ask all the world to witness his operations, no matter what the state of the patient might be, or what the character of those invited. Consider, for a moment, what mischief an unscrupulous homœopathist might cause, if he were admitted to criticise, to misinterpret, and to misrepresent the proceedings of a man whose ruin may be his own fortune.

While, however, we think that a discretionary power to exclude or admit should be given to every hospital surgeon, it should be understood that it is very advisable to let all regular medical men have as free access as possible to the hospital.

The original rule of the Huddersfield Infirmary seems a good one, since it indicates the propriety of opening the operative theatre to all medical men, as far as may be consistent with the proper discharge of the duties of the place, and with the comfort of the surgeon who officiates. And we collect from the report, that it is now the custom to invite all the regular medical men in Huddersfield to the operations. This is as it should be; but we would also advise the surgeons to remember, that they should hold fast their discretionary power, as long as there are homœopathists and Ramsbothams to be kept at the door. The pretensions of homœopathy and the rights of truth and science are irreconcilable, and no quarter should be shown by any of our Profession towards a class of men who can only flourish in proportion as they injure us, and truth through us.

CHILDREN'S HOSPITAL.

It has afforded us no little satisfaction to have noted, from time to time, the endeavours which have been made to establish a Hospital for Children. We say, "have been made;" for we are happy to state that the object has been so far accomplished that a fitting house has been obtained, whose rooms will in a few months be opened for patients. The situation is as good as could be wished. One of those old large houses in Great Ormond-street, which, a century and a half ago, were the homes of our aristocracy, has been hired by the Committee. As there are great inconveniences in fixing such an establishment out of London, or even in the nearest suburb, the Committee have wisely considered that a good house in town, ready made to their hand, with a large garden attached to it, in a central situation, would be better than an expensive building at a distance both from patients and physicians.

We trust our brethren will exert themselves on this occasion. The propriety, nay, the necessity, of such a hospital is so obvious as to require no argument from us; yet, if it is to succeed, medical men must help it, by bringing the subject before their patients and connexions, and explaining to them the necessity of assistance. We understand that 600*l.* is at once needed to prepare the house, and that 1500*l.* per annum is the estimated cost for 60 children. The sum is large; but we cannot doubt that, if the Profession put their shoulders to the wheel, it will soon be raised. If any of our readers should be unacquainted with the movement which has been lately made, we have no doubt they can procure from Dr. West, 96, Wimpole-street, the Report of the meeting which was held at the Hanover-square Rooms in March last, where they will find the most convincing arguments advanced by the various speakers on the occasion in favour of the Hospital.

THE CENSUS FOR IRELAND, 1841-51.

IRELAND,—the exception to almost every rule, in religion, in politics, and in social economics,—true to her character, is also an exception as to the rule applying to the General Census for 1851. The enumeration for Great Britain yields a result of increase of population to the extent of 2½ millions, while Ireland shows a decrease of more than a million and a half in a population of eight millions, as follows:—

	1841.	1851.
Houses: Inhabited	1,328,839	1,047,735
Uninhabited, built	52,208	65,159
building	3,313	2,113
Total	1,384,360	1,115,007
Families	1,472,287	1,207,002
Persons: Males	4,019,576	3,176,727
Females	4,155,548	3,339,067
Total	8,175,124	6,515,794
Population in 1841	8,175,124	
" 1851		6,515,794
Decrease		1,659,330
Or, at the rate of 20 per cent.		
Population in 1821	6,801,827	
" 1831	7,767,401	
" 1841	8,175,124	
" 1851		6,515,794

Now, since the Legislature has not "repealed the Union," neither shall we, and so, adding the Census of Ireland to the general results for England and Wales, we find that the whole decennial increase of population in the United Kingdom amounts to only 604,220.

The decrease among the male population of Ireland amounts to 20.96 per cent., and among the female to 19.65 per cent.; while the decrease in the number of families has been 265,285, or 18 per cent. The number of persons to a family in 1841, was 5.55 per cent.; and in 1851, 5.39. The decrease of population in the ten years 1841 to 1851 is greater than the whole increase in the previous 20 years, by as much as 286,033. The towns, however, of Ireland uniformly show an increase, some to a considerable extent, such as Belfast 32 per cent., and Galway 43 per cent. The only county that boasts of an augmentation is Dublin, to the extent of 10 per cent.

But, to show still further the declining state of this wretched country,—the number of inhabited houses has diminished in the ten years to the amount of 281,104, or 6.22 per cent.; the number of uninhabited built houses has increased by 12,951, or 23 per cent.; and the number of houses building in 1851 is less than those building in 1841 by 1200, or 36 per cent.

Here, then, in the year of grace 1851,—the year when Great Britain more especially shows herself to the whole world, in greatness and in legislative wisdom—we have Ireland, her sister isle—decimated and cast down; the most stalwart of her people, some voluntarily, others involuntarily, exiling themselves from Erin, while helpless youth and decrepid old age are left to witness the gradual decay of this, "the first flower of the earth."

Into the causes of this most melancholy state of things it were dangerous to enter. Political considerations are so interwoven with the matter, that we should be forced from our province, did we but tread the threshold; and even could it be shown, that the failure of the potato-crop and the resulting famine were the causes of this melancholy decrease in population, we should still be obliged to seek a remoter cause, and ask why the people of Ireland should be dependent on a precarious crop, which failing, left them no alternative but to lie down and die by millions.

Here, we repeat, political considerations interfere, and to politicians we must leave it.

We shall look with much interest for the more special results to be brought out by the Census,—such as the particular class or classes which have mostly suffered a decrease,—and the numbers, male and female, under the respective ages in 1851 compared with 1841. These particulars will supply interesting data for study and remark, and, until they are forthcoming, we must defer the subject.

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF MEDICINE AND SURGERY.

[EIGHTH NOTICE.]

CONTINUING our progress along the southern gallery of the British Department of the Exhibition, towards its western extremity, after leaving the chemical specimens, we cannot pass without notice the very complete collection of the agricultural and horticultural products of Scotland; a collection unrivaled in the Exhibition for its completeness, and, although not strictly within our bounds, yet we must recommend all members of our Profession to pause awhile and devote a short time to its inspection. Still further west, we have isinglass in all its varieties and states of manufacture, and beyond this another form of gelatine, which has of late years formed by no means an unimportant branch of manufacture, as a cheap substitute for isinglass, which it threatens, in some degree, to supersede. The manufacture of artificial gelatine, from the clippings of hides, has only been brought to its present perfection within the last twenty-five or thirty years; it requires great care in the selection and cleansing of the materials, and in the subsequent stages of the process. We cannot refrain from entering our

protest against the purely chemical, and, as we consider it, the unphysiological assertion, that gelatine is not nutritious in the proper sense of the term. The celebrated Liebig has been the most strenuous supporter of this dogma on the strength of two arguments; the one, that none but proteine compounds are nutritious: proteine cannot be extracted from gelatine, therefore gelatine is not nutritious; the other grounded on an experiment performed by Magendie, who, having fed animals on gelatine and water, found that they died at the end of about forty days of marasmus. Both these arguments are, in our opinion, fallacious. The first has been recently demolished by Liebig himself, who has denied that any such thing as proteine can be obtained in a pure state; that the composition of albumen, fibrine, and caseine, as stated by Mulder is incorrect, and that the whole proteine theory, and with it, we presume, the statement that gelatine is not nutritious, must fall to the ground. The second argument can only be sustained by a *suppressio veri*, since the very same Commission of the French Academy of which Magendie was the acting member, who made the above-mentioned experiment, also found that animals fed on albumen or fibrine and water succumbed, in the same state, at about the same length of time, after being subjected to a diet consisting of one alimentary substance. Universal experience goes against this opinion; nor will the supposition put forth by Liebig, that the gelatine taken into the stomach is employed in nourishing the gelatinous tissues, help the supporters of this notion out of the difficulties in which they are plunged. Until better arguments are adduced, we shall place gelatine among the nutritive alimentary substances, in the strict sense of the term.

The specimens of tobacco in its various states, although chiefly employed as a luxury and in the form of cigars, will be remembered as a very powerful medicinal agent, whose medicinal powers have not, in our opinion, received the attention that they deserve.

From the Southern Gallery, we now pass to the Northern, in which we find the British assortment of philosophical, chemical, and surgical apparatus. Continuing our course, and commencing at the western extremity of this gallery, the first objects that demand our attention are microscopes and microscopical preparations. The microscope, from being, at the commencement of the present century, a mere toy, or source of wonder and amusement, has, of late years, taken its proper place in the hands of the philosophic investigator, and has added more to our knowledge of the healthy and morbid structure of the tissues and organs of man, animals, and plants, than any other means of investigation; and is destined to effect still more important changes in our opinions as the instrument is rendered more perfect and more powerful—if, indeed, this can be done. But the microscope, however important it may be as a means of theoretical investigation, is still more important in a practical point of view, since it enables us often to distinguish forms of disease, and directs us to the most successful mode of treatment. Take, for example, the morbid deposits in the urine; many of them present no appreciable difference to the unassisted eye, and would require a delicate and difficult process of chemical analysis to distinguish them; but place a small portion of the urine containing the deposit under a moderately powerful microscope, and if you do not at once detect the nature of the deposit by the form of its particles, the use of a few simple tests will at once point out its character and determine the treatment to be employed. For these practical purposes an achromatic microscope, with a magnifying power of about two hundred diameters, will suffice, and these are now made at a very reasonable price, from five to ten or twelve pounds; but we would recommend our readers, when purchasing an instrument which is to serve them for the term of their lives, not, by economising a few pounds to purchase a bad, and therefore a useless, instrument. It is quite true that much may be discovered even by means of a very common instrument; but when it is remembered that the eye must be educated to the use of the microscope, and that without practice blunders are frequently made even with good instruments, how much greater must be the risk of error when using an imperfect instrument. We will venture another piece of advice, and we consider it an important one to all those who are commencing the use of the microscope, which is to ask the opinion of some friend accustomed to this mode of investigation, on the quality of the microscope they are about to purchase, or we can assure them they will get an inferior

instrument, unless, indeed, they purchase one of a maker of considerable reputation, who, for his own credit's sake, would sell only good instruments. Hitherto we have spoken of the microscope as a practical instrument, and we have stated that a magnifying power of about 200 diameters will suffice to distinguish morbid conditions of the secretions; but an instrument so limited in its powers will not suffice for original investigation of structure; and for this purpose microscopes of much higher power and definition are manufactured, of course at a much higher cost. The chief London makers, who may challenge the whole world for the excellence and power of their microscopes, are Ross, Powell, and Smith and Beck; between whose instruments there is little difference of excellence, but some difference of form. Each of these makers exhibits a collection of microscopes; but, as these are in glass cases, of course their merits cannot be compared at the Exhibition. For ourselves, we prefer the form adopted by Mr. Ross, for one simple reason,—that the fine adjustment-screw is placed on the side of the body of the microscope nearest to the observer. This may appear a trifling circumstance, and it is really of no importance when the microscope is employed for practical purposes, because all that is required to be known may be ascertained in a few minutes; but when it is employed as an instrument of research, and used during several consecutive hours, the position of the fine adjustment-screw, which is in constant use, as near as possible and at the smallest possible elevation, relieves the observer from much muscular fatigue; and it is a familiar fact, that muscular and mental fatigue are intimately connected. It is not our province to enter into a minute description of the varied forms of microscopes and microscopical apparatus; but we may refer those who are desirous of such information to the excellent Treatise on the Microscope, by Mr. Quekett, one of the most eminent British microscopical observers, where they will find elaborate descriptions and excellent figures of all the forms of the instrument and apparatus now in use.

In addition to their microscopes, Messrs. Smith and Beck exhibit a Microscopic Cabinet, consisting of a set of drawers of excellent workmanship and convenient form for containing and arranging collections of microscopic specimens, concerning which we shall have much to say in our next article.

REVIEWS.

On Articulate Sounds, and on the Causes and Cure of Impediments of Speech. By JOHN BISHOP, F.R.S., F.R.C.S., Member of the Council of the College of Surgeons of England, etc. 8vo., pp. 79.

There is, perhaps, no subject which has received more unmerited neglect, from the members of the Medical Profession, than the investigation of the causes and treatment of impediments of speech; this ample field for practice has been left to the teachers of rhetoric, and empirics have (as the author remarks in his Preface) occupied the vacant ground, with manifest discredit to the Profession and detriment to the public. Others within the Profession have endeavoured to remedy these defects by surgical means, and tonsil-cutting and even more serious operations, have been performed, with very unsatisfactory results. This surgical treatment has arisen from false theory; and the natural result has followed, that the patient has not received the benefit from it that he was led to anticipate.

As the author, in his Preface, states, with truth, pathology is based on physiology, and, in proportion to our accurate knowledge of physiology and pathology, will be the success of treatment. In this class of affections of the vocal organs, as the physiology, although very complex, is better understood than that of many of the internal organs, we may anticipate a larger measure of success in treatment.

This Essay is divided into two parts; the first of which is devoted to the examination of the mechanism of speech, the production and modification of vocal sounds; the second, to the consideration of the causes of impediments of speech, and the mode of overcoming these difficulties.

In the first part, the author sets out with the general proposition, that the modification of the voice, by which articulate sounds are produced, is wholly dependent on the

development of the intellect,—a fact easily proved by reference to the different orders of animals, but still more strikingly in the absence of true articulation in idiots. Most animals possessed of a vocal apparatus are capable of producing sounds or cries, which consist of vocalised breath, modified by the actions of the fauces, mouth, teeth, and lips; but they differ from articulate sounds, in being the expression of the emotions of the animal, and in having no distinct intellectual meaning. Man, on the other hand, frames a series of distinct sounds and combinations of sounds, by which he can communicate his ideas, emotions, and passions to other men, and hold intellectual converse with them. This is language composed of words, which, again, are built up of a series of simple elementary sounds or letters. All the varied languages of the nations and tribes scattered over the surface of the globe, contain only a certain number of these elementary sounds. The vocal apparatus, indeed, seems capable of producing only a certain number, which has been variously estimated by authors. Volney admitted about fifty-eight or sixty, as forming an universal alphabet; Sir John Herschell considers thirty-four as sufficient; Marsden thirty-five.

The author then discusses the simple elementary sounds, the mode of their production, and their combinations; discussing at the same time the production of artificial vocal sounds by mechanism. This curious subject was first taken up by Kratzenstein and Kempelen, followed by Willis, who fully succeeded in producing all the vowel sounds, and ascertaining the laws which regulate their production, of which a detailed account is given in this essay. Faber, the constructor and exhibitor of the euphonic or speaking automaton, succeeded in not only producing the vowel sounds, but in constructing an artificial human figure, which was capable of articulating distinctly, but with a peculiar melancholy tone, words and sentences,—of whispering and singing the national anthem; but the mode of production of these sounds was preserved as a secret.

Each of the classes of sounds is discussed with considerable minuteness; their mode of production, and their chief attributes and combinations are stated, and the whole are classified according to their anatomical and physiological, and their acoustic significance. It would lead us into a wide field of discussion, wide indeed as this portion of the essay under review, were we to examine the details into which our author has entered; we shall, therefore, conclude our notice of the physiological part of the work with an extract on enunciation:—

“In the employment of elementary sounds for the expression of ideas, whether conveyed in the form of melody, as recitative, in reading aloud, or in speaking, the principles of enunciation are the same; the distinction is only in the choice of the melody, which, however, is susceptible of great variety, and in certain sentences determines the meaning of the speaker. Pauses, accents, cadences, choice of melody and tune, aided by gesticulation in delivery, are called into action by the finished orator, in order to render his subject impressive, and to secure the attention of his audience. Few, however, either in the pulpit, at the bar, or in the senate, attain by exercise that excellence in the method of expressing their ideas of which the vocal organs are susceptible. In speaking, the proper intonation, time, accent, quality, and intensity adapted to the magnitude of different assemblages, cannot be acquired without much study and practice; and, as the art is little understood and less cultivated in our schools, we need not be surprised that so few persons are to be found in society capable of expressing their ideas in a manner satisfactory either to themselves or their hearers. An exposition of the principles of intonation would be foreign to the objects of this treatise; but every one must have observed as many shades of intonation as there are diversities of physiognomy; and hence we can recognise a friend by his voice, that is, by the peculiar *method* of intonation and use of the articulatory organs.”

As the articulate voice is the result of the combined action of the multifarious parts of a complicated apparatus, we may expect that the causes of its impediments will be numerous and variously located. It has been shown that, in order to articulate a word or a sentence readily and perfectly, the will must have perfect control over the emotions of the mind, and over the whole of the voluntary muscles directly or indirectly concerned in the production of the voice; and that there must exist the most perfect consentaneity of action among them. The interruption of this consentaneity of action may, according to the Author, be produced by the

irregular action of no less than four sets of organs. 1st, By closure of the valve of the glottis; 2nd, by closure of the isthmus of the fauces; 3rd, by the dorsum of the tongue being brought into contact with the palate; 4th, by closure of the lips and posterior nares. These interruptions of speech, known as stuttering, or stammering, are evidently functional; dependent on want of complete control of the will over the different parts of the vocal apparatus, and are often the results of derangement of the nervous system. A powerful argument for this view of the subject is, that the greater portion of those whose articulation is thus impeded are able to sing without interruption, and cases are met with occasionally where persons stammer only when under the influence of powerful emotion.

“The most common cases of stammering occur when persons attempt to articulate the desired sounds without putting the glottis into vibratory action; and, therefore, in order to remove this kind of impediment, the treatment consists in instructing and exercising the patient in the method of using the vocal apparatus properly. To effect this purpose, it is necessary to direct the patient to vocalise the breath so as to utter a continuous sound, as by singing a note in music. This he should do, in the first place, without making any attempt to articulate a syllable; and then, on repeating the same sound, should endeavour to articulate the word required. This he will be enabled to do immediately, if, during the whole time that the attempt is made to pronounce the articulate sounds, the glottis is kept in action by the vocalisation of the air issuing from the lungs, and the articulating organs perform the necessary actions. In this manner the patient will be enabled to overcome, on the first trial, some of the difficulties of articulating at will.”

Such cases are evidently purely functional, and are, for that reason, incapable of cure by the removal of the tonsils, the cutting of the uvula, or the section of the tongue proposed by Dieffenbach. All such proceedings being based on false theory, must, as they do, produce no permanent melioration of the condition of the patient.

We are reminded that our limits, but not our subject, are nearly exhausted; but, nevertheless, we would draw the attention of our readers to a common complaint among persons who are compelled, by their profession, to speak or read much, and in public, in a constrained voice,—we allude to the loss of voice so frequently seen in clergymen. This loss of voice is considered by the author to be produced by the repeated attempts to conclude a sentence in the same breath, when the chest becomes greatly exhausted, and no attempt at inspiration is made until it becomes absolutely compulsory by the action of the reflex system; thus taking the act of inspiration from the control of the will. If these interferences of the voluntary and reflex systems be frequently repeated, the control of the will over the voice and the respiratory movements is lost, and public speaking must be abandoned. Cases are narrated in support of these assertions, which, in our opinion, fully bear them out. There is much matter of great interest contained in this short treatise, which may be perused with profit by members of the Profession. Mr. Bishop deserves great praise for bringing the subject within the pale of the Profession, to which it naturally belongs. The memoir should find its appropriate place in the library of every reading member of the Profession, to whose notice we specially recommend the volume.

FOREIGN CORRESPONDENCE.

FRANCE.

MEDICAL ETHICS.

ALTHOUGH the institutions of England are in many respects superior to those in other civilised countries, it must be confessed that we have much to learn and to imitate in almost all that concerns medical policy.

We have, for example, various medical associations of high character in a scientific point of view, but the safeguard of the honour and interests of the Profession seems to form no part of the duties assumed by our associated bodies, and hence individuals isolated from the mass are insulted or injured with impunity, arising from a want of protection. This radical defect does not exist in France. Here the medical associations do not disdain to occupy themselves with the material interests of their members, and any

injury inflicted on an associate is immediately taken up by the whole body, which, to employ their expressive term, becomes *solidaire* (identified, like all the molecules of a solid) with the individual. The protection thus afforded is of the most extensive and valuable kind, on the one hand preserving from impurity the honour of the Profession, and on the other rendering efficient aid to individual members in sustaining their rights or redressing injuries inflicted on them.

We have recently had several examples of the action exercised by medical associations in this double capacity. Thus the honour of the Profession has been upheld by the expulsion of homœopathic practitioners from the different Societies of Paris. Independence of opinion is respected, but human life is here considered of too much value to be handed over to imposture applied in practice. People are not yet convinced that matter is infinitely divisible in a pestle and mortar, nor do they believe that any *pharmacien* could gain an honest livelihood at a trade of the kind, inasmuch as it would take him more years than the world is old to make sixpennyworth of pills.

With regard to the interests of the Profession and the beneficial influence which associations can exercise when brought in aid to individual claims, I may cite the recent case of Dr. Boullard. This gentleman, a member of the "Medical Association for the Department of the Seine," attended a patient during an illness which proved fatal. The landlord immediately seized the goods and chattels for rent due, and the doctor, as usual, was left to console himself with the consciousness of humanity. The Association took up the question at once, and consulted a couple of sound lawyers, who disinterred an article of the "civil code" which confers a general privilege in favour of the medical attendant during "the last malady" over all other claims. In addition to this act of timely service, the Council of the Association, composed of Orfila, Dean Bérard, Professor Adelon, and other eminent men, addressed a memoir to the Court, in which they insisted on the justice of deciding the question in conformity with the interests of the medical profession. Such conduct as this is well worthy of imitation, and much better calculated to advance the material interests of members than the "cakes and coffee" so sparingly distributed by some of our crack societies.

SPIRAL BOUGIES.

M. Leroy-d'Etiolles is the most indefatigable inventor of instruments in all France. The collection of implements which he has imagined, would form a respectable museum. His corkscrew bougies, though not the last product of a fertile brain, were brought before the notice of the Academy on Tuesday last. The difficulty of overcoming irregular strictures of the urethra, when the canal is nearly obliterated, is well-known to surgeons. Forcible catheterism with a conical bougie is the last resource in severe cases of this kind, and for milder cases, other expedients, such as forced injections, &c., have been employed. The spiral bougies are more simple, and in the hands of M. Leroy appear to have produced excellent effects. It is not necessary to have instruments fabricated expressly for the purpose. A gum-elastic or gutta percha bougie may be twisted round a pin or any other cylindrical body, and kept in position for a few minutes. The application of this small instrument requires some dexterity and great patience; but, generally speaking, after half an hour the greatest obstacles are overcome. M. Leroy-d'Etiolles related fifty-three cases, illustrative of the benefit to be derived from this practice, which he has employed since the year 1845.

DR. MARSHALL HALL ON EPILEPSY.

Dr. Hall's doctrines are not yet well understood in France, and the manner in which they have been imported by French writers is anything but calculated to render them clear and intelligible. Dr. Hall, therefore, seems to have taken the wise resolution of explaining his peculiar ideas himself, and has addressed a couple of memoirs to the Institut as a commencement.

The nature of epilepsy, according to Dr. Hall, may, to a certain point, be explained by reflex nervous action. In cases of sympathetic epilepsy, mental emotions and organic irritations produce many of the leading phenomena, the former directly, the latter by reflex influence. Among the more remarkable effects are certain phenomena confined to the region of the neck, which the author comprises under the term "trachelism." These are, 1. Compression of the veins. 2. Occlusion of the glottis. 3. Protrusion and injury of the tongue, &c. The occlusion of the glottis is essential to epilepsy, and this latter state cannot exist without the former. Hence, if tracheotomy be performed when the premonitory symptoms of an epileptic attack appear, the true epileptic convulsion cannot be developed. An opportunity of applying the theory to practice was recently offered to one of Dr. Hall's friends,

Mr. Cane, of Uxbridge. A young man, 24 years of age, had been long subject to epileptic attacks, coming on every second day, and of so severe a nature, that the patient seemed threatened with imminent suffocation, remaining in a state of profound stupor, with apoplectic breathing. Mr. Cane performed the operation of tracheotomy, and during the two months which followed the patient had only one attack of his disease.

On analysing the symptoms of epilepsy, (non-organic,) it appears evident to Dr. Hall that the causes of this malady act either directly or reflexly on the spinal system. Through the medium of this latter the muscles of the neck, glottis, &c., become affected by spasmodic contractions, and from these contractions arises compression of the veins of the neck, followed by congestion at the roots of the veins, softening and rupture of the nervous tissue, &c. The susceptibility of the spinal system is augmented by each access, and affords a predisposing cause of future attacks.

THE SWEATING SICKNESS.

The sweating sickness continues to prevail with great intensity in the South of France. In a few hours fatal congestion of the brain often ensues. Quinine in large doses has been found to be the best remedy.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

THE WEATHER AND DISEASE.

AMONG various things in the medical way, I have to report that the weather is unhealthily hot, causing many head-affections,—small-pox, scarlatina, and febricula have been very common. Last week there was a case of death from cholera (Asiatic?) reported by the medical officer of health. Bowel complaints, of a severe type, especially among infants, are not unusual with us just now.

DEATHS OF MEDICAL MEN.

Three or four medical men have died here, among whom I may mention—Mr. Collinson, of Magull, son of the late Mr. Collinson, surgeon, Liverpool. On the 25th ult., Robert Lewin, Esq., M.D.; for more than fifty years he acted as Honorary Physician to the School for the Blind. On the 6th inst., Mr. Burgess, West Derby-street, was found dead in bed.

THE DEODORIZING PROPERTIES OF PEAT CHARCOAL

have recently been investigated by a number of highly scientific persons, among whom were Drs. Stevenson and Moffatt, at Birkenhead. Ten pounds weight of night-soil, placed in a bucket, were first acted upon, by mixing with it 15lbs. of the peat charcoal, when the whole of the offensive odour arising from the soil was, in a few minutes, entirely neutralised and destroyed. A precisely similar result followed another of the experiments in which the component parts were 5lbs. of night soil and 7lbs. of charcoal. A third and final test was 11lbs. of refuse offal from the slaughter-houses, the smell of which was most offensive, to 16½lbs. of charcoal, and the result was most satisfactory. These tests were closely examined by the gentlemen present, who unanimously expressed their entire satisfaction with the results. It was afterwards stated that the utility of the charcoal as a disinfectant was not the only quality which it possessed; for the effect of its mixture with the night-soil was the production of a valuable manure. The ammonia of the soil being absorbed by the charcoal, an inodorous compound was formed, in which all the necessary qualities of the manure were preserved, and it became a useful and portable article of merchandise. Many instances of its application as a sanitary agent were also given, as well as its use for agricultural and other purposes.

In my opinion it is an important question to be decided, whether the noxious gases themselves are the cause of diseases of a febrile character, or whether they are not placed near to or in juxta-position with the molecules which actually cause disease; if the latter, it is scarcely possible that deodorizing agents can be of much value unless they destroy at the same time the disease-producing particles. Facts in favour of this hint can be obtained, more particularly in the neighbourhood of chemical works, where a considerable amount of chlorine gas is diffused, and yet disease is as prevalent as elsewhere. Where filth, rags, and low wages are predominant, acting up to sanitary Acts is of little advantage. There are more moral than physical evils to be contended with than our scientific men care to notice.

GENERAL CORRESPONDENCE.

THE BRITISH MEDICAL FUND.

[To the Editor of the Medical Times.]

SIR,—In these days of prudence and economy, when Insurance Societies and a variety of other societies are springing into existence like mushrooms; when we have not only Fire and Life Insurance Offices, but assurance against accident and death both by land and by water, each big with professions of kindness and benefit to mankind, I feel perfectly astonished that more attention has not been called to the "British Medical Fund." This, in my opinion, arises from the fact of its usefulness, and of what it professes to accomplish, not being more generally known among the Profession at large. The "British Medical Fund" is a Society which has been established solely for the benefit of medical men; and, at the present time, when the sources of their income have been curtailed by the introduction of mesmerism, hydropathy, homœopathy, and a variety of other quackeries, and when the honest, the well educated, and the gentlemanly legitimate practitioner has no chance of success in competition with the knaves who practise those quackeries, as far as cunning and humbug are concerned, it behoves every member of the Profession to support such an Institution, and to use every effort in his power to bring it into immediate operation. This Society, it appears, is divided into a Provident and Relief Branch, and those again are subdivided into several departments. 1st. There is a Life Department, in which a member may insure his life for any sum not exceeding 200*l.*, the rate of payment for which is about the same as that paid at all the other Life Insurance Offices. 2nd. There is an Annuity Department, which insures an annuity of from 10*l.* to 100*l.* on the payment of a certain sum down, or by annual instalments for a certain term of years. This department is made available for the wives and children of members. 3rd. There is a sickness department, which insures the payment of from 1*l.* to 2*l.* a week to members when they are laid on a bed of sickness, or otherwise temporarily disabled from attending to their professional duties. Thus, if a man at the age of twenty-five years pays an annual premium of 1*l.* 11*s.* 4*d.*, he receives 1*l.* a week in sickness; and, if he pays 3*l.* 2*s.* 7*d.*, he receives 2*l.* a week, a very nice little provision to fall back upon when his personal exertions are paralysed by disease, or with which to pay an assistant to attend to his practice. 4th. There is a Temporary Relief Department, for the purpose of affording assistance to aged, broken-down, and unfortunate members of the Profession, their wives and children, and for the purpose of advancing small sums of money to enable subscribers to any of the above-named departments to continue their policies when sickness, or some other unforeseen calamity, deprives them of the means of keeping up their payments, and thus securing to them all the advantages of that particular department to which they had, perhaps, subscribed for years, and of which they must have been deprived according to the laws of all similar Societies, were it not for this fund. This fund is to be raised by the annual and life subscriptions of all persons joining the Society, and by the munificence of the public generally; and by which it is contemplated to build and endow retreats for the old and the infirm, and to establish a College for the education of the sons and daughters of medical men. Now, Sir, the Department to which I beg to call your attention, and that of the Profession more particularly, is the Sickness Department, as it is an Institution never before contemplated by the minds of medical philanthropists, and one which will be of the greatest importance to medical men. If we look to the different trades and callings to which the various classes of society belong,—of course I am now speaking of the masses and not of the exceptions,—we shall find that every class, and every individual of that class, save the medical man, can manage their or his business as well by a substitute as by themselves. The grocer's man can sell tea and sugar as well as his master; and so it is with the butcher, and so with the stationer, and so it is with all trades and callings; independent of which, when the tradesman is ill, he has his benefit club to fall back upon, from which he derives a weekly allowance and the attendance of a medical man. It is not so, however, with the General Practitioner; when he is laid on a bed of sickness he has not the advantages of the tradesman. No one is satisfied with his assistant, although he may be as clever as his master; he may stop a gap for a short time, but it will not do for long; the patient pays to have the attendance of the principal, and he will have it, or he will send for another practitioner. Besides, he has no benefit club to call upon; he may be the doctor to several, but his pride forbids him to take advantage of the funds, because they are subscribed by a class of society inferior to that to which he belongs. Then look at him

labouring under disease; without funds, with his income cut off, without resources of any kind; his mind harassed by the nature of the circumstances by which he is surrounded; he sees his wife and children in want; if he recovers, he finds himself in debt; and if he dies, he leaves his family penniless. This is a true picture, and not overdrawn, and, as a general rule, applies equally to those General Practitioners who keep their little vehicles, as to those who walk with sticks. Now, Sir, see what a boon such an Institution would be to such men! A prudent man, at the age of 25 years, by insuring his life in the Life Department, would be able to bequeath to his family, at his death, 200*l.* for the annual premium of 3*l.* 17*s.* 2*d.*; and by the payment of 3*l.* 2*s.* 7*d.* a year, he would secure to himself an allowance of 2*l.* a week in sickness. Here will be an Institution supported by his compeers, and its funds raised by men of equal standing with himself, to which he may apply for assistance, in case of necessity, as a matter of right, and without feeling it to be an act derogatory to his character in any way. Feeling that I have already trespassed too much on your patience, and hoping to see the Sickness Department of the "British Medical Fund" in active operation in a very short time,—which cannot be accomplished until there are 200 subscribers,—and, at the same time, begging to assure you that I have no object whatever in this lengthened communication, save a selfish one, that of securing my own interests and those of the Profession generally,

I am, &c.

ROBERT DAVIS, M.R.C.S. and L.S.A.

2, Brunswick-place, City-road.

THE MENTAL AND MORAL ASPECTS OF MESMERISM.

[To the Editor of the Medical Times.]

SIR,—In my last letter, I endeavoured to show, that some of the facts exhibited under the name of electro-biology or animal-magnetism resulted from the influence of a strong mind over a weak one. I presume every mesmerist would at once admit, that if there were no ignorant, weak-minded, imbecile people in the world, there could be no animal magnetism, from the total want of subjects. I believe that no person in the possession of a well-trained mind, whose volition was under the guidance of reason and moral power, could be mesmerised; therefore, is it not fair to conclude, that all the subjects of animal magnetism are ignorant, weak minded, imbecile, and come under the common-sense view of being persons having no will of their own? I also endeavoured to show, that many of those who practised mesmerism were strong-minded men, have much firmness of character and self possession, with its invariable concomitant, commanding power over the will of others, especially the weak.

In the work of Dr. Gregory on Animal Magnetism, he repeatedly asserts, that all the facts exhibited by mesmerism have occurred spontaneously, without any influence from without. We have all known instances where fear has so paralysed a person, that he has been fixed to a spot, and incapable of moving; people are run over in our streets from the same want of self-possession which is exhibited in the subjects of animal magnetism. I am told by ladies, that when a servant is combing their hair, particularly in front, they generally feel a strong disposition for sleep. Somnambulism is well known to occur spontaneously; the imaginary gift of tongues, of prophecy, of second sight, were known delusions long before they were revived under the modern term clairvoyance. So of other facts called mesmeric, which have all been known to medical men for ages, and, having been always observed in weak, feeble-minded, hysterical people, have been imputed to ill-regulated fancy and want of moral power.

We might take another view of mesmerism,—in its moral relations. When a strong boy attacks a weak one, what do we say of him? When, in the barbarous ages, a powerful baron carried desolation, pillage, rape, and murder into the homes of the weak and helpless, what did we say of him? When a lawless pirate attacked a defenceless merchant, and carried his crew and passengers into hopeless slavery, what did we say of him? When the chief of a nation employs his authority in the oppression of the weak, and gratifies his lust of power by conniving at the atrocities of his partisans over weak men and weaker women, what do we say of him? And what shall we say of a powerful mind, which, instead of diffusing the blessings of a vigorous intellect, indulges its superiority by selecting the weakest of its fellow-mortals for the exercise of its power and the gratification of a morbid appetite for the marvellous?

Which is most to be deprecated, physical power exerted over the bodies of men, or mental power exercised over the feeble and

irresolute? Is it not a prostitution of the latter, to engross it on such a subject as animal magnetism? Has mesmerism added anything to our knowledge? The influence of feeling, passion, and imagination in the cure of disease was known long before animal magnetism was thought of. I am told that in India operations are performed on the Hindoos while in a mesmeric sleep, but chloroform is a more certain anæsthetic, and does less harm to the body than mesmerism does to the mind. That the Hindoo should be a ready victim to mesmerism cannot surprise us, and its great success in India corroborates the position that the influence is essentially that of strong minds over weak ones. Granting all the facts asserted by mesmerists, what do they amount to?—that some men, who will condescend so to employ their force of mind, have a certain influence over a small proportion of very imbecile people.

In considering the mental and moral aspects of mesmerism, it would appear that the intellectual condition of both subject and object was one that no wise man would wish for himself or for his friends. He would lament if he had a relative under the influence of another's will, and he would also lament if he had a friend who devoted a mind fitted for better things to the purpose of exciting a laugh in the vacant, and making a public exhibition of the weakness of our nature.

The pursuit of such inquiries appears to lead to serious evils, both to the mesmeriser and his victim, and also to the public mind. The first it takes away from useful pursuits; it engrosses the mind on a subject which, after indulging for a time the love of the marvellous, will die a natural death, as it has done before, when some greater wonder shall absorb the public appetite. The weak-minded objects are made cunning and deceitful; for, seeing the effects of their early introduction to the mesmeric temples, they soon begin to aid the experimenter and embellish his future proceedings by giving all possible pungency to his experiments. It always happens that the more frequently a person has been mesmerised the more readily he falls into the desired state, and as his education continues he rises in his profession from the rank of a somnambulist to that of a clairvoyant. Which is most to be pitied, the deceiver or the deceived?

Some mesmerists think that in the temples of Delphi, etc., the priestesses were clairvoyants, and that the learned men of Egypt were well acquainted with these mysteries, and made good use of them in the temples of Isis. Are inquiries into such notorious impostures worthy the attention of the learned Professors of Modern Athens? The philosophers of the ancient city knew better; they set the right value on the Oracles, and, instead of adding darkness to the human mind by mysticism and sophistry, they dispelled the power of ignorance, imbecility, and cunning, by those brilliant inquiries into the principles of mind, for which we must ever be grateful. The Athenian philosophers taught their countrymen to search after truth by exercising the highest powers of the intellect. Some modern philosophers would teach us to yield up our reason to the heated imaginations of a few sensitive women, whom they would transform into priestesses for the revival of worn-out superstitions.—I am, &c. **LIONEL S. BEALE.**

REPORTS OF SOCIETIES.

STATISTICAL SOCIETY OF LONDON.

The Right Hon. Lord OVERSTONE, President, in the Chair.

A Paper was read by F. G. P. Neison, Esq., ON THE RATE OF MORTALITY AMONG PERSONS OF INTEMPERATE HABITS.

Mr. Neison commenced his paper by explaining, that the primary reason for collecting the data then brought forward, was to apply the results to Life Assurance operations, and he had consequently only included well-marked cases of intemperance, and not brought into his observations mere occasional drinkers, or what is termed generous or free livers. Throughout the whole of the Tables the mortality shown was frightfully high. In the 6111·5 years of life to which the observations extended, 357 deaths had taken place; but if these lives had been subject to the same rate of mortality as the general population of England and Wales, the number of deaths would have been 110 only, or less than one-third. At the term of life 21–30, the mortality was upwards of five times that of the general community; and in the succeeding twenty years, it was above four times greater; the difference gradually becoming less and less. An intemperate person of age

20 has an equal chance of living 15·6 years; one of 30 years of age 13·8; and one of 40 years 11·6; while a person of the general population of the country would have an equal chance of living 44·2, 36·5, and 28·8 years respectively. Some curious results were shown in the influence of the different kinds of drinks on the duration of life; beer-drinkers averaging 21·7 years; spirit-drinkers, 16·7 years; and those who drink both spirits and beer indiscriminately, 16·1 years. The results, however, were not more curious than those connected with the different classes of persons. The average duration of life after the commencement of intemperate habits among mechanics, working and labouring men, 18 years; traders, dealers, and merchants, 17; professional men and gentlemen, 15; and females 14 years only. But, perhaps, the most curious circumstance disclosed, was the remarkable similarity between the proportion of crime in the sexes to the proportion of deaths from assigned causes of intemperance. It was shown, that the tendency to crime in the male sex is nearly five times greater than that of the female, or, more strictly, in the relation of 336 to 1581; while the ratio of deaths to the population from assigned causes of intemperance at age 20 and upwards are in the relation of 8011 to 36,769,—a most remarkable agreement, the difference being under 2½ per cent. The greatest number of deaths which had taken place, according to Mr. Neison's facts, was from head diseases (nervous system), namely, 97, of which 57 were recorded under the head of "delirium tremens." The next in order was liver disease and dropsy, being 82; and nearly the same number from diseases of the respiratory organs. These results are very curious, as showing the very marked influence which intemperate habits have on the cause of death. It was shown, that among the population of England and Wales, aged 20 and upwards, the deaths from head diseases (nervous system) constitute only 9·710 per cent of the deaths from all causes at those ages; but among the intemperate classes they constitute 27·100 per cent., being nearly three times as great. It was also shown, that, in the general community, the deaths from diseases of the respiratory organs, at the same periods of life, amount to 33·150 per cent. of the deaths from all causes; while in the intemperate groupe they are only 22·980 per cent of all the deaths.

The following condensed abstract shows the ratio per cent. of deaths from different causes to the total deaths from all causes in England and Wales:—

Cause of Death.	1847.	Gotha Life Office.	Scottish Widows' Fund.	Intemperate Lives.
Head disease	9·710	15·176	20·720	27·10
Digestive Organs ..	6·240	8·377	11·994	23·3
Respiratory Organs	33·150	27·843	23·676	22·98
Total of the above } three classes .. }	49·100	51·396	56·390	73·38

Mr. Neison concluded by giving an estimate of the number of drunkards in England and Wales. From which it appeared that the number of males was 53,583; and females, 11,223: making a total of 64,806, which gives one drunkard to every 74 of the male population, one to every 434 of the female, and one in 145 of both sexes.

Mr. Kennedy then brought before the meeting a notice of the Census of the United States for 1850.

THE CHOLERA IN JAMAICA.—The following is given as the amount of deaths in six parishes in Jamaica, since the first appearance of the scourge: Kingston, 5400; St. Thomas-in-the Vale, 1300; St. Thomas-in-the-East, 1300; Spanish Town and St. Catharine, 2500; St. James, 3500; Trelawny, 2078: making a total, 17,178.

THE CHOLERA continues to be very prevalent in the south-western districts of the United States, and apprehensions are entertained of an outbreak of the epidemic at New York. In Jamaica, at the date of the last reports, the parishes of Westmoreland, Hanover, Blue Hole, Maybesfield, Mesopotamia, Blackheath, and Trelawny are infected. The second outbreak of the epidemic occurred first at Sandy Bay. At Blue Hole there were five fatal cases in one night; upwards of twenty were under treatment when the report was made. At Maybesfield and Friendship the scourge was exceedingly fatal, attacking every estate on the banks of the Cabaritto river. The disease also exists at the Mint and King's Valley, Grange-hill, Lincoln, Big Bridge, and Savanna-la-Mar. In Trelawny the disease is epidemic.

M E T R O P O L I S.
 TABLE showing the BIRTHS and DEATHS for the FIRST HALF-YEAR of 1851, the several DISEASES, BIRTHS and DEATHS of MALES and FEMALES, AGE at DEATH, the DISTRICTS in which the DEATHS occurred, the TEMPERATURE and METEOROLOGY, the INCREASE of POPULATION, and the HALF-YEARLY RESULTS.
 By Mr. B. SMITH.

DATE.	SPORADIC DISEASES.																BIRTHS.		DEATHS.		TOTAL BIRTHS.	TOTAL DEATHS.	BIRTHS OVER DEATHS.	AGES AT DEATH.				DISTRICTS.					BAROMETER.	THERMO-METER.		General Direction of the Wind.	Amount of Horizontal Movement of the Air.	Rain in Inches.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	Males.	Females.	Males.	Females.				0 to 15.	15 to 60.	60 and upwards.	West.	North.	Central.	East.	South.	Inchs.		Dry.	Dew Point.				Difference between the Temperature of the week and the same week on an average of 7 years.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1851.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														</

* Under the head "Zymotic Diseases" are included:—Small Pox, Measles, Scarlatina, Hooping Cough, Croup, Thrush, Diarrhea, Dysentery, Cholera, Influenza, Purpura and Scurvy, Ague, Remittent Fever, Infantile Fever, Typhus, Meiria (or Puertal Fever), Rheumatic Fever, Erysipelas, Syphilis, Noma or Cancer, and Hydrophobia.
 Under the head "Sporadic Diseases" 1. includes Dropsy, Cancer, and other diseases of uncertain or variable seat. 2. Tubercular Diseases. 3. Diseases of the Brain, Spinal Marrow, Nerves and Senses. 4. Diseases of the Heart and Blood-vessels. 5. Diseases of the Lungs and of the other Organs of Respiration. 6. Diseases of the Stomach, Liver, and other Organs of Digestion. 7. Diseases of the Kidneys. 8. Childbirth, Diseases of the Uterus, &c. 9. Rheumatism, Diseases of the Bones, Joints, &c. 10. Diseases of the Skin, Cellular Tissues, &c. 11. Malformations. 12. Premature Birth and Debility. 13. Atrophy. 14. Age. 15. Sudden. 16. Violence, Privation, Cold, and Intemperance. † A discrepancy of 9 occurs in the weekly returns, between the Deaths as to sex and the total number, for the week ending April 5. ‡ The means are here given for the whole year 1850.

From the foregoing Table it appears, that the Deaths in the 1st half-year of 1851 have exceeded those of the corresponding half of 1850, by 4046, or 5·8 per cent of the population in 1851. This increase ranges under all the heads of causes with the exception of childbirth, diseases of the skin, etc., malformations, and sudden death, under which a decrease is shown of 33, 6, 13, and 127 respectively. In zymotic diseases the increase has been 1503; in dropsy, cancer, etc., 46; in tubercular diseases, 588; in diseases of the brain, etc., 92; diseases of the heart, etc., 157; diseases of the lungs, 1111; diseases of the stomach, liver, etc., 139; diseases of the kidneys, 17; rheumatism, diseases of the bones, etc., 7; premature birth and debility, 132; atrophy, 113; age, 52; violence, privation, cold, and intemperance, 121.

The births of males have exceeded those of 1850 by 1185; while those of females only show an increase of 258. Hence the total births have preponderated over those of the 1st half of 1850, by 1443. The deaths of males show an increase of 2205, and those of females, 1832.

The increase of deaths this half year, at the age of from 0 to 15, has been 2687, being 67 per cent. of the whole increase; that at the age of 15 to 60, has been 917, or 23 per cent.; and from 60 years and upwards, 418, or 10 per cent.

In the various districts of the Metropolis, the increase of deaths in this half year of 1851 over 1850, has been as follows:—West 592, or 6·3 per cent.; North 831, or 5·9 per cent.; Central 759, or 5·2 per cent.; East 969, or 5 per cent.; South 895, or 6·9 per cent.

There has been a decrease in the excess of births over deaths this half year, as compared with that of 1850, of 2603. This fact, together with the large excess of deaths under the head of zymotic diseases, is to be accounted for when we remember the large accession of infantile population which accrued in 1850, immediately after the accession of cholera—so many victims to a cause which carries off the very young in a most melancholy disproportion.

MEDICAL NEWS.

THE HARVEIAN ORATION.—This annual tribute to the memory of the great discoverer of the circulation of the blood was delivered on Saturday by Dr. Spurgin, at the Royal College of Physicians, Pall-mall, East, in presence of the President of the College, a number of the Fellows, and several distinguished visitors, among whom we observed, the Bishop of Bangor, the Bishop of Lichfield, Sir Robert Inglis, Mr. Justice Maule, Mr. Justice Coleridge, Baron Dirskinck Hohnfeld, General Sir George Pollock, the Hon. Capt. Maude, Sir A. D. Croft, Lieutenant-Colonel Carpenter, Captain Jones, the Very Rev. Principal Lee, the Rev. Dr. Major, Rev. Dr. Hessey, Rev. Dr. Worthington, Rev. L. H. Russell, Rev. — Povah, Rev. J. Marshall, Rev. Robert Hayes, Rev. A. Williams, Rev. Augustus Clissold, Rev. J. E. Rowlatt, Rev. Oliver Walford, Rev. B. F. James, Rev. B. Maitland, Rev. William Mead; Drs. Brande, Lee, and Lemercier. The oration was, as usual, in Latin. Dr. Spurgin commenced his observations by a reference to the nature of truth, and to the aptitude and the insatiable desire of the human mind for its attainment. He next passed to a consideration of the two-fold means of investigating and ascertaining truth—the synthetic and analytic methods; and he then proceeded to point out the patient, careful, earnest character of the intellectual labours of Harvey, whose whole career afforded a model to guide the researches of all who seek to penetrate the secrets of nature. His memorable discovery of the circulation of the blood was one of those happy deductions of genius which change the face of science, and become the pregnant sources of a long train of new acquisitions in the regions of truth for the promotion of human happiness. In complete harmony with Harvey's discovery, the orator propounded a new view of the supply of blood to the muscular fibre of the heart, showing that that supply cannot be derived from the coronary arteries, as is universally taught, but that it flows through certain foramina in the cavities of the heart itself, to which all the coronary vessels stand in the relation of veins. In confirmation of this view, a peculiarity in the structure of the coronary arteries was pointed out, and medical history referred to, as affording an instance of a total obliteration of the passage through those arteries unattended by a cessation of life. The orator next offered some interesting remarks on the existence of a *vis formatrix* pervading the whole animal world, but differing in each individual species, to which he invited the attention of all who are interested in the advancement

of sound physiology. He expatiated on the extensive and varied knowledge essentially necessary in all who practise the healing art, and that high moral tone which should always accompany both its acquisition and exercise. The members of the College who have died during the past year were feelingly alluded to; and a well-merited eulogium was pronounced upon the late Dr. Haviland, Regius Professor of Physic in the University of Cambridge. In the peroration, some striking observations were made upon the present remarkable era in the world's history, and in the discoveries of science; among the latter were mentioned, that of Professor Faraday relative to the action of the magnet upon oxygen; and that of M. Foucault, demonstrating, even to visual perception, the rotation of the earth upon its axis. Dr. Spurgin, after having illustrated the great influence which this discovery has exercised over medical science, concluded his oration by some allusions to the great topic of the day—"the Crystal Palace," with its wonderful contents, the accumulated treasures of ages of industry. This Exhibition he regarded as the great glory of our peaceful era, and as the most striking pledge of the future progress of mankind.

ROYAL COLLEGE OF SURGEONS.—At a meeting of the Council on the 10th inst., Mr. John Flint South, of St. Thomas' Hospital, was elected President of the College for the ensuing year, in the vacancy occasioned by the retirement, in the prescribed order, of Mr. J. M. Arnott. Messrs. Cæsar Henry Hawkins and James Luke were elected Vice-Presidents. At this meeting, Messrs. Coulson and Dalrymple were introduced, and took their seats as members of the Council.

THE COLLEGE FELLOWSHIP.—During the past week there have been examinations in Classics, Mathematics, and French, at the Royal College of Surgeons. Several candidates presented themselves. The number will be greatly increased at the professional examinations in August next.

HUNTERIAN ORATION.—Mr. James Luke, Vice-President of the Royal College of Surgeons and Surgeon to the London Hospital, has been requested to deliver the annual oration in memory of the immortal Hunter.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College of the Court of Examiners on the 4th inst.:—

BOTTOMLEY, THOMAS ABBEY, Huddersfield.

BROWNE, SAMUEL, Royal Navy.

COLE, HENRY, Lewisham.

FOLKER, WILLIAM HENRY, Oxford.

HARRIS, WILLIAM HENRY, Barnstaple, Devon.

HALES, THOMAS, Fort Green, Staffordshire.

NUTTALL, FRANCIS, Bury, Lancashire.

PRICE, JOHN RICHARD, Holyhead, North Wales.

SAYERS, HENRY BOWLES, Bandon, Cork.

SHILLITOE, BUXTON, Hertford.

WILLIAMS, ROBERT, Hirnau, Montgomeryshire.

WINDUS, F. JOSEPH, Madras.

And on the 7th inst.:—

BULL, GEORGE, Lewes, Sussex.

CARTER, WILLIAM HUSKISSON, Chichester, Sussex.

GAMBLE, EDWARD PARKS, Cork.

HARRIS, GEORGE SMITH DELAVIL, Blackhall, Sevenoaks, Kent.

HAYNE, LEONARD HENRY JOSEPH, Royal Navy.

HURST, WILLIAM, Valparaiso, South America.

LEWIS, CHARLES FRANCIS, Pimlico.

MONEY, FREDERICK JOHN, Offham, Kent.

PEETE, THOMAS, Margate, Kent.

TOWNSEND, STEPHEN CHAPMAN, Coleridge, Devon.

At the same meeting of the Court, Mr. William W. Wildey passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date May 5, 1843.

THE BLACKWALL DINNER.—Despite the awful vaticinations of our Contemporary, and the Lord Burleigh-like shakes of the head with which he has replied to that mysterious personage "Q. in the Corner," (who so conveniently pops in when wanted,) the Blackwall dinner passed off without a conflagration of the Thames, or explosion of any infernal machine, professional or otherwise. Nearly one hundred gentlemen sat down to a first-rate white-bait dinner; and among them were included, as we are informed, the celebrated Jäger, of Vienna; Hannover, the great microscopist of Copenhagen; Brandis, of Marborough; Barral, the eminent physician of Lisbon; Pantaleoni, of Rome; and Robers, also a man of mark. Mr. James acquitted himself of his duties as Chairman

most admirably; and Mr. Green proposed the health of the visitors in a most graceful speech, which was responded to by Jäger. Mr. White Cooper has, we believe, retired from the somewhat onerous duties of Honorary Secretary; but we hope that many similar plots will be hatched, to the cementing of good fellowship, and the confusion of false and interested prophets.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 3:—

BLACKWELL, THOMAS SEAL, Staplehurst, Kent.

DAVIS, EDWARD WILLIAM STEPHEN, Merthyr Tydvil.

FLORANCE, AUGUSTUS, Isle of Portland, Dorset.

GABRIEL, JOHN TOM, Royal Navy.

HEAD, EDWARD ABRAHAM HANCOCK, Stoke, near Plymouth.

LUCAS, ROBERT, Burwell, Cambridgeshire.

ROULSTON, JOHN, Helperby-bridge, Yorkshire.

TATHAM, ROBERT GORDON, Newby-place, Poplar.

UNIVERSITY OF OXFORD.—The following degree in medicine was granted on the 5th instant:—Bachelor in Medicine, John William Ogle, M.A., Trinity College.

SIR BENJAMIN COLLINS BRODIE, BART., had the honorary degree of D.C.L. conferred on him by the University of Oxford on the 3rd inst.

ON Tuesday last, Mr. Wharton Jones was elected Fullerian Professor of Physiology to the Royal Institution of Great Britain. The appointment is held for three years.

QUEEN'S UNIVERSITY, IRELAND.—A meeting of the Senate of this new University was held on the 4th instant, in the Council Chamber, Dublin Castle, when the Lord Chancellor was elected the Vice-Chancellor of the Institution, and the following gentlemen as examiners in the medical sciences:—Cathcart Lees, M.D., in the Theory and Practice of Medicine; John Hamilton, M.D., in Surgery; H. Carlisle, M.D., of Belfast, in Anatomy, Physiology, and Comparative Anatomy; James Apjohn, M.D., in Chemistry; Alexander Fleming, M.D., of Cork, in Materia Medica, Pharmacy, and Medical Jurisprudence; George J. Allman, M.D., in Zoology and Botany; Thomas M'Keever, M.D., in Midwifery and the Diseases of Women and Children. Besides these, John Stevelly, LL.D., of Belfast, has been elected the Examiner in Natural Philosophy and Practical Mechanics; and Mr. James Nicol, of Cork, in Mineralogy and Geology.

OBITUARY.—On Wednesday, the 2nd inst., at St. Agnes Villa, Bayswater, Thomas Dean, Esq., surgeon, of Oxford-street, aged 55. —On the 2nd instant, Frederick Gilbertson, Esq., surgeon, Egham Hill, Surrey.—Lately, at Stone, near Berkeley, Gloucestershire, aged 83 years, Henry Jenner, M.D., nephew of the celebrated Dr. Jenner, the discoverer of vaccination; he was also the favourite pupil of the late distinguished John Hunter.

DEATH OF DR. MOIR.—We regret much at having to announce the decease of Dr. Moir, of Musselburgh, the "Delta" of *Blackwood's Magazine*. Moir was well known in the medical and literary worlds, where his reputation stood high. His decease, which was sudden, took place in Dumfries, at two a.m.

NAVAL APPOINTMENT.—Surgeon Edward Heath (1845) to the Firebrand steam frigate, on the Mediterranean station.

MEDICAL APPOINTMENTS AND VACANCIES.—A medical officer is wanted for the 4th medical district of the Brentford Union, lower side of Ealing, at a salary of 70*l.* a year, the surgical extras directed by the Poor-law Board, and 10*s.* each for ordinary cases of midwifery under orders given by authorities, being additional. Application to be made on or before the 15th instant to the clerk to the Board of Guardians at New Brentford. Mr. Wilkinson, of South Lambeth, has been elected the resident surgeon to the new House of Correction on Wandsworth-common. A house-surgeon is wanted for St. Ann's Dispensary, Rose-hill, Liverpool. Dr. Pollock and Dr. Hale have been elected physicians to the Westminster General Dispensary.

UNIVERSITY COLLEGE.—On the 5th instant, the prizes in the Faculty of Arts were distributed. Among these were Natural Philosophy, senior prize, E. W. Tarn; junior, 1st prize, A. Smith; 2nd ditto, E. H. Olive; Experimental, 1st prize, T. E. Morris; 2nd ditto, A. Haslam; Botany, silver medal, A. M. Tippetts; Zoology, silver medal, J. D. Tapin; Mineralogy, prize, C. J. West; Analytical Chemistry, gold medal, A. E. Fletcher; Geography, prize, E. W. Tarn.

MUNIFICENT BEQUESTS.—The Committee of University College Hospital, at a late meeting, received payment of 360*l.*, a legacy left by the late Mr. Cullen, of Maldon, Essex, and ordered it to be invested. The late Mr. Thackeray, of the Priory, Lewis-

ham, has bequeathed legacies, amounting to 200*l.* each, free of duty, to the Deaf and Dumb Asylum, the Asylum for the Blind, and the Royal Kent Dispensary.

THE number of cases of fever sent to the London Fever Hospital from the Holborn Union during the three months from Lady-day to Midsummer, was, from Pheasant-court, 39, 15 of which were from one house; George-alley, 7; Field-lane, 1; from other places, 11.

DR. LAYCOCK, OF YORK.—A handsome and well deserved silver tea-service has been presented to Dr. Thomas Laycock, of York, by the Associated Licentiates Extra Urbem of the College of Physicians, with the following inscription:—"Presented to Thomas Laycock, M.D., Physician to the York Dispensary, Lecturer on the Practice of Medicine in the York Medical School, etc., by his friends, the Associated Licentiates Extra Urbem of the Royal College of Physicians of London, in testimony of their very cordial esteem and regard, and in gratitude for the ability, energy, and zeal with which he has maintained their rights and interests.—Anno Domini, 1851."

MORTALITY IN THE METROPOLIS.—The amount of deaths in the week ending July 5 is over that of the same week of ten years by 130; but, making the necessary corrections for increase of population, the excess of mortality in the past week would be 43. This increase occurs under the heads scarlatina, typhus, and diarrhoea, or English cholera. Five cases from the latter cause are detailed as follow:—"In Marylebone, at 6, New-street, Dorset-square, on 30th June, the son of a porter, aged 11 months, died of 'cholera infantum (5 days).' In Marylebone, at 10, Townshend-road, on 3rd July, a coachman, aged 32 years, 'English cholera' (3 days)." In sub-district of Gray's-inn-lane, at 2, Field-terrace, on 24th June, the daughter of a plasterer, aged 2 years, 'English cholera (8 hours).' In St. Saviour, at 17, Russell-place, on 2nd July, the daughter of a scavenger, aged 7 months, died of 'English cholera (24 hours).' In Islington, at 11, Dorset-street, Ball's-pond, on 28th June, the son of a picture-frame maker, aged 1 year, 'English cholera (2 days) convulsions.'" Mr. Butterfield, the Registrar, mentions, with reference to this last case, 'that 'the smell from the drains of this and the adjoining houses is offensive; and the soil which accumulates, instead of being removed from the premises, is buried in the gardens.'" 114 deaths are ascribed to diseases of the respiratory organs, 22 over the corrected average, exclusive of phthisis, which was fatal last week to 142 persons. One death is attributed to the inhalation of "poisonous sulphureted hydrogen gas—apoplexy—paralysis of the left side." The registrar states that "the deceased entered a well to repair the pipe, the usual precaution of burning a candle having been taken; but though the experiment seemed to indicate that there was no danger, he lived only a few days after being taken out." Mr. Leonard, a registrar, observes:—"In addition to the fatal cases of small-pox mentioned in last week's report, at 22 Cecil-court, another has since occurred. The last of the three unvaccinated children in the family has died. All the children who had been vaccinated have had modified small-pox, and have recovered. If death had followed want of food or "the common necessities of life," from neglect, a jury would have found a verdict accordingly; but neglect of vaccination, and the abandonment of children to a loathsome and fatal disease, is among 'the things permitted.'" The numbers of deaths in workhouses during the past week have been 46 males and 48 females—94; military and naval asylums, 10 males; general hospitals, 27 males, 10 females—37; hospitals for special diseases, 1 male, 1 female—2; lying-in-hospitals, 1; lunatic asylums, 2 males; military and naval hospitals, 12 males; prisons, 1 male:—total in public institutions, 99 males, 60 females—159. The thermometer varied, during the week, from 57°·4 to 69°·4, yielding a weekly average of 62°·9, being a plus temperature over the average for the same week of ten years of 1·7. The general direction of the wind was N.E.

QUACK MEDICINES.—*Apròpos* to nostrum vendors and nostrum users, we copy the following appropriate letter from the *Boston Medical and Surgical Journal* of May 21, 1851:—

The Patent Medicine Business, and the Duty of Physicians with regard to it.—Mr. Editor,—I was pleased to see, in the last number of your journal, that the important question has been agitated by some of our district Societies, and that the movement has been seconded by some of the physicians in this city, as to whether it is not the duty of the physician to discountenance the manufacture and sale of patent medicines and nostrums, in a more decided and emphatic manner than has heretofore been adopted. As the matter now stands, the physician, though perhaps unwillingly, is forced into the necessity of aiding and abetting quackery, by purchasing his medicines and sending his recipes to shops

where patent medicines are made and sold, from the fact that all our apothecaries (with a few honourable exceptions) deal in nostrums to a greater or less extent. This trade in quack medicines is a dishonest business. It is not or ought not to be considered respectable, and it is the duty of physicians to discountenance it. It is a dishonest business, because by reason of false representations, and bought or forged certificates, it holds out to the invalid promises which cannot be fulfilled. The consumptive's last dollar is drawn from his pocket to purchase some worthless compound, which, in the simplicity of their hearts, he and his friends are led to believe will restore him to health—a hope founded on these false statements of the patent medicine dealer, but soon to be quenched in death. This is but one illustration—will any one say that such a business is honest? It is not a respectable business. The man who puts out his decoy-sign in some alley or lane of the city, and by false promises, in high-sounding advertisements, and by an assumed name, promises to cure "secret diseases" by secret remedies, in a short time, according to the price the too-believing unfortunate one is able to pay, is not called respectable. We do not call the man who aids and assists him respectable, and he does not consider himself worthy of respect. He is ashamed of himself. Is the manufacturer or dealer in such secret remedies, though in a more splendid establishment, and patronized by the regular physician, is he so far above the quack doctor that some of the censure may not apply to him? Certainly not. By misrepresentation, these nostrums are placed before the public: the apothecary, if not directly interested in their manufacture, buys a supply, saying, to relieve himself of the responsibility, that people *will* be humbugged, and he might as well have the profit of it as others. A poor excuse, truly. It is the duty of physicians to discountenance it, by all means in their power, because it is a dishonest business—(one reason in itself sufficient)—because it is or ought to be disreputable, and because, by combining the dispensing of medicines with the trade in quack nostrums, the Medical Profession is degraded by the connexion; the villainous compounds of a Townsend, a Brandreth, and a Moffatt, are vended at the same counter where the prescriptions of physicians are compounded,—the broad and comprehensive term "Pharmacy," being made to cover the whole. By the exertions of physicians, this state of things can be remedied. When apothecaries are aware that their shops will not be patronised and recommended by the Medical Faculty, as long as they continue to deal in nostrums, they will be discarded from their shelves, and the business confined to a few disreputable shops, having no connexion with the respectable drug business. These nostrums will be made and sold to some extent; but let us clear ourselves of all connexion with the traffic. This, I believe, is the state of feeling among the Profession generally,—at least, so far as I have any knowledge of it. By these remarks, I only hope to excite a spirit of inquiry among the members of the Profession, and I hope before long to see some decisive action taken in the matter, that the laws may no longer remain a dead letter on the books of the Massachusetts Medical Society.—A MEMBER OF THE MASS. MED. SOCIETY.

THE EYE FOUNTAIN.—This is a new invention, by Mr. W. B. Pine, of the Strand, and will be found of great use by persons afflicted with weak or inflamed eyes; also after a long study. It is in shape like a small vase, attached to which is a small air-pump, the use of which is to propel, through a very fine jet, a continuous stream of water or lotion against the eyes. We have much pleasure in recommending this instrument to the notice of the Medical Profession, and others, as a great improvement on the old method of applying lotions. We would also remind our readers, that the German oculists have for many years used a long tube for the same purpose, and with good effect to the patient.

EPIDEMIOLOGICAL SOCIETY.—Mr. Hunt read a Paper "On the Uses and Limits of Statistical Science as applied to the Study of Epidemics." The objects of this paper were to expose the fallacious influence of what are called medical facts, those especially which are published, either for the purpose of supporting any theory or mode of practice, or simply because they are interesting as being extraordinary or out of the common way; and also to show that these fallacies were susceptible of correction only by statistical inquiries, properly conducted and very extensively carried out; thus bringing the influence of an immense number of facts or observations to bear upon the false deductions which are liable to be drawn from the deficient evidence so frequently relied on. The Author adverted to a few of the difficulties belonging especially to the medical department of statistics, arising in the varying influences of morbid and therapeutic agents on the different subjects of disease. These difficulties were described as much enhanced in the department of therapeutics on account of

the impossibility of comparing in the same individual case the effects of treatment with the results of non-treatment. So that, in the opinion of the author, the statistical method of inquiry was not applicable to questions connected with the curative treatment of epidemics, although highly valuable in the prophylactic treatment, as well as the general prevention or arrest of the spread of epidemics. As a most important application of such inquiries, the subject of small-pox and vaccination was alluded to; and Mr. Hunt concluded with expressing a hope, that the Profession would not be backward in sending replies to the queries issued by the Society on these and other subjects. It was announced from the chair, that a paper "On the Nature of Epidemics," by Mr. Grove, of Wandsworth, would be read at the ordinary meeting, on Monday, August 4.

CHLOROFORM.—The new Act for the better prevention of offences, contains a clause with respect to chloroform, by which it is enacted, that if any person shall unlawfully apply or administer, or attempt to administer, to any person chloroform, laudanum, or other stupefying or overpowering drug, with intent to assist in committing a felony, every such offender shall be held guilty of felony, and be liable to transportation for life, or imprisonment with or without hard labour, for three years. Our legislators are not physiologists.

DEATHS in the Metropolis for the week ending Saturday, July 5, 1851.

CAUSES OF DEATH.	July 5.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	436	368	197	1003	8726
SPECIFIED CAUSES	435	367	197	1001	8682
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	162	39	13	214	2095
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	23	17	46	462
3. Tubercular Diseases. ...	70	120	12	202	1822
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses, ...	51	44	37	132	1072
5. Diseases of the Heart and Blood- vessels ... ..	...	19	14	33	283
6. Diseases of the Lungs, and of the other Organs of Respiration ...	56	27	31	114	843
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	12	25	21	68	643
8. Diseases of the Kidneys, &c. ...	...	11	...	11	74
9. Childbirth, Diseases of the Uterus ...	...	2	1	3	80
10. Rheumatism, Diseases of the Bones, Joints, &c. ... ..	...	7	...	7	45
11. Diseases of the Skin, Cellular Tis- sue, &c.	2	...	1	3	12
12. Malformations	2	...	...	2	16
13. Premature Birth and Debility ...	25	2	...	27	185
14. Atrophy	19	2	2	23	184
15. Age ... ..	...	...	40	40	372
16. Sudden	5	7	1	16	128
17. Violence, Privation, Cold, and In- temperance	15	39	4	58	366
Causes not Specified	1	1	...	2	44

TO CORRESPONDENTS.

We have to announce our intention to commence next week two series of highly-interesting and instructive papers—the one by Dr. Klein Grant, the well-known editor of "Hooper's Dictionary," on the "Medical Topography of London and the Surrounding Country within Ten Miles;" and the other, the long looked-for Reports of Dr. Frederick Bird on the "Diagnosis, Treatment, and Pathology of Ovarian Tumours."

Mr. Logsdon is thanked; his communication reached us too late for this week's Number.

THE PHARMACY BILL.

[To the Editor of the Medical Times.]

SIR,—I trust you will not allow this Bill, so injurious to the best interests of the Profession, to pass unnoticed. I am surprised to find your Contemporary intimate that he has heard no objections made to it.

Yours, &c.

A GENERAL PRACTITIONER.

[We have very serious doubts if the Profession should allow this Bill to become law, without protesting against that which will, with other great humbugs of the day, materially influence their interests. We shall fairly state our views, and hope to hear what the Profession themselves think upon the matter. We are not surprised that our Contemporary has heard nothing against Mr. Jacob Bell's Bill. Our Contemporary is rapidly ceasing to be a purely medical journal.]

[To the Editor of the Medical Times.]

SIR,—Allow me to animadvert on your last week's notice of my recent correspondence with the Secretary of St. Luke's Hospital. Had you done me the honour to have inserted my applications, it would have been evident to

your readers that no proposition calculated to render that Institution an arena for mere speculative experiments could have been fairly traced to them. My desire has been, permission to discuss a new theory for the melioration of the evils of insanity in any fitting place where my medical brethren would afford me the opportunity.

Your Correspondent seems so satisfied with the importance of place and its unapproachableness, as to forget all the deficiencies stated in your Number of the 3rd of May last respecting lunacy; but we bear them in mind, and quote a short extract from them:—"The pathology of insanity, notwithstanding the vaunted progress of medical science, remains still involved in deep obscurity, nor can we anticipate that any satisfactory light will be thrown upon the nature of this disease until the physiology of the brain itself is better understood." Baron Liebig has found nitrogen to be a component of the fat of the brain; such discovery in chemistry opens a field for physiologists to contemplate. The influence of nitrogen on the brain can be clearly traced—to reduce its hitherto unknown uses into a basis for remedial treatment, I would attempt upon the results of experience, with a view to establish a system of which our Profession is at present wanting; and have therefore sought the advantages of a candid and open co-operation with my medical brethren.

I have offered various propositions for their consideration, either to approve or to confute. The medical staff in St. Luke's Hospital, you observe, "is sufficiently strong to guarantee that the patients in that Institution are treated upon the most approved principles, and, no doubt, will be happy and ready to avail themselves of any discovery."

It may be asked in what way?

Should a discussion of the matter be permitted, and carry a conviction of its usefulness, based as it is on scientific principles, and devoid of injurious tendency, where will they find a more fitting place to test its powers than in St. Luke's Hospital?

Why do they procrastinate attention to a subject which you are pleased to say, for aught we know, may be valuable. I am, &c.

WILLIAM PARKER, M.R.C.S., L.A.C.

No. 2, Hamilton-square, Birkenhead, Cheshire.

WE have received many letters concerning our remarks upon nostrums, from one of which, from the pen of a distinguished and eminent provincial physician, we extract the following sentence:—"I was glad to observe your perfectly just remarks touching the nostrum for fever, which has been tried lately at the Metropolitan hospitals. I think the use of a nostrum at all for so large and remarkable a class of diseases as is known by the term 'Fever,' is empirical and irrational; and it makes one's head ache to think that the leading men named in the 'Medical Times' should know no better."

Dr. Warburg and others.—We cannot undertake to return letters and communications that we think unsuitable for publication in our Journal.

Mr. Lidderdale will observe that his recommendation has been acted upon.

We have referred Mr. Davenport's letter to the gentlemen in charge of the department of the Journal to which it has reference.

A Constant Reader.—We doubt if any private school is open for private dissection during the summer.

Mr. Lord, Manchester.—1st. If we were endowed with the gift of prophecy we might be able to answer our Correspondent's question; but no reasonable man would be disposed to risk his credit for discretion by speculating on the probabilities of a medical reform. The prospect of affairs is at this moment very unpromising. 2nd. We doubt it. 3rd. It is invidious to select for pre-eminence one among many good. 4th. No.

A Reader.—The remuneration, if duly summoned by the police authorities, is 3s. 6d. a visit up to nine p.m.; after that time and until six a.m., 7s. The account properly verified by the Station Superintendent should be sent to the Commissioners in Scotland-yard.

T. D. P.—We have taken our position, and intend to retain it. The Key-si-sing is a medicinal plant, and no secret remedy. Our Correspondent, upon a little consideration, will perceive how unwarranted are his strictures.

A Medical Student.—Burnett's Outlines, price one guinea.

Mr. Ball, Burslem, Staffordshire.—We are not acquainted with the decision referred to by the Secretary of this paltry Office. It is clear that a medical referee can have no legal claim upon an assurance office unless directly employed by its officers. If a printed form be merely presented to the medical man by his patient, with a request to fill it up, as is ordinarily the case, there can be no *locus standi* against the Office,—the patient, not the Office, being the employer. In a moral and equitable point of view, however, the surgeon in all cases should be remunerated by the office for whose interest it is that the certificate is given. We would place under ban every office that declined to remunerate the medical referee, and patronise only those that conducted their business upon more just and liberal principles.

Mr. Cookson.—1. The University of Edinburgh requires four years' study in either that University or in some other where the degree of M.D. is granted. One year's study may be compounded for by six winter months' medical or surgical practice of a general hospital, having eighty beds, and a course of practical anatomy. One year's study, at least, must have been in the University of Edinburgh. The same duration of study is required at the University of Glasgow; but three years may be passed in the medical schools of London or Dublin. Similar regulations obtain in King's College, Aberdeen, but the candidates must also hold the degree of M.A. Legally qualified medical men, five years in practice, may be examined on the strength of their diplomas. At Marischal College and University, also at Aberdeen, one year's study may be had in any medical school; the other

three in a University, one at least being at Marischal College. Medical men in practice, in addition to their diploma, are required to attend one winter's course of lectures at the University. At St. Andrews, four years' study is necessary; but University education is not demanded. Legally-qualified medical men are admitted to examination on the presentation of the diploma. 2. It is more probable that the authorities of Edinburgh or Glasgow University would admit the certificates of a respectable foreign University for the three years' study, as their regulations state "any university where the degree of M.D. is granted," and no limitation to British Universities is mentioned. This, however, should be clearly ascertained by correspondence with the Dean of the Medical Faculty, before our Correspondent commences his studies, as it would be very annoying to lose three years' time, for want of making the necessary inquiry. 3. The foreign Universities mentioned are all good, and the diplomas carry weight. Ten years' study is required for the diplomas of M.D. or M.C., at the University of Paris. Five examinations are undergone by the candidates. The winter session begins in November: the summer in April. The regulations at Montpellier and Strasburg are very similar. The Universities of Munich and of Heidelberg rank very high, and the examinations are stringent. The proceedings with respect to foreigners not intending to practise in Germany are less severe than those for the natives. Giessen and Erlangen are Universities of less repute, as their diplomas were formerly saleable. That fact has left a stain upon their graduates which it will require years to remove. Our Correspondent will find a very good account of foreign and British Universities in the last "Medical Guide and Almanack," published by Renshaw, in the Strand.

[To the Editor of the Medical Times.]

SIR,—Having observed in your excellent journal the great attention you invariably pay to subjects connected with medical ethics, I respectfully ask your opinion in the following case:—T, a medical gentleman, now in a town, formerly practising in a village four miles and a half removed from the town where he now practises, in May, 1848, advertised for an assistant to attend his country practice. B applied, and was engaged; and gave such satisfaction, that, in 1849, T gave B an advance of salary. All went well till June, 1850, when T very abruptly told B he could not afford to pay B the salary, and gave him notice to leave (this was in the middle of the quarter) at the end of the quarter. B had, during his stay in the village, given pretty general satisfaction, and had been frequently solicited by a large majority of the parishioners to commence practice for himself. This B refused to do until he had informed T that he intended to, if he could not purchase the practice from him (T). T hesitated some time; at last asked a premium of most extortionate character, which was refused by B, but, in return, offered what he thought a very fair premium, or so much per cent. per annum on the amount of the book debts for a certain number of years. This T refused; and B then agreed to submit the matter to the rector of the parish, who immediately said he considered B had done all a gentleman could do and as much as could be expected; and strongly recommended B to commence practice, promising him his support, which he has ever since received. B consequently did commence practice, in opposition to the party to whom he was formerly assistant.

Ought T to scandalise B to his medical and private friends, and loudly proclaim B's conduct disgraceful in the extreme? Also, is it gentlemanly of T to give in a medical bill, and, on being asked by the party for particulars, to send in a second bill (a smaller sum) stating, that the former bill was B's charges (while in T's service, B supposes), when B had been six months out of T's service. Your answer will be anxiously looked for in this week's Number, and will greatly oblige, Yours, &c., VERITAS.

P.S. Could B not raise an action against T in this case? B was not bound by his agreement not to commence practice.

[As we understand the facts of the case from the letter of "Veritas," they are these:—T engaged B as an assistant to attend on T's patients in a certain village four-and-a-half miles from his house. B and T were mutually satisfied with the conduct of each other, till T found B was likely to supplant him in the confidence of his patients, and he then endeavoured to get rid of B. B, availing himself of the hold he had obtained of T's patients, endeavoured to compel T to dispose of the practice to him, i. e., to B; and, failing, commenced practice in opposition to T. Our opinion is decidedly unfavourable to B's case. B was paid for his services; and we think, that had B acted in a highly-honourable manner, he would have endeavoured, on all occasions to make T's patients,—i. e., the patients of that man by whom he was paid,—repose with confidence in T, and never have listened to the entreaties of those who urged him to endeavour to take as his own, patients confided to his care by another. As to T not having compelled B to sign a document containing a clause by which B should be prevented practising within a certain number of miles of the village in which B was assistant, it has always appeared to us that such document indicated a want of confidence in the gentlemanly and honourable feelings of the assistant. The existence of the paper involved the suspicion that the assistant might avail himself of the trust reposed in him to remove to himself the confidence of his employer's patients, which is a breach of trust. We strongly advise B not to risk an action, or his character will not shine the brighter.]

COMMUNICATIONS have been received from—

Dr. WARBURG; Mr. BALL, of Burslem; Mr. LORD, of Manchester; A READER; A CONSTANT READER; MISO-NOSTRUM; Dr. J. B. THOMPSON, of Suffolk-place; Mr. DAVENPORT, of Great Russell-street; ANTI-HUMBUR; A GENERAL PRACTITIONER; Dr. HANNOVER, of Copenhagen; Dr. FREDERICK BIRD, of Brook-street, Grosvenor-square; Mr. EVANS, of Oxford-street; Mr. PARKER, of Birkenhead; Mr. LOGSDON, of John-street, Chelsea; Dr. SNOW BECK, of Langham-place; A MEDICAL STUDENT; T. D. P.; A READER; CIVIS; A HARD-WORKED AND BADLY-PAID GENERAL PRACTITIONER; Dr. KLEIN GRANT, of 49, Upper Gower-street; Mr. COOKSON.

ORIGINAL LECTURES.

LECTURES

ON

DIGESTION, RESPIRATION, AND
SECRETION,GIVEN AT THE ROYAL INSTITUTION,
TO THE MEMBERS, AND TO THE PUPILS OF
ST. GEORGE'S HOSPITAL.

By H. BENICE JONES, M.D., F.R.S.,

Physician to St. George's Hospital.

[Continued from page 4.]

ON MECHANICAL AND CHEMICAL ACTIONS
IN DIGESTION.

IN my lecture to-day, gentlemen, I shall endeavour to take a more connected view of the subjects of digestion and nutrition. If all vegetables and all animals contain the four classes of substances of which I have so often spoken,—if it be impossible, without great care and preparation, to separate these classes from one another,—if, for instance, it is most difficult, and almost impossible, to obtain pure starch and pure albumen,—if Providence has carefully collected together in vegetables all those different constituents of which we are composed, it follows that the chemical law of digestion,—that each class of substances which exists in our bodies must be present in our food,—cannot be easily broken. We have not to bring together these different compounds,—the albuminous, the non-nitrogenous compounds, the salts, and the water,—these are already brought together in nature. The plant, of which I spoke in my first lecture, not only unites together the elements into organic compounds, but it does much more than this; it carefully collects even the inorganic salts into compounds which man requires for his support. Why, then, need we pay much attention to the chemical composition of our food? If all substances chemically contain nearly the same compounds, then, so far as regards the supply of the elements of the body, it can matter but little what we eat. If chemical composition alone were considered, grass, and almost all organised substances, would give us the elements and constituents of which our bodies are composed.

I have already mentioned, that the mechanical law is quite as important as the chemical law; and, in relation to this mechanical law, the chemical composition of food becomes of considerable importance, and has a great influence on the extent to which any substance is capable of subdivision. So far as the chemical composition bears upon this capability, so far does it become of importance in enabling us to determine the proper food of man; but, as regards the actual bringing together of the different constituents of which we are composed, for this, provision is so well made in nature that no art is required for effecting it.

The great object I have had in view in my lectures on the saliva, on the gastric juice, the bile, and the pancreatic fluid, has been to show the influence of these agents on the subdivision of the food,—the reduction of the food to that state in which it could be absorbed. The object of the processes of digestion is not to add anything to the food, but to enable the food to pass into the body. That part of the food which passes into the body, and becomes a part of its constituents, entering into the formation of the different structures and organs of the body—that part is truly and strictly called nourishment. The water, the salts, the nitrogenous substance, the non-nitrogenous substance, whatever it be, which enters into the composition of a cell, or any portion of the body, is nourishment. But, in addition to such substances, there are many which cannot be shown to enter into the composition of the different cells or organs of the body. Thus, substances can be divided into those which enter into the actual structure and composition of the body, and those which, though they are digested and pass into the system, do not take part in the formation of the structures of which the body is composed; these latter substances pass into the body, circulate in the blood, are used for various purposes in the system, but do not form any bodily structure. Starch, sugar, acids, and

alcohol have been, in popular language, also called nourishment. Professor Liebig has made a division thus: he has called the albuminous substances the plastic elements of nutrition, and the non-nitrogenous substances (starch, sugar, alcohol, and even fats,) elements of respiration. This division, it appears to me, is, by no means, an expression of the whole truth. If, as I have mentioned, the non-nitrogenous substances, the salts and water, enter into the composition of the cells, structures, and tissues of the body, forming part of the brain, the lungs, the liver, and also of the bones, these may be called plastic elements just as much as albuminous substances. Moreover, it is in the highest degree probable, that the non-nitrogenous substances, which contain carbon, hydrogen, and oxygen only, are not, as Professor Liebig considered, the sole elements of respiration. There is every reason to believe, that the oxygen of the air not only acts upon sugar and on the acids, but also upon the salts and the albuminous substances, though not to the same degree; it is for this reason that I think Professor Liebig's division does not represent the whole truth; and it seems to me desirable that a division, which more accurately represents the truth, should be adopted. The ingredients which become really a part of the body, I shall call building materials, or radical nourishment; and the starch, sugar, acids, and alcohol, which cannot be proved to enter into the composition of the cells of the body, I shall call protecting matter, or conservative nourishment; and in my future lectures I shall speak of these substances in this way. It is absolutely necessary that the distinction which Professor Liebig drew should be made clear and decided; that some portion of the food forms a part of the bodily tissues, and that another portion does not become part of the organs at all, but serves the purposes of respiration, and of protecting other substances which exist in the body from the action of the oxygen of the air. This most important truth, which Professor Liebig first saw with perfect clearness, must be fully admitted; but the division which he gave, that nitrogenous substances were the plastic elements, and that the non-nitrogenous organic matter constituted the elements of respiration, must be modified. As varnish or paint protects wood or iron, of which a building is made, so it is certain that food may be taken which never forms a part of the body, but is of the greatest use, because it serves as fuel, giving rise to carbonic acid, to water, and to heat, and protecting all the organs from injury from the external air.

The building materials and the protecting matter come into the stomach perfectly finished, as regards the constituents of which they are composed; the food is never made more radically or more conservatively nutritious in the stomach than it was when taken into the body; but in the stomach chemical and mechanical actions go on for the purpose of subdividing the food, and making it capable of passing into the system. In the stomach, I may say, there is no need of any addition; but a process of division is all that is requisite there. Albuminous substances are as albuminous when they exist in milk (for instance) as when they pass into the blood. So also regarding the substances which serve for the purposes of respiration: they go into the body fit for the purposes for which they are intended, and undergo but slight changes. Starch has to be slightly changed to make it capable of being absorbed; if it were not for the change it would remain insoluble, and could never pass into the system. It could not protect the structures from the action of the inspired oxygen. The difference, then, between chyme and chyle, which has been made of so much importance, is much less than has been supposed. The difference is chiefly the result of subdivision. In the chyme the food is in masses, and in the chyle it is very finely divided. It is very frequently made perfectly soluble, but, probably, perfect solution is not absolutely necessary. Some recently repeated and very beautiful experiments seem to show, that particles of matter in the very finest possible state of division, short of solution, can pass into the human body. Experiments were made with wood-charcoal ground to the very finest possible powder, and almost impalpable precipitates were formed, as for example, Prussian blue; this, when given as food, was found to pass into the lacteals, which seems to show that the very minutest grains of matter can penetrate into the chyle, and thus being absorbed, can pass into the system. It is possible also, that substances which we use as medicines, such as calomel, or even metallic mercury, being in a state of very minute division, short of actual solution, may pass into the

system. The great difference, then, between the chyme and the chyle is, that the process of division is carried as far as possible in one case, and not nearly so far in the other; and all the chemical differences between the chyme and chyle will be found to be the result of chemical changes, which assist in the subdivision of the food.

Some late beautiful experiments of M. Bernard's seem to show, that certain substances pass into the blood in one direction, and others in another direction: thus, that some go through the lacteals and thoracic duct, so immediately into the veins of the general circulation; but that others are absorbed by the veins of the stomach and intestines, and have to pass through the liver before they proceed to the general circulation. This is most interesting, and worthy of the greatest attention; but I cannot do more than state the fact, that when sugar was injected into the stomach of an animal through a fistulous opening, and the animal was killed some hours afterwards, no trace of sugar could be found in the chyle. Though it was injected in solution (and sugar is perfectly soluble in water) no sugar was found to pass through the lacteals into the chyle, and directly into the thoracic duct; but it went into the veins of the intestines and into the liver, indicating that the greatest portion of the sugar which we take into the body passes through the liver into the general circulation, and not by the lacteals into the thoracic duct, and from it into the venous system. These experiments are most important; they are not as yet completed, but they are sufficient to show that important facts may yet be discovered by experiments on animals; and the progress of the physiology of digestion and of nutrition will hereafter to a great degree depend on a union of chemical and anatomical skill and knowledge directed to the perfecting of such experiments.

The digestibility of any substance cannot then be conjectured from its ultimate chemical analysis. The form, so to speak, in which the substance occurs—in which the particles of the substance are arranged, is quite as important, in regard to the digestibility of a substance, as the elements themselves. If I take, for instance, this dried tendon, or the mass of leather before me,—nothing can be more certain than that its analysis will be precisely the same as the analysis of the jelly formed from the same leather which you here see. If I burn the leather and the jelly, and analyse them, I shall find they contain the same elements in the same proportions. Both substances will retain a small quantity of ash and a minute trace of albuminous substance, which can never be separated from them entirely. Yet, how different are the two substances! How indigestible is the leather, and how easy of solution is the gelatine! The latter has gone through a certain change, which, chemically, has but slightly effected it; but, mechanically, it has undergone a great change. It has been sub-divided, and thus it has become soluble and digestible. The ingredients and the nutritive properties of the two substances are identical; yet see what a difference is produced simply by mechanical action! See how much, in this instance, depends upon the form, and how little, comparatively, depends upon the chemical elements which are present! So, also, if I take the most tender and the most tough meat, the chemical analysis would give precisely the same elements in each; but how different the digestibility of the two!—the one will be acted upon easily, and will cause no indigestion in the weakest stomach; while the other will produce pain and irritation, and perhaps severe indigestion. So it is with vegetable food. I might take the finest flour and the coarsest bran. Ultra-chemists have advised bran to be eaten, because it contains more nitrogen than the finest flour. It is true, that coarse bran does contain rather more nitrogenous substance than fine flour; but its mechanical state must be taken into consideration, even more than its chemical state. The common sense of the poor in this respect has surpassed the uncommon knowledge of the chemist; for they prefer the whiter bread for digestibility and nutritiveness to the brown and coarser kind, because it admits of being far more easily divided, and is, therefore, more entirely absorbed. So, also, if I take the heaviest bread and the lightest bread, the same difference in capability of being sub-divided will be observed. If I divide a quantity of flour into two portions, and cause one portion to be well fermented, and the other badly fermented, one would come out the lightest bread and the other the heaviest dough. The chemical analysis would show the two to be nearly alike—nearly the

same relative proportions of carbon, hydrogen, oxygen, nitrogen, sulphur, and ashes, would exist in each loaf; but how different would be the action of the stomach on the two! One would be easily digested; the other, with the greatest difficulty. In short, the only true test of digestibility ought to be arrived at by determining the degree in which the ingredients of the food are capable of being finely divided, so as to enable them to pass into the blood; and by far the most important question regarding the chemical composition of food is in relation to this capability of division.

The nutritiveness of food has been continually confounded with its digestibility. There is a great difference between the two. It is quite true that, to be nutritious, food must be digestible; but it does not follow that all food that is digested must of necessity be nutritious. It is altogether incorrect to suppose, as has been supposed, that the quantity of nitrogen in any organic compound bears any relation to the nutritive power of that substance. The former theory, by which the nutritiveness of food was estimated, had relation especially to carbon. It was thought that, if any kind of food was analysed, and found to contain much carbon, it must, therefore, be very nutritious. This theory arose chiefly from considerations regarding the composition of fat, which was known to be a very nutritious body, containing no nitrogen, but a large quantity of carbon. Very soon after the albuminous substances were analysed, the idea that the amount of carbon indicated the nutritiousness of any substance was given up. It was known how important the albuminous substances were for nutrition; and then it was said that nitrogen, which always exists in large quantities in these substances, furnished the index and the key to the nutritiveness of food. But even this fails just as much as the former test did. If nitrogen were actually the measure of the nutritiousness of food, these substances, like carbonate of ammonia, which contains 29 per cent. nitrogen, with carbon, hydrogen, and oxygen, ought to be nutritive, of which, however, there is no proof. Urea also, which contains no less than 47 per cent. of nitrogen, should be highly nutritious, if this theory were correct; it should, indeed, be the most highly nutritious food; but, on the contrary, we know it to be an excrement, and that it is of no use whatever as nutriment. The truth is, a substance which contains a great quantity of nitrogen *may* be most nutritious food. The same may be said also of a substance containing no nitrogen, such as fat. It is possible, also, that substances containing a large quantity of salts may be most nutritious food. Generally, the fact may be stated thus:—that substance which is sufficiently organic, and contains most of the principle which the body most wants, is the most nutritive food. If the body is most in want of nitrogenous substances, then highly albuminous substances will be the most nutritious food; but, if it contains a sufficient supply of nitrogenous substances, and an insufficient supply of non-nitrogenous bodies, then that vegetable or animal substance containing the latter, will, for the time, be most nutritious. One might even go to the language of political economy for a statement regarding the most valuable food, and say, that the most valuable and nutritious food is that of which there is the most want and the least supply. Even if there had been an insufficient supply of salts,—phosphate of lime, for instance,—then food containing most saline matter would be, for that time, and for that time only, the most nutritious. After long droughts, or after a long journey in the Desert, it is not impossible that substances containing most water would be the most nutritious food.

All nourishment must be finely divided, that is, it must be digested, before it can pass into the body; but it is by no means the fact, that all food that is digested must be used for the repair of the organs of the body, or for the purposes of respiration. More food may be taken and digested than is requisite for the uses of the body. Such food, then, becomes no longer a nutriment, but an element of disease; it even acts as a slow poison, and, if long continued, might produce death. The overloading of the system with food gives rise to symptoms which are first classed with indigestion. This partly arises from the fact, that indigestion frequently accompanies the absorption of too much food. The system has already more food than is requisite for the supply of the wants of the body; the stomach tries, if I may be allowed the expression, to stop the supplies by leaving the food in such a state that it cannot be absorbed. The more proximate

cause of indigestion is seen in the state of the fulness of the vessels, in the laws which regulate the absorption of fluids, and the phenomena of endosmosis. The more full the vessels the slower is the passage of the food into them. The food remains in the intestines unabsorbed; changes take place in it whilst in the intestines, and thus indigestion arises in consequence of the food being delayed there; the quantity taken into the system is thus lessened, and the relation of the supply to the wants of the body is for a time restored.

But, to return to the simile I have used,—that of the building materials of a house. Digestion is the conveyance of the requisite quantities of bricks, mortar, wood, stone, and paint, to the spot where the house is to be built; nutrition is the employment of these materials in the formation of the structure itself, and in the defence of the house from the external air. The protective nutriment consists of various substances, such as starch, which, you have seen, is changed into sugar and then into lactic acid, and also into acetic acid and butyric acid, and, lastly, into carbonic acid and water, giving rise to the production of heat in these changes. Fatty substances, alcohol, and other non-nitrogenous organic substances, belong also to this class of protective nutriment. More rarely, also, probably, albuminous substances may be used in the body for the purposes of respiration, being acted upon by the oxygen of the air. The radical nourishment, the building materials which constitute the cells and structures of our body, consist of water, salts, fatty matters, containing carbon, hydrogen, and oxygen, and of albuminous substances, containing carbon, hydrogen, oxygen, and nitrogen. If these materials are not brought to the building by digestion and circulation, no structure of the body can be formed. If the food is digested, it may happen not to be used for the nourishment of the body. More building materials may be brought together than are wanted for the repair of the structure. Inasmuch as the old structure must be removed before the new building occupies its place, it is clear that the supply or consumption of the food must be proportioned to the waste of the tissues. The food must bear, or should bear, a direct proportion to the work or labour done by the muscles of the body, and not only by the muscles, but by each portion, each tissue of the body, for every part is undergoing unceasing change, and the food should supply new substances according as the old material is taken away.

I have said that, as regards digestion, chemistry is chiefly of importance in relation to the solubility or subdivision of the components of the food. Chemistry is of great importance also in nutrition, because it enables us to regulate the balance which should subsist between the waste and the supply, between the quantity taken in and the quantity thrown out of the body. Let me take first the albuminous substances which may be considered to be daily wasted. We will suppose that a certain amount of labour of mind or of muscle is done in a day, and that by such labour, and the changes consequent upon it, 220 grains of nitrogen are taken out of the body. This quantity of nitrogen, then, must be replaced in the twenty-four hours. My diagram shows the quantity of different kinds of food which must be taken in order to replace this daily waste of nitrogen.

Quantity of Nitrogen in different kinds of Food.

In 24 hours nitrogen, about 220 grains wanted. This quantity exists in

Albumen	3 ounces.
Eggs	11 "
Roast flesh	15 "
Boiled veal	16 "
Wheat bread	27 "
Boiled white beans	27 "
Boiled brown beans	29 "
Boiled peas	43 "
Rye bread	47 "
Boiled rice	300 "
Boiled potatoes	300 "

The Table is only an approximate one; but it is sufficient for my purpose. Three ounces of albumen, (the white of egg,) as you will see, will give 220 grains of nitrogen; but of eggs, as a whole, eleven ounces must be taken to furnish the supply. If I take potatoes, however, as much as 300 ounces will be required to give the requisite quantity of nitrogen to supply the wants of the system. As far as nitrogen, then, is concerned, if a man lived upon potatoes alone, he would have

to eat 300 ounces in order to replace the daily waste. But nitrogen is not the only element which is wanted; a certain quantity of carbon is each day thrown out, amounting to about 7 ounces, or about 26 ounces of carbonic acid. My Table shows what quantity of different kinds of food should be taken to supply this waste.

Quantity of Carbon in Different Kinds of Food.

In 24 hours carbon about 7 ounces wanted. This quantity exists in,—

Dry arrowroot	16 ounces.
Wheat bread	33 "
Rye bread	36 "
Boiled green peas	53 "
Boiled potatoes	54 "
Boiled beans	60 "
Boiled rice	63 "

Referring to potatoes, you find, that 54 ounces are sufficient for this purpose. What then happens? If, as I have supposed, a person lives upon potatoes alone, and if he takes a sufficient quantity to supply the waste of nitrogen, he takes much more than is necessary to supply the waste of carbon; 300 ounces being required in one case, and only 53 in the other. If he takes only a sufficient quantity to supply the carbon, weakness will be produced from a want of albuminous substance; but if he takes sufficient for the albuminous substance, the system will be overloaded with carbonaceous matter, and disorder, if not disease, will result. Let us take bread, which may be regarded as the ordinary food, "the staff of life;" we find that about 33 ounces are required to supply the waste of carbon, and 27 ounces to supply the waste of nitrogen. This is so near an approximation, that the difference is of far less importance than in the previous example. If a man takes sufficient bread for his nitrogenous wants, he takes rather more than he requires to supply the consumption of carbon; and if he takes the requisite quantity for the supply of the carbon, he has very little more than he wants for nitrogen. Hence it is that man can live much better upon bread alone than upon potatoes alone. A similar Table might be drawn up for the salts, which would show, that in this respect also wheat is the preferable food, and that it can much better supply the four classes of substances which are required than can potatoes.

Thus, then, I have endeavoured to explain to you the most important agents which effect the digestion of the food. I have brought before you also some of the chemical actions which occur in digestion, and I have indicated the way in which chemical composition may affect nutrition. In my first lecture I showed that food in general contained water, salts, non-nitrogenous substances, and nitrogenous matter. The same four classes are found to exist even in the secretions of which I have spoken,—the gastric juice, the pancreatic juice, the saliva, and the bile; even in these I have been careful to point out the constant union of these classes of substances. I have shown that the saliva and the pancreatic juice effect the solution of the starch, converting the starch, which is insoluble, into a soluble substance, which can serve the purposes of life. I have shown that the gastric juice dissolves albuminous substances, and, being highly acid, dissolves those salts which are soluble only in dilute acid. I have shown that the bile and the pancreatic fluid (and I should have added conjointly with these the intestinal fluid, the secretion from the surface of the intestine) divide the fatty matters which are melted at the temperature of the body, and render them more capable of absorption, by making them into an emulsion,—the very finest possible state of subdivision in which they can well exist. The action of these agents on the different components of our food is totally different from the action of any acid or alkali alone. It is different, moreover, from the alternate action of acids and alkalies, though this alternation is found to occur; thus the food is subject in the mouth to an alkaline action, in the stomach to an acid; then in the duodenum to an alkaline fluid from the liver and pancreas, and in the cæcum to an acid; in the blood, again, to an alkaline fluid; and in the muscles to an acid. These alternations are most remarkable; but digestion is by no means to be considered as a simple or alternate chemical action of acids and alkalies. You will get a far truer view of digestion by comparing it to the process of fermentation; by considering the active agents as albuminous substances which effect a change like that which yeast can effect, of which I have so frequently spoken. The ferment in the saliva differs from that of the gastric

juice as much as the ferment in the pancreatic juice does from the highly complex organic substance in the bile which so rapidly undergoes change. The acids and alkalies may direct fermentation, may assist the action, (and in this respect they are, without doubt, of very great importance); but you will err far more by taking the acids and alkalies as the efficient agents in digestion, than if you suppose that there are different ferments, each of which has its peculiar function to perform. It will help you but little, if it all, to call this fermentation catalytic action or contact action. I am unable to satisfy you or myself as to the nature of the action even of the yeast out of the body; far less can I satisfy you as to the definite nature of the action of these ferments in the body. But, though we cannot satisfy ourselves fully, we may investigate the circumstances attending their action; and it is by such investigations and inquiries that we shall ultimately obtain the knowledge which we require. We know that yeast, when boiled, gives rise to a different action from that which it would otherwise set up. If left to itself at a temperature between 70° and 80° it changes sugar into alcohol and carbonic acid; but, if boiled, it gives lactic acid. So also with the ferments of the saliva and the gastric juice. The variations of these ferments probably give rise to the various forms of indigestion. The albuminous food may, in consequence of these changes, remain itself unchanged. It may thus give rise to a mechanical irritation in the stomach; and, the more irritable the mucous and muscular membrane, the more the undissolved food will be felt. Far more frequently and seriously does the altered ferment, by its action on non-nitrogenous food, on starch, sugar, and fat, produce substances which excite irritation. It is thus chiefly that the errors of fermentation become apparent; just as in the case of fermentation out of the body the alteration of the yeast became apparent in the different products formed from the sugar.

A too alkaline state of the intestines, without doubt promotes the formation of lactic acid from the starch and sugar of the food. If lactic acid is delayed in the intestines by the further action of the ferment, or possibly even if the ferment is changed in the intestines, then lactic acid gives rise to butyric acid, just as you may remember, in my lecture on the changes of non-nitrogenous substances out of the body, I mentioned a case in which casein, and sugar, and lime, when mixed together, in one stage gave rise to lactic acid, and in another to butyric acid; and that, when Professor Scherer went to examine the products which he hoped would contain butyric acid, he found nothing but acetic acid. Just so within the body, by different states of the ferments, or by slight changes in the duration of the action or of the alkaline or acid substances which direct the fermentation, different results will be produced. If the contents of the bowels are not removed by absorption, but remain there, or if the ferment is altered, the lactic acid and water will give rise to butyric acid, carbonic acid, and hydrogen. The carbonic acid and the hydrogen distend the intestines, and give rise to painful forms of indigestion, and the hydrogen, at the moment of its evolution, may re-act on the saline substances in the intestinal canal. Thus, from the sulphates, by the reducing action of the nascent hydrogen, sulphuretted hydrogen may be set free, and may be found to exist in the intestinal canal. These are some of the changes which may take place when the ferment is altered.

Moreover, if the intestinal fluid becomes highly alkaline, the albuminous food itself may evolve sulphuretted hydrogen gas. This happens in cases of decomposition in the body. Catheters, when introduced, will give rise, in the case of alkaline urine and decomposition of mucus, to sulphuretted hydrogen in the bladder, which will act upon the silver of the catheter. There is good reason to think, that the salivary ferment which ordinarily changes starch into sugar, may, by some change, convert sugar into acetic acid and carbonic acid; and it is possible that, when this is the case, a state of stomach is produced which admits of the growth of the *sarcinæ ventriculi*. But, on this subject, further experiments are required, more especially as to the effect which is produced by retarding the escape of the digested food from the stomach.

Here, then, I must bring these lectures on digestion to a close. If I have succeeded in bringing before you clearly the facts which we owe to animal chemistry,—if I have shown you that we must no longer be content with the statement that “the stomach is a stomach,” and that “digestion

is a vital process”—if I have shown you that actions which can be proved to take place out of the body by the agency of chemical forces, take place in the body by the agency of the same forces, provided the circumstances are the same, do not, on this account, think that I degrade or under estimate the importance of digestion by trying thus to explain it. There is no doubt that temper always, and even morality sometimes, may depend upon the state of the stomach. Moreover, a sound mind can only dwell in a sound body, and a sound body can only be formed where the quantity and quality of the food are so adapted to the state of the stomach and the wants of the system, that healthy digestion and sound nutrition can take place.

In my next lecture I shall proceed to the Blood, which forms the connecting medium between the food and the respiration.

ORIGINAL COMMUNICATIONS.

REPORTS OF PRACTICE, ILLUSTRATIVE OF THE DIAGNOSIS, TREATMENT, AND PATHOLOGY OF OVARIAN TUMOURS.

By FREDERIC BIRD, M.D.,

Lecturer on Midwifery and the Diseases of Women at Westminster Hospital.

A simple record of clinical experience and observation will probably constitute the contents of these papers; and, although I may assume an egotism which I trust I have not, I shall rather do so than tire by the prolixity which frequent reference to the writings of others would occasion. The morbid ovary, alike in its diagnosis and treatment, has yet to be perfectly understood, and the only useful contributions to this end must be drawn more from practical examination than from speculative opinion. And if I hesitate to extend these remarks by quotations which might be often valuable, I am still more unwilling to devote time and space to the consideration of certain opinions of doubtful worth that have been recently urged against the treatment of ovarian tumours by excision. With scarcely more than a single exception, the objections to such form of practice have emanated from authorities good in other matters, but unimportant in this; and there still remains the opposition of a few “who appear to value themselves upon a perpetual scepticism; upon believing nothing but their own senses; upon calling for demonstration where it cannot possibly be obtained, and sometimes upon holding out against it when it is laid before them; upon inventing arguments against the success of any new undertaking, and, where arguments cannot be found, upon treating it with contempt and ridicule.” The cases I have to record will, I believe, furnish a sufficient argument for the present, and time, the great friend of truth, will provide for the future.

Whatever may have been advanced to the contrary, experience has shown that therapeutic agents are powerless to remove, or even to retard, the progress of ovarian disease, while it has too often afforded instances in which the long-continued use of active remedies, failing to effect good, have, by deteriorating the constitutional powers, urged on the more rapid development of disease, and hastened the fatal termination. For upon the maintenance of the general health alone does the hope of life depend; it is the only safety of the sufferer; it alone stands between her and death: impair it by mercury, lessen it by unavailing attempts to cause absorption by iodine, reduce it by mechanical appliances, and the duration of life will be less even than the short period permitted by this exhausting malady.

I am conscious of the equal importance and difficulty of attempting to determine the duration of life in ovarian disease, and upon which mainly depends the propriety of having recourse to so severe a remedy as extirpation; but until this question can be more satisfactorily solved than it at present is, it cannot excite surprise that there should be found many who are unwilling to afford their sanction to the operation so long as a chance of life, even at the price of suffering, is left. Before these papers are concluded, I hope to be able to present, at least, an approximation to the truth;

and, if it be found to be true that ovarian tumours may, under the restoring agency of remedies, be converted into comparatively harmless lesions; if it can be shown that they are compatible with a long existence,—then may the operation of excision be expunged from the list of remedial means. Let but its inutility be added to its attendant dangers, and it can no longer deserve advocacy or adoption; but if, unfortunately, the converse of all this be proved to be true,—if statistical evidence justifies the assertion that ovarian disease, in that form, at least, in which the operation is rightly admissible, is rapid in its course and fatal in its end, there will be no available argument by which its employment can be negatived.

Sharing the fate of whatever is novel in the treatment of disease, the operation of excision has been opposed by the equal errors of undue advocacy and premature judgment. It is doubtful which has most interfered with its more frequent adoption; it is the abuse of the operation to sanction it in ill-selected cases, and it is unjust to judge of its merits by results obtained from such experience. Errors in diagnosis also have happened as often in instances of ovarian tumours as in other cases; and, although their occasional occurrence permits of no surprise on hearing of examples in which a dislocated femur has been confounded with fracture of its neck,—of aneurismal swellings with fungoid masses,—of uterine tumours with foetal growths,—yet have many of those to whom such mistakes have occurred been among the first to express their astonishment, and often ridicule, at the faulty diagnosis which has not more frequently attended the investigation of cases infinitely more difficult to examine. Hence it has arisen, that many competent practitioners, shrinking from the responsibility, the dread of failure, and the fear of subsequent censure, have declined to adopt or even to give their concurrence to a measure which, under certain restrictions, is adequate to the preservation of human life. It is a subject for regret also that, in the occasional discussions in Medical Societies that have ensued upon the narrations of cases of ovarian disease, the merits of excision have been canvassed and the results of experience adduced often by those who are not supposed (and their remarks have rarely proved the contrary) to be conversant with diseases of the uterine system, and who have had to confess that they had never either performed or witnessed an operation upon which they presumed to pass judgment. It would add little to the cause of science or of humanity to apply to practice some of the opinions said to have been based upon statistical scrutiny, for at present nothing is accurately known of the statistics; the industry of several writers has produced tabular lists of cases, but the majority of them are now of comparatively old date, and, although a later one has been presented it has been so masked by an unnatural association of fact and error, as to become mischievous rather than useful, while its compiler, who has neither gathered credit to himself nor conferred instruction upon others, must, by the mere force of truth, be ultimately convicted of having wilfully obscured the inquiry he assumed to aid by an humiliating indulgence in that restless spirit of detraction, that pitiable and feral passion, under whose power "*intabescit videndo successus hominum—suppliciumque suum est*," and which has marred and warped a mind once fitted for better things.

The imperfect narration of cases, their premature publication and faulty arrangement, have alike tended to error; and there is as yet no tabular form from which any useful information can be elicited. Whenever data sufficient in number and accuracy shall have been afforded, it will, I doubt not, be found that, in proper cases, the extirpation of ovarian tumours is at least as successful as any other operation of equal magnitude.

Although the experience I may adduce will serve to support the opinion of the incurability of ovarian disease by ordinary treatment, yet I would by no means maintain that even in the most favourable cases *quoad* extirpation, the operation should at once be adopted; for among such very favourable cases are to be found those rarer examples of cystic accumulations which, marked by slow development and absence of local or general symptoms, may be more wisely allowed to remain until the supervention of urgent suffering admits and justifies their removal. There also occur from time to time instances in which all the general signs of ovarian tumour are present, but in which the disease has its seat in the broad ligament; as in true ovarian disease, a large collection of fluid may take place; but unlike ovarian disease, there will not be remarked an unvarying

tendency to its re-accumulation,—in some cases, the fluid is probably never again secreted; and in others it subsequently collects so slowly, that years may elapse before the abdominal distension becomes so great as to call for paracentesis. The differential signs between such instances and true ovarian tumour, must be always uncertain, often wanting, and, although I have had occasion to note a certain fact, in the examples that have occurred to myself, yet is the experience too limited to demonstrate its diagnostic value. Whenever it has seemed probable that fluid has collected in the broad ligament, I have always urged the propriety of tapping, in the first instance, as soon as the distension of the abdomen demanded relief; and it has been remarked that the secretion has in each case presented the same physical and chemical characters,—thin and limpid as water, without any admixture of flocculi, of low specific gravity, saline, and containing no free albumen. The subsequent course of such cases never justified excision, and tapping was not always again required.

Case 1.—, aged 27, had for five years suffered from what was supposed to be true ovarian tumour. Fluctuation was most distinct; she was tapped, and a large quantity of fluid removed. Six years elapsed, during which time no re-accumulation occurred; then it again collected, and tapping was again employed. The fluid presented the same character. Three years have since passed, and no more fluid has been secreted.

Case 2.—Mrs. —, nearly fifty years of age, presented the same history as in the preceding case. For nearly six years the abdomen had been distended. Tapping was followed by the escape of many pints of a white transparent secretion. More than four years have elapsed, and there has been no secondary formation of fluid.

Case 3.—, under 30. For two years had presented many of the common signs of ovarian "dropsy;" was tapped; about seventeen pints of clear, white fluid removed. Eighteen months elapsed and no further accumulation occurred.

Case 4.—, aged 21, under the care of Mr. Huxtable, of Hackney. For rather less than two years had presented the symptoms of ovarian tumour. Certain features in the case led me to the opinion that the fluid was in the broad ligament. I punctured the cyst, and a large quantity of white, watery transparent secretion escaped. Seven months have passed and the abdomen has not enlarged.

To the occasional occurrence of such cases, is probably to be attributed the apparent and rare success of empirical treatment; mistaken for ovarian disease, and submitted to paracentesis, and to the action of any imaginary remedies, the fluid may not again collect, and the cure is at once ascribed to the treatment. Moreover, even in cases of ovarian tumours, it will sometimes be observed that paracentesis, unassociated with any other palliative means, has been followed by so long an interval before the fluid is again accumulated, as to apparently strengthen a hope of cure.

Case 5.—Mrs. G., aged 35. At 19 ovarian disease declared itself; tapped five times at intervals of about one year; no accumulation of fluid then occurred for seven years, after which tapping was required with rapidly increased frequency, and urgent, general, and local suffering endangered life. I performed the operation of extirpating the tumour, and rapid recovery followed.—*Med. Gaz.*, Aug. 18, 1843.

It will not be necessary to refer at any length to all the signs supposed to be diagnostic of the ovarian character of certain abdominal tumours, as it is rather my object to allude chiefly to the special diagnosis of those complications, the presence of which often oppose the success of extirpation and sometimes negative its adoption. It may, however, be useful to notice some of those symptoms of reputed value which clinical experience proves to be of little worth. Many of these signs are less characteristic of ovarian tumours than of the changes and complications that may attend them; and so much diversity exists in the physical signs of tumour of the ovary, that perhaps every case will present some peculiar feature of variable importance and duration. The initial symptoms of ovarian disease are often but feebly marked, and as frequently fail to attract the attention of the patient. Very commonly is abdominal intumescence the first indication observed, and so insidiously may the work of disease go on, that the failure of general health, like the local symptoms, is for a time neither felt nor heeded. It is probable that a period occurs in almost every case marked by early symptoms of morbid action; but from their uncer-

tainty, as well as from their being confounded with the indications of other disease, a correct diagnosis is not deduced, and perhaps the only time at which therapeutic remedies could avail anything is lost; it is that first stage of disease in which congestion or inflammatory action constitutes the only morbid change the ovarium has yet undergone, and is the first link in the chain of events which is ultimately to terminate in tumour and death. It would be well if the symptomatology of ovarian congestion and inflammation was more generally and perfectly understood,—well, also, if the symptoms presented so much severity as to induce active treatment; it is often otherwise, and although a certain degree of acuteness may at first be observed, it soon lessens and the patient ceases to complain. Of great importance is it to rightly understand the symptoms of ovaritis, but to describe them here would be but to reiterate the excellent clinical and most instructive writings of Dr. Rigby on this subject. (*Vide Medical Times.*)

In a large proportion of cases, ovarian inflammation or congestion will furnish the primary indications of tumour, and against them remedies (powerless in more advanced states) are often employed with success. Deep-seated pain, of more or less acuteness, in the pelvis, increased by any cause capable of exerting local pressure, and commonly preceded or accompanied by catamenial derangement has been often the earliest evidence of morbid action. It is not of long duration; a few days elapse and it exists no longer, or is scarcely felt. Soon abdominal enlargement announces the formation of tumour. The following example, taken from many similar ones, will assist in illustrating this point:—

Case 6.—Mrs. T, aged about 50, complained of severe, but dull heavy pain deep in the centre of the pelvis—occasionally the pain became acute, and especially so during defecation. Her general health gave evidence of distress. By examinations through the vagina and rectum an ovarium could be felt, enlarged apparently to the size of a small egg, its vessels actively pulsating. Leeches were freely applied internally, and ordinary treatment pursued. In a few days the pain had lessened, and soon afterwards she expressed herself quite relieved. In three months she again presented herself, when an ovarian tumour containing much fluid was found, and evidently involving the previously affected ovary—when necessary she was tapped, the fluid again returned, and after each tapping with increased activity; and in less than eight months, during which time she had been four times tapped, she had ceased to live, worn out by the exhaustion of the disease. The fluid removed was of dark colour and viscid.

The less uncertain symptoms of ovarian disease are those arising from mechanical causes; the physical signs are far more valuable than those developed generally, for nothing can be more variable than the effects produced upon the constitutional condition. In a few cases the general health has long remained undisturbed; there has neither occurred derangement of function, nor diminution of power; but in by far the greater number of instances the constitution soon feels the tax of exhaustion, although, it may be, without the pain of disease, whilst there happens a small number of cases in which from the beginning so much suffering exists as to directly threaten life, and justify any means, however hazardous, to insure relief. As typical of these several forms, I may refer to the following cases.

Case 7.—Ann B., aged 17, general health hitherto good. The catamenial function, established at fifteen, has been uninterrupted. Eight months ago she suffered from acute, but transient pain felt deeply in the pelvis, together with frequent cramp and pains extending down one leg. After three months had passed, it was observed that her abdomen had enlarged, and equally so; and, at the present time, she presents uniform abdominal distension, equal to that of the eighth month of pregnancy; the umbilicus is not drawn up, and is protruded, fluctuation distinct in every part, uterus mobile. Frequent micturition and constipation, with occasional fugitive pelvic pains, are the only local symptoms; general health not materially affected;—patience and purgatives were alone advised.

Nine months elapsed; the abdominal distension had much increased, and the constitution showed marked evidence of impairment. Tonics, good diet and change of air, were ordered for a time, and, failing to effect benefit, the extirpation of the tumour was proposed. Before this course could be commenced, she was attacked, after an imprudent

exposure to cold and fatigue, by severe symptoms. Mr. Kelly, of Fetter-lane, attended her, and, on the third or fourth day afterwards, I saw her, and when tympanitic distension of that part of the abdomen not previously distended by the tumour, tenderness, still acute, on pressure, severe abdominal pain, hurried respiration, a cold moist skin, and a pulse of 140, told of her approaching death from peritonitis. Autopsy (dissection by Mr. Kelly) gave as results, universal and acute peritonitis, the whole anterior surface of the tumour feebly attached to the abdominal parietes by copious exudations of plastic lymph, and so with the adjacent viscera; these adhesions, which could only have existed during the course of the inflammation from which she died; having been removed, the tumour was found quite free from all complications, and attached by a narrow and long pedicle. The tumour consisted chiefly of one large sac filled by dark viscid fluid, containing but a small number of secondary cysts.

In this example there were but few antecedent symptoms, but sufficient to support the opinion of the disease having had its origin in ovarian inflammation or congestion; the abdomen soon became distended, but without pain or other symptoms, save the exhausting influence eventually manifested in the system. The free space afforded to a tumour when above the pelvic brim, the readiness with which the floating viscera become compressed into the hypochondriac regions, the facility with which the abdominal parietes at once yield to, and support the morbid mass, all tend to this end; nor does it often happen that any long previous interval occurs in which the small size of the tumour permits it to remain in the true pelvis, where, by its pressure upon surrounding parts, painful symptoms might be produced. The ovarium, once enlarged by disease, soon rises above the pelvis, and beyond the reach of pressure; and it is only in those cases in which early peritonitis has fixed by adhesions the augmenting mass, that it fails to emerge from the cavity in which it is contained, and there remaining to acquire increased bulk, ultimately gives rise to local pressure and consequent suffering. Corresponding in many of its features with the preceding example, but more happy in its termination, is the following:—

Case 8.—Mlle. —, whose illness forms the subject of the following case, resided in St. Quentin, in France. She had recently attained her twenty-first year, and until her present disease manifested itself, had possessed unbroken health. In her thirteenth year the catamenial function was established, and until within the last few months had been undisturbed; then from regularity it passed into profuseness, and so continued. About eighteen months ago, an abdominal enlargement was first observed, without having been preceded by any evident symptoms. The swelling occupied a central position, and did not involve one lateral region more than the other. Slight at first, it soon increased; but, even when it had arrived at considerable size, there was little to complain of beyond the inconvenience of bulk; and under the care of her medical attendants, M. Demonchaux and M. Desain, who judiciously abstained from the use of active remedies, the general health was for a time maintained without impairment. This immunity from suffering lived but through a few months, and then gave place to abdominal and pelvic pain, dysuria, crural oedema, and all the evidences of mechanical pressure. The general health then began to yield rapidly to the exhaustion consequent upon her disease. In this state she arrived in England, and after trying the tonic action of change of air in Devonshire and elsewhere, she was obliged, by the greatly increased distension, to seek relief in tapping. Paracentesis was performed by Dr. Miller, of Enfield, under whose care she more immediately was, and about two gallons of turbid and thick fluid removed; convalescence soon followed, and for a time she was much relieved. In a little while the tumour began to refill, and in less than six months the abdominal enlargement was as great as before. Her symptoms then became urgent; she could walk but with difficulty; dyspnoea was frequent, and she was rapidly emaciating.

At this period the abdomen had a circumference of nearly forty inches; the distension was uniform and prominent, leaving the lateral regions somewhat flattened; the umbilicus was protruded, and scarcely changed from its normal position. By percussion, the position of the tumour could be accurately defined; its fundus reached to the ensiform cartilage; whilst in either hypochondrium resonance disclosed the position of the intestines; fluctuation was evident, and

nearly equal throughout. Increased movement of the diaphragm caused an evident change in the position of the tumour. The uterus was healthy and moderately mobile.

The remaining symptoms, in addition to those already named, told only of debility. The circulation, though very feeble, was not frequent; the pulse was below 100; the action of the heart irritable; and the respiration short and uneasy. The evident deterioration of the general health, the increased urgency of the local symptoms, the rapid growth and re-filling of the tumour, justified excision; whilst the absence of collateral disease, the age, and previous health of the patient, added to the probability of success.

No other means of investigation were practised or required; the diagnosis, alike in relation to the seat of disease and to the absence of secondary complications, was satisfactorily clear; whilst, if any other indication had been needed, it might have been found in the countenance of the patient. The physiognomy of ovarian tumour was most strongly marked; her features, naturally expressive, had assumed the elongation and thinning almost characteristic of that disease, whilst it was pleasing still to trace in them the marks of enduring fortitude. I advised the extirpation of the morbid mass, and performed it.

There were present at the operation, Dr. Murphy, Dr. Protheroe Smith, Mr. Barnard Holt, Mr. Streeter, and Mr. Owen. The requisite precautions, both in reference to the patient and the room in which she was placed, having been taken, an incision to the extent of about five inches was made through the abdominal walls in the median line, at once exposing the tumour and allowing of the introduction of the fingers; a little bleeding, consequent upon the division of a vein traversing the linea alba, occasioned the delay of a few minutes, during which time the movement of the tumour synchronously with that of the diaphragm verified the correctness of the diagnosis. No adhesions existed; and, as soon as the oozing of blood from the divided parietes had ceased, the tumour was grasped and its cavity opened, giving escape to a large quantity of thick fluid. The greater portion of the contents having been evacuated, the tumour was gently raised, and, almost without interruption, continued to pass out through the wound. The pedicle was then seen, and found to be thicker and shorter than usual, leaving but a small space between the uterus and diseased ovarium; the more ligamentous structures of the pedicle, including the Fallopian tube, were partly divided by the knife, while two ligatures served to tie the remaining portion, including three arterial branches, one only of which was of large size. The pedicle was then cut through, and the excision of the tumour completed. All bleeding having ceased, and the ligatures found to be secure, the opposite ovary was examined, and, being healthy, the abdomen was at once closed by several sutures, cold water dressing (retained in its position by a very light bandage) applied, and the patient placed in a more comfortable position.

The operation was borne with much firmness, and at its conclusion the pulse was not quicker than it had been many days before; neither vomiting nor faintness occurred; no stimulants were needed to excite re-action, and at the

3rd hour after the operation, she presented a warm and moist skin, an easy position, a pulse of 105. She had not slept, but was quite free from pain; urine, removed by catheter, about two ounces in quantity.

7th hour (note by Mr. Streeter.)—Pulse 100; skin perspiring, countenance and respiration good; fever; no disposition to sleep, but lies tranquilly.

11th hour.—Has vomited once, probably from having drank rather too freely of iced water. She has not slept, although since the first report she has taken three grains of morphia. Copious perspiration is maintained, and, with the exception of occasional pain about the pudenda, she makes no complaint; urine freely secreted, has been from time to time removed by catheter. Pulse has risen to 110.

18th hour.—Has scarcely slept, but presents no appearance of fatigue or suffering. Skin and pulse the same, the tongue moist and white from the absence of food.

24th hour.—Has slept occasionally, and, on awaking, has vomited two or three times, the ejected fluid being little more than the water she freely drinks; the secretions go on well; pulse 112, but soft.

28th hour.—Much the same as before, save that the pulse, although unaltered in character, has risen to 120.

36th hour.—Inclined to sleep; makes no complaint;

pulse 116; urine well secreted, is still removed by catheter.

42nd hour.—Has slept well, and is very cheerful; skin has continued to act copiously, and the pulse is now 105.

48th hour.—Doing well; the pulse reduced to 100; still actively perspiring.

55th hour.—Sleeps well; secretions natural; pulse 99.

72nd hour.—Continues to improve; the perspiration is now lessened; appetite is returning and thirst diminishing; pulse 88.

4th day.—Is to-day suffering from occasional and rather severe pains about the pelvis, with some slight tenesmus, and lumbar pain, apparently indicative of approaching menstruation; in other respects progressing well.

5th day.—The catamenial function beginning, has been followed by the cessation of the symptoms of yesterday. Skin, pulse, and tongue present favourable conditions.

6th day.—Going on very satisfactorily; the pulse has ranged at 90, and the only complaint is hunger.

7th day.—Has passed urine for the first time without catheterism; the bowels have been well and painlessly relieved; she takes food with much appetite, and has a good pulse of 75. The wound is nearly healed, with the exception of that part kept open by the ligatures.

To record the subsequent daily progress, would be but to note a rapid and uninterrupted convalescence; beyond an occasional laxative and regulation of diet, no treatment was necessary. Soon after the last report, she left her bed and room, and could have sat up, but that it was desired that the recumbent posture should be maintained until after the detachment of the ligatures. The sutures were taken out at the end of the first week, and on the thirty-third day after the operation she was relieved from all further restriction by the separation of the ligatures, which then passed out of the wound, bringing with them a small portion of decomposed tissue. Under the restoring agency of fresh air and a good diet, health and strength rapidly returned, the catamenial function became natural, and, rapidly acquiring flesh, she was soon enabled to return to France. From that time until the present (and nearly three years have passed away) she has enjoyed most perfect health.

The tumour was of ovoid form, and of nearly regular outline, save at the inferior or basic portion, where the development of secondary cysts within gave rise to slight nodulated projections. Its external serous surface presented no marks of antecedent inflammation; numerous but small arterial vessels were seen (after injection) to pass in every direction, for the most part running in parallel lines, and seldom ramifying. The thickness of the cyst varied considerably, at the upper part being thin, whilst at the lower it was thick, and in some parts presented a cartilaginous hardness. The interior of the tumour was formed by one large primary cavity, within which were many secondary cysts; these were of very small size in the upper and lateral parts of the parent sac; but at the lower or basic portion had attained the size of grapes, and were closely compressed together, forming a dense multilocular mass. The contents of the secondary cysts differed, some being filled by viscid, but clear mucoid fluid, others by opaque gelatinous secretions; the fluid by which the primary cyst was filled was of a light brown colour, of high specific gravity, containing a few flocculi of lymph, and without much viscosity; after having remained for a short time, its surface became covered by numerous plates of cholesterine, whilst it deposited blood corpuscles abundantly. The lining membrane of the large cyst was smooth, presenting no traces of inflammation, and was traversed by many, and, towards the basic region, large and tortuous veins. The pedicle was chiefly formed by the broad ligament and Fallopian tube, which latter structure had, by the development of the tumour, become elongated to a length of ten inches, its fimbriae widely separated, and ultimately lost upon the surface of the tumour—one artery equal in size to the radial, and two much smaller ones; the former running beneath the Fallopian tube; the latter near the ligament of the ovary, constituted the vascular supply.

The diagnosis of the tumour in this case was not only clear in reference to the specific form of the disease, but also to the absence of those complications by which the ultimate success of the operation is mainly influenced. Leaving the consideration of the differential signs by which this latter inquiry may be guided for the present, I would advert only to the uniform distension of the abdomen as one of those features in ovarian disease to which the test of experience may usefully be applied. The position of the

tumour when first observed was central, occupying the hypogastric without involving either iliac region; and when at last the whole abdomen became completely distended the enlargement was symmetrical. Venturing to oppose my own observation to the opinion of those who have gone before me, I would say that unilateral position is less a symptom of ovarian disease than of certain secondary effects with which it may be complicated, and, as a general rule, is to be regarded as contra-indicative of extirpation. In this, as in other of its symptoms, the preceding case well illustrates a form of ovarian disease often met with, although unusually free from those subordinate morbid effects which are sometimes of spontaneous occurrence, but sometimes also to be traced to the prejudicial action of reputed remedies. The judicious treatment by the medical attendants whose care this lady had received, contributed to the preservation of the general health. Neither mercury, iodine, or other agent capable of deteriorating the constitutional powers was employed, and although her health had at last broken down, and symptoms of severer type arose, yet were these changes solely attributable to the exhausting rapidity of the cystic secretion. The brief period (and it is often shorter) of little more than a year and a half saw the disease fully developed, and the formation of fluid so great and rapid as to demand relief by tapping, and afterwards, by consequent exhaustion, to threaten the life of the patient. The operation was therefore permitted by the certainty of the diagnosis, justified by necessity, and recommended by its promise of success.

Let it be, however, distinctly stated, that although the extirpation of the ovarian tumour, in the preceding example, was the unquestionable means of preserving a valued life, and is a practice to be adopted and in certain cases urged, yet is the number of such instances small in proportion to the frequency of the disease. Often is the tumour from its first detection associated with difficulties utterly forbidding its excision; often is the operation negated by the early occurrence of peritoneal inflammation; and still more frequently does it happen that the loss of time resulting from the unavailing trial of various forms of treatment carries the patient beyond that stage in her disease in which its removal could be attended with success, and when so much prostration of power has arisen as to make the shock of excision an almost certain cause of death. Under conditions such as these it is the abuse of the operation to attempt its performance. From the neglect of that caution which seldom fails to guide the practitioner in other cases, have happened some unfortunate instances which, ending in the worst form of failure, have brought discredit upon a valuable addition to practice, and have assisted to make up the erroneous statistics on which as faulty opinions have been based. Aided by such ill-judged examples, it needed but a little distortion of some facts, and forgetfulness of others, to create opposing arguments,—and neither have been wanting.

53, Lower Brook-street.

[To be continued.]

THE MEDICAL TOPOGRAPHY OF LONDON.

AND THE

SURROUNDING COUNTRY WITHIN TEN MILES.

BY KLEIN GRANT, M.D.,

Formerly Senior Physician to the Royal General Dispensary, and Lecturer on the Practice of Physic in the Aldersgate School of Medicine; Editor of "Hooper's Medical Dictionary," etc. etc.

THE term *topography* is received in a much larger acceptance when used in a medical than when in an ordinary sense. By *medical topography* we mean every thing connected with a locality which bears upon health and disease,—upon the means of preserving the one or averting the other; hence it may be justly considered as embracing not only everything respecting a locality which has immediate reference to the health of its own population, but everything also respecting that locality which bears in any way on the science or practice of medicine in general,—everything, consequently, which illustrates the phenomena and laws of life, whether in their healthy or morbid manifestations, and everything that has relation to hygienic or therapeutical agencies.

Medical topography is, therefore, a subject of vast extent and great difficulty, and its difficulties will, of course, increase in proportion to the complexity of the causes and

circumstances which influence health, or which afford the materials of scientific induction relative to medicine, in the district which may form the field of inquiry.

That a work on the medical topography of London and its vicinity is a great desideratum will scarcely be disputed; though a question may arise how far its execution is likely to come within the limits of time, opportunity, and capacity, ordinarily assigned to a single individual. It was not till the writer of the series of articles, commencing with the present, had actually engaged, and made some progress in his investigations, that he became thoroughly aware of the magnitude of the task he had imposed upon himself; since, however, he has undertaken it, he is resolved, in the full conviction of its importance, and in the absence of more able inquirers, to carry it through to the best of his ability; and he takes the present occasion of earnestly soliciting every aid which his professional brethren, and intelligent persons of all classes, may be able to afford him in the prosecution of his labours.

A large proportion of the population of London, and of other great cities, reside, or pass a considerable part of their time in localities prescribed by the occupations which they follow, and, consequently, have little choice as to their local circumstances, though it is of the highest importance to their welfare that such circumstances should be rendered as favourable as the case admits of; to those, however, also constituting a large class, who enjoy greater freedom in this respect, the choice of an abode becomes a matter of the most immediate interest; though the majority of persons are, probably, little aware to what an extent their own health, and that of their families, may be influenced by simple difference of locality within the limits of the Metropolis, and in the country immediately surrounding it. On public and philanthropic grounds the subject of medical topography ought not to be indifferent to any one; and there are, perhaps, few persons to whom observation may not occasionally afford opportunities of contributing something useful to the general stock of information regarding it.

The study of medical topography is of high antiquity, and was sedulously cultivated by that extraordinary man who has been justly styled "the father of medicine." Throughout the writings of Hippocrates, we find a vigilant attention to the influence of external nature and surrounding circumstances on the living body; in other words, to those influences which it is a principal object of medical topography to illustrate. His book "*De Aërē Locis et Aquis*," is devoted especially to these matters, into which he appears to have had a deeper insight than any of his successors for many ages. In modern times, this subject, though one of the most important in the whole range of science, has been little cultivated till within a comparatively recent period, and less perhaps in our own than in most other European countries. Within the last thirty or forty years, however, the Medical Practitioners of the British Army and Navy have made many valuable contributions to the medical topography of foreign regions. Various communications of this nature are to be found in the volumes of the *Edinburgh Medical and Surgical Journal*, published from the years 1819 to 1821 inclusive; and, in the reviews given by that Journal of works relating to medical topography, much valuable information is introduced respecting the history and bibliography of the subject. At that period, the Journal referred to was under the superintendence of the late Dr. Hennen, to whom the world is indebted, not only for an admirable work on the varied and interesting shores and islands of the Mediterranean, but also for the first comprehensive and well-digested plan of studying the subject of medical topography in general.

More recently, the Provincial Medical and Surgical Association have been very active in the promotion of this study, and their "*Transactions*" contain several able papers, by various writers, on the medical topography of some of our principal provincial towns, and of some extensive rural districts. Especial mention may be made of those by Dr. Forbes on "*The Medical Topography of the Hundred of Penwith*, comprising the district of the Land's-End in Cornwall." These are not only excellent in respect of the particular information they contain, but also extremely valuable as an example of the manner in which such inquiries should be conducted.

With regard to the medical topography of our own Metropolis, nothing, as far as the writer is aware, has been attempted, in a connected form, except a paper which is to

be found in the first volume of the *London Medical Repository*, (January to June, 1814.) It is very brief, but well-executed, and formed a valuable contribution to medical science at that period.

There are certain general heads to which all that is most important in medical topography admits of being referred. Some of these heads will assume a much greater relative interest than others, according to the locality which is the subject of observation; according, for example, as it be a large city,—an open extent of country,—a forest,—a marshy district,—a mountain range,—a sea-coast,—the banks of a great river,—a tract newly rescued from the wildness of nature, or one long since transformed by the cultivating hand of man,—a country where the people are few, and their manners simple, or one in which a teeming population, the advanced arts of life, and the influence of luxury, have multiplied the sources both of good and evil, of wealth and of poverty, of health, comfort, and convenience, as well as of disease, destitution, and misery.

Nevertheless, there are few pieces of medical topography of any considerable extent, into which matters referrible to most of the heads above alluded to will not be found to enter more or less. It will be well, therefore, before proceeding further, to state these heads in a synoptical form; and this statement will likewise serve to exhibit the order which we propose to observe in handling our subject.

The arrangement here adopted does not agree precisely with that of any former writer; but it may easily be perceived, on comparison, that it embodies the principles of those adopted severally by Dr. Hennen and Dr. Forbes,—each excellent in its way.

I. Geographical Position.—Latitude—Longitude—Boundaries.

II. Physical Geography and Natural History.—Elevation. Alluvial Soil and Surface. Waters—Seas—Rivers—Lakes—Wells—Canals—Morasses and Bogs. Geology and Mineralogy. Botany. Zoology. Climate and Meteorology. State of Agriculture. State of Roads and Communications.

III. Number, Character, and Various Points Relative to the Ordinary Condition of the Population.—Number. Physical Characteristics of the People. Classes of Inhabitants. Domestic Economy—Dwellings—Bedding—Clothing—Furniture—Diet—Fuel. Trades and Occupations. Arts and Manufactures. Customs and Amusements. Morals. Education, Moral and Physical. State of the Poor. Marriages, Births, Deaths, and Duration of Life. Interments.

IV. Diseases and Physical Sources of Inquiry.—Endemic Diseases. Epidemic Diseases. Sporadic Diseases. Diseases arising from Imitation. Diseases of Artisans. Sources of Casualty. Feigned Diseases and Injuries. Epizootic Diseases. Diseases of Plants.

V. Institutions and Means Conducive to the Preservation of Health, and to the Prevention or Cure of Disease or Injury.—Medical Police. Baths and Washhouses. Hospitals and Dispensaries. Popular Medicine. Medical Schools. The Medical Profession—State of Medical Science and Practice.

VI. Miscellaneous Topics, having some relation to the general subject, but not easily referrible to any of the preceding heads.

In the prosecution of our subject we shall make some remarks on each of the heads enumerated in the foregoing classification; first, as it relates to medical topography in general; and, secondly, as it bears particularly on that of London, or the surrounding country. This manner of proceeding, though it may at first sight appear greatly to increase our labour, will, in reality, be found to have an opposite effect; by the development and application of general principles, it will enable us to escape many repetitions which would otherwise have been unavoidable; to render the detail of particular facts easier and more intelligible, and to bring the whole of our materials into a smaller compass and a more tractable shape.

ON CHORDEE.

By JOHN L. MILTON, Esq., M.R.C.S. Lond.

tension of the penis, when the urethra is suffering under a specific inflammation, seems not a little calculated to lay the foundation for spasmodic or even organic stricture; and, if incapable of producing such results, it seems to bring about a state of the urethra peculiarly ill disposed to the healing of gonorrhœa. Again, it has a most injurious effect on the health and spirits of the patient suffering under it; an irritable or delicate man, obliged to rise four or five times in the night, to walk about, or stand with his feet on some cold surface, or even plunge the penis into cold water, cannot but suffer in the long run. The urethra has not unfrequently been injured by the remedies which patients, tormented beyond endurance, have employed; and lastly, the cases of stricture reveal for the most part the history of a neglected or inveterate clap,—a fact of sufficient importance to make every discovery valuable that can tend to hasten the cure of gonorrhœa, and alleviate its painful complications.

Chordee appears to be the first link in that chain of sympathetic irritations set up by gonorrhœa, which, from their resemblance to inflammatory phenomena, have been treated antiphlogistically by many practitioners. I allude to swollen testicle, irritable bladder, etc. Probably the affections of the glands, denominated sympathetic bubo, and gonorrhœal mumps, and rheumatism, the two former of which bear a strong resemblance to orchitis, are closely allied but more distant phases of this chain of actions. Violent pain, spasm, reluctance to form pus, are characteristic marks of these affections; the analogues perhaps of the cough and soreness which attend the acme and decay of some affections of the mucous membranes, as cold and influenza.

It has been divided by common consent into inflammatory and spasmodic; but while the origin of the former has been silently conceded to muscular contraction, or orgasm of the erectile tissue, that of the latter has been freely contested. Mr. Hunter says, (a) “when the inflammation is not confined merely to the surface of the urethra and its glands, but goes deeper, and attacks the reticular membrane, it produces in it extravasations of coagulable lymph, as in the adhesive inflammation, which, uniting the cells together, destroys the power of distension of the corpus spongiosum urethræ, and makes it unequal in this respect to the corpora cavernosa penis, and therefore a curve on that side takes place in the time of erection.”

Mr. Nishett, (b) says also, that it “depends on the extravasation of coagulable lymph into the cells of the corpus spongiosum urethræ.” Zoll(c) gives the same account.

Sir C. Bell(d) says, “the chordee is caused by erection when the membrane of the urethra is already inflamed, and has consequently lost its elasticity; being powerfully stretched, it cracks, and you have hæmorrhage. It is obvious that, if you do not subdue this, you lay the foundation of strictures.”

Mr. Wallace says, after alluding to the explanation of this symptom by effusion of coagulable lymph into the cells of the corpus spongiosum, “this explanation, however, is seldom perhaps, if ever, correct; for, as soon as the inflammation and irritability of the urethra, and the disposition to these painful erections have subsided, the penis ceases to be preternaturally curved during its priapism; and this could scarcely happen if its spongy cells had been agglutinated by lymph; for such agglutination would most probably be persistent, at least for some time after inflammation, etc., had subsided.”

“How, then, is the unnatural curve of the penis which attends chordee, to be explained? I answer, that it is owing to the spongy body losing from inflammation, its extensibility, and that the corpora cavernosa are not affected in this way; the proof being, that the curve takes place in the direction in which the want of extensibility of the corpus spongiosum would act on the corpora cavernosa.” But the reader will ask, how can it lose this extensibility from inflammation, unless the cells be glued together by coagulable lymph?

Mr. Childs, again, attributes it to “effusion of coagulable lymph into the reticular texture of the corpus spongiosum.”

CHORDEE and painful erections are such prominent and painful symptoms in gonorrhœa, that it is unnecessary to dilate on the importance of attending to, and, if practicable, alleviating them as quickly as possible. Long continued painful

(a) “Hunter on the Venereal.” 1810.—P. 52.

(b) “First Lines of the Theory and Practice in the Venereal Diseases.” 1787.

(c) *Prælectiones*, 104.

(d) “Institutes of Surgery.” 1838. Vol. I., p. 292.

In short, though the theatre of action is so limited, opinions are as diversified on the origin, as on the treatment of this symptom.

But, however ingenious and philosophical these explanations may be, and however much they may bear upon them the impress of truth, it is still worth while to examine on what proofs they rest. I would therefore ask—

1st. Is there on record a single case in which it is shown, on *post-mortem* examination, that the corpus spongiosum was in the state supposed; that is, containing effused lymph?

2nd. Is there one where it is shown that this took place without effusion into the upper surface of the urethra, or into the corpora cavernosa penis?

3rd. That if Sir C. Bell's explanation be admitted, how comes it that we can bind the glans penis downwards, and thus relieve the chordee? If the mucous membrane had lost its elasticity, so that it could not be bent upwards without pain, how could it be bent downwards, not merely without pain, but with positive relief to suffering?

It must not be forgotten that the cause of the erection of the penis itself is still a disputed point. We may admit that the erectile tissue becomes filled with blood by the "turgor vitalis;" but the elevation of the penis seems to demand the interposition of muscular action.

But, admitting that any one of these reasons was true; admitting that the under surface of the urethra has lost its elasticity, that lymph is effused into the corpus spongiosum, and not into the corpora cavernosa, so chaining down the urethra, this would only prevent the extension of the penis in length. In ordinary erection of the penis, that part of the urethra which is the seat of chordee is carried upwards nearly unaltered in direction; the greatest curvature taking place beyond the specific seat of gonorrhœa. Mere effusion of lymph could not *bend* the urethra.

Moreover, I have never been able by manipulation to detect this effusion of lymph in the living subject. The only alteration I have ever remarked was a certain hardness of the middle portion of the urethra, but this was towards the close of the complaint, and more likely to be a consequence than a cause of chordee.

On the other hand, there seem to be some facts which might suggest its being due to muscular contraction; the first is, that the erection of the penis is designed for the emission of the semen, and that some analogous acts in the animal economy are performed by the mixed agency of animal and organic muscles. The second, that painful erections, which are but one stage removed from spasmodic chordee, can scarcely be caused by anything but the cause of healthy erection.

The third, that even the supporters of inflammatory chordee admit that there is a spasmodic chordee.

The fourth, that the form which the penis assumes in chordee is more like that which the urethra would take on if acted upon by longitudinal muscular fibres seated on the under surface of the urethra, than that resulting from a solid deposit of lymph, which could scarcely be always effused so regularly as to give the penis the same form in every case.

The fifth, that the observations made by Mr. Bauer and Sir Everard Home, the investigations of Mr. Kölliker and others, and the recent discovery by Mr. Hancock, of the prolongation along the urethra of the muscular coat of the bladder, tend to show that the urethra may be acted on by spasm. The specific seat of gonorrhœa corresponds to the place in which this spasm would ensue.

Dissection of the penis reveals in connexion with this part a cellular layer, uniting the corpus spongiosum to the corpora cavernosa above, and the skin below. The corpus spongiosum, which appeared to me to be thicker along the under than on the upper surface of the urethra, is invested by its own fibrous sheath, and invests the urethra. It contains fibres which, when examined under the microscope, bear a strong resemblance to muscular fibre, and differ widely from those of the fibrous sheath in the corpus cavernosum; these fibres seem to get fewer and less characteristically marked as the corpus spongiosum expands to form the glans penis. I am not sufficiently versed in the use of the microscope to say with certainty if these fibres are muscular or not. My friend, Mr. Lane, however, seemed to consider them as bearing a strong resemblance to muscular fibre, but the penis on which the examination was conducted was not sufficiently fresh to enable us to decide positively.

The sixth reason is, that the irritability of the bladder,

swollen testicle, abscess of the perinæum, sympathetic bubo, seem to be much more like spasm than real inflammation. Irritability of the bladder is clearly spasm; swollen testicle rarely goes on to the formation of pus; and if it be at times accompanied or followed by some of the phenomena of pure inflammation, it is possible that these are secondary, and induced by the secretion of the gland, locked up by spasm, acting as a foreign body. Abscess of the perinæum seems explicable in the same way, and is perhaps connected with the prostate gland; sympathetic bubo seems closely akin to this. (a) Antiphlogistic remedies in their early stages (that of spasm before the locked up matter has caused real inflammation) are not so useful as anodynes, warm bathing, and antispasmodics.

Lastly, closely analogous spasms take place in some disordered conditions of the mucous membranes of other parts of the frame.

But for all practical purposes, the subject we have to deal with resolves itself into two facts: the one that there is a spasm, the other, that the disordered condition of the mucous membrane causes this, primarily or secondarily, to be attended with pain. Let us, then, briefly examine the treatment which has generally been adopted with a view of giving relief. In a paper like this, I am prevented, by my limited space, from giving in detail everything that has been written on this subject, or even enumerating the various plans of relief. I shall therefore confine myself to a few of those best known and most employed, and then proceed to lay down my own treatment, and illustrate it by cases.

Mr. Lagneau(b) says, "for the inflamed chordee, bleeding from the arm, hot bathing to the perinæum, lavements, eighteen or twenty leeches to the canal of the urethra, two or three times repeated, and, when the pain is severe, gr. i. of the watery extract of opium, and gr. ii. of camphor," which he recommends giving in the evening. He winds up this energetic treatment by a solemn warning not to plunge the penis into cold water, as it may be, and has been, followed by a metastasis of the complaint of the bladder.

M. Ricord(c) recommends gr. iiss. of camphor, and gr. ss. of opium in a pill, of which two or three may be taken every night.

Richter(d) recommends that the patient sleep on a hair mattress, and very cool, or else on a canopy, and do not turn on his back. Eisenmann(e) that the parts should be exposed to the influence of narcotic vapours; or that infusion of camomile or cherry-laurel water be injected or dropped into the urethra. He found sedatives of no avail. He recommends the patient to make water more frequently than necessary, because a distended bladder irritates the vesiculæ seminales and the neighbouring parts. He objects, also, to dipping the penis in cold water, and then recommends soothing injections, or poultices; opium being less useful. Peyrihe recommended ammonia and injections of soap lye. Iodine, the empyreumatic oil of tartar, and blue ointment have also been praised.

Mr. Hunter says(f) "he has known twenty drops of the tinctura thebaica take it (painful erection) away for a whole night, and that the cicuta has likewise some powers in this way." For the chordee, he recommends opium joined with camphor, praises local bleeding with the free use of hot vapour to the parts; poultices with camphor; while the effused lymph which remains may be removed by mercurial ointment in friction. He has seen the cicuta of service.

Mr. Wallace recommends calomel and hippo, with opium and camphor.

Such are the general outlines of the practice pursued by surgeons, as we find it recorded in books. These plans bear a pretty strong resemblance to each other, and are nearly all calculated to lead to one point—the allaying of pain by the use of sedatives. The idea of attempting to remove it by the pure antispasmodics, does not seem to have been worked out or even entertained, although everything seems to show that it is more amenable to them than to opium. I will add but one more remedy, as remarkable for its originality as any I know, and which was, I believe, first recommended in writing by Dr. Colles. It is, that when the patient finds

(a) I have once or twice punctured a bubo in this stage, when it seemed likely to burst, and have let out only something closely resembling lymph.

(b) Art. "Traitement de la Blennorrhagie chez l'Homme."—P. 65, Vol. I.

(c) "Ricord, Traite Pratique des Maladies Veneriennes."

(d) "Richter's Chirurgische Bibliothek,"—B. 4. J. 491, &c.

(e) "Der Tripper in allen seinen Formen." Erlangen. 1839.

(f) "On the Venereal." 1810. P. 95.

the chordee coming on, *he do turn over, and balance himself on his knees and elbows till the chordee goes off.* The reader can easily imagine what effect such a remedy would produce. Let him figure to himself an exasperated patient struggling in the middle of the night to get ease in this way! Verily, this is surgery!

I now approach that part of the matter which has most of all occupied my attention—the substitution of some simple and always applicable remedy for these different methods of cure. I will not stop to point out the inutility or inapplicability of antiphlogistic treatment to this symptom, as any one versed in the disease must have observed cases where the chordee came on though the patient had been treated most heroically. Sedatives I utterly object to, as I have never used them in sufficient quantity to have any material effect on the chordee without finding the patient much worse afterwards. They generally disordered the stomach, produced headache and languor, very often with constipation of the bowels. The scalding and discharges were rendered worse and more obstinate, and, to crown all, the chordee was merely abated for an instant, and returned the moment they were left off; nay, even when they were again administered without increasing the dose. Nor have I ever been able to understand why they should be given, as the pain appears to depend on a spasm, and when this is removed the pain ceases; whereas, the spasm does not necessarily subside when the pain is relieved.

I have tried the most powerful anti-spasmodics, as ether, galbanum, assafoetida, and chloroform, and can only say of them that I have found nothing equal to camphor in the fluid form. In powder, camphor is disagreeable to take, and did not appear to act so readily, I suppose from not being so equally diffused and finely divided as in solution. In fact, in spasm a liquid remedy, as admitting of a more rapid action, is always the thing to be sought for. The spirit of camphor, taken in the dose of ʒj., in a small quantity of water, is equally energetic and rapid. The objection that it immediately becomes insoluble by contact with water, is sufficiently obviated by the fact, that its operation is most certain and rapid, and that essence of camphor, in which the camphor is so dissolved that it does not separate on the admixture of water, possesses, so far as I have been able to judge, no advantage over the other.

As in many other cases, the chain of morbid actions must at once be broken, and this is done much more effectually by two or three full doses, repeated at short intervals, without the least remission, till the chordee is completely stopped, than by small quantities, however long continued and regularly taken. I therefore invariably adopt the following plan:—

A teaspoonful is to be taken at night in water before going to bed, and *every time the patient wakes with the chordee, let him at once rise and repeat the dose.* In the milder cases, one dose for a night or two is generally enough. In the more severe ones, the symptom is generally removed at the end of the second night, becoming, in the mean time, milder and less frequent after each dose. So long as the clap remains bad, I frequently recommend the patient to take a teaspoonful at night, before going to bed, which suspends the chordee till the cure is completed. This plan of treatment also answers well in the bearing down pains to which women are sometimes subject in clap; but as here, contrary to what it is in men, these pains are generally worst in the daytime, it is best to use the essence of camphor largely in the medicine they may happen to be taking.

It must, however, be taken in full doses. A violent sudden pain like that of chordee, requires an equally powerful remedy, and there is no use in trifling with it. A less quantity than a teaspoonful will not always suffice to abate the pain at once, though it may materially alleviate it; just as a moderate dose of chloroform will lull the acute pain of an operation without rendering the patient insensible to what is going on, while a smaller quantity, in one full dose, produces complete torpor. Now, as a teaspoonful or two may be safely taken, it is best to insure success at once. In one or two cases, it has produced some sickness, and, strangely enough, this has been more the case with small doses than with large ones; this was probably caused by something having been previously taken that had in some measure disordered the stomach. At any rate, the instances have been too few to make the affair of any moment. I only allude to it here, that no one might by its appearance be discouraged from giving so valuable a remedy as camphor really is.

The patient should be directed to keep the camphor in a tightly-corked bottle, and in a cool place, and to have it by his bed-side ready to take. It is best taken in water, as, if dropped on sugar, it produces a strong sensation of heat in the mouth, occasionally preventing the patient from getting to sleep again.

In my next paper, I shall adduce cases in support of what I have said.

[To be continued.]

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. THOMAS'S HOSPITAL.

By T. A. CHALDECOTT, Esq.,

House Surgeon.

REMOVAL OF THE OS CALCIS FOR NECROSIS.—CURE.

WILLIAM CLIFTON, aged 10, was admitted into Abraham ward, under Mr. Simon's care, on the 18th of April, 1851, with severe disease of the foot, accompanied by impairment of the general health. His mother stated that, until four months back, the foot was perfectly healthy; that then, without any known cause, it became swollen, hot, red, and very painful; that it was treated with leeches and poultices, purgatives being occasionally given, and that, at first, it improved. A month after the commencement of the disease openings formed, from which there flowed a profuse discharge of pus. The foot continued much the same up to the time of admission, the pain and swelling having undergone no diminution.

On his admission the hinder half of the foot was swollen to, at least, double its bulk, and was of a bright red colour. The swelling extended as high as a line just above the malleoli, but (as it covered these processes) was too uniform to be owing to effusion into the ankle-joint. There were several orifices at different parts of the swollen integuments, from all of which sinuses ran towards the os calcis; and this bone could be felt with the probe exposed to a considerable extent. He had exquisite pain when the foot was moved or even touched. His health was much affected; he had lost flesh considerably; he was without appetite, had impaired rest, and was feverish and irritable. Warm-water dressing was applied. On the 20th of April an incision was made over the dorsum of the foot where fluctuation was felt; from this a good deal of serum, mingled with blood, and a small quantity of pus escaped; it was found to communicate with the old sinuses. By this incision much relief was given to the tension of the superficial parts, and the inflammation of the foot rapidly subsided in a great degree.

Mr. Simon then, on making a very careful examination, found that the os calcis was the only bone exposed; that all the sinuses led in the direction of that bone; and that the tenderness was chiefly confined to its coverings. Over the inner side of the foot the skin was healthy, and here pressure could be made without causing pain. Mr. Simon, who, when the boy was first admitted, had feared that at least the whole foot must eventually be amputated, now came to the conclusion, that the calcaneum was the only bone diseased; that this disease was, in all probability, necrosis, and not caries; and that the neighbouring articulations, with the astragalus and cuboid bone were in a healthy condition. He therefore determined to remove only this bone, thinking, from the accounts of the few cases which have been operated on in this manner, that the foot, thus preserved, would prove a more useful member than the stump left after amputation beneath the astragalus, or at the ankle-joint; and knowing, from experience, that the diseased skin, riddled with sinuses as it then was, would quickly recover itself and heal after the removal of the dead bone. He intended, however, if during the operation he should find the cuboid diseased, to amputate the foot beneath the astragalus; and if this bone also were unhealthy, to amputate at the ankle-joint. On the 28th, Mr. Simon performed the operation. He made a longitudinal incision in the axis of the bone, beginning just above the heel, and extending to the centre of the sole; and from the end of this incision a second one, extending at right-angles directly outwards, passing round the outer margin of the foot to its

dorsum; the two cuts together forming the outline of a rectangular flap. By turning up this flap, he immediately exposed the whole outer surface of the calcaneum, and its articulations with the adjoining bones. It was readily turned out from its place, the whole of it being necrosed, with the exception of that part which enters into articulation with the cuboid, and which was sound to a small depth from the joint. The tendo-Achillis had been separated from the bone with its periosteum, and was firmly adherent to the surrounding tissues.

The articulating surfaces of the cuboid and the astragalus were perfectly healthy. Some little new bone had been thrown out, this it was thought advisable to remove where loosened by the eversion of the flap. The wound was lightly brought together, united in part by sutures and strapping, and water-dressing was applied. Only a single arterial ligature was required: the posterior tibial trunk, as well as the plantar branches, and the corresponding nerves having been carefully avoided. The limb was placed on an internal splint, and secured by a roller. Chloroform had been given throughout the operation, anæsthesia having been very readily and completely induced. The boy got well without a bad symptom. A great part of the wound healed by the first intention, and the single ligature which had been applied came away in a few days. The cavity left by the removal of the bone at first served to collect the pus which escaped imperfectly through one of the old sinuses, but after a time the wound, which had united, gave way at one point, and from this opening the matter escaped freely, so that, by judicious employment of compresses the cavity was obliterated, the discharge ceased, and all the sinuses healed, the skin resuming in a very short time its ordinary healthy appearance. On the 30th May, six weeks from the date of his admission, he was discharged cured; having been about the ward on his crutches for some time previously, and being able to press his foot firmly to the ground without pain. The absence of the heel bone was not so apparent as might have been expected.

We have selected the foregoing case for publication because it affords a very good example, showing how far that saving surgery may be carried, which teaches us to prefer excision of single bones of the tarsus, when diseased, to the sacrifice of the whole foot, or to that still greater mutilation of the body, amputation below the knee.

The only objection to this plan of treatment is the difficulty of diagnosing the exact extent of the disease previous to operation. But that this difficulty may be overcome by a careful and accurate examination has been fully proved, and in these days, when, by the aid of chloroform, the surgeon's knife has been deprived of many of its terrors, and consequently the celerity of an operation has become of secondary importance, the surgeon may, at the time, make certain of the extent of the mischief, and use his knife just so far as may be necessary for the removal of the whole disease.

But very few (some four or five) instances of the removal of the os calcis have been recorded. The results of these, which must be regarded on the whole as very satisfactory, are mentioned in the "Medico-Chirurgical Transactions," Vol. XXXIII., in a paper on the subject by Mr. Page, wherein he relates also more fully a case of his own, in which he performed this operation with a very satisfactory result, "the boy," he states, "being able to walk, run, and jump with very little impediment, and the foot, for all the uses of a foot, being as serviceable to him as the other."

The method of operation pursued in the present instance, viz., the raising of an outside flap, and the separation of the calcaneum from the astragalus from within outwards, must be considered preferable to that followed by Mr. Rose,—the raising of a posterior flap, and separation of the bones from behind forwards,—seeing that the plantar nerves and vessels are preserved in the former, while in the latter they are necessarily cut through.

The diagnosis of the extent of the disease was, in the present instance, rendered more easy and certain by the knowledge of its nature; for necrosis, unlike caries, is generally confined to a single bone. The same fact also rendered the prognosis more favourable.

We may conclude, then, from the result of this and other similar cases, that excision of the calcaneum is, in many instances, preferable to amputation of the foot, inasmuch as the motion at the ankle-joint being preserved, and the tendo-Achillis becoming firmly united with the surrounding soft

tissues, and thus allowing the gastrocnemius still to act as a powerful extensor of the foot, locomotion is much more easily and perfectly performed.

RUPTURE OF THE COLON—COMPOUND DISLOCATION OF GREAT TOE—DEATH.

The following case is one of those, unhappily not rare accidents, in which an important viscus has been ruptured by mechanical violence. Efforts to save life in these instances must almost always prove abortive, and the following is only related for the purpose of warning our readers, that it is quite possible that a mortal accident of this kind may happen without the immediate occurrence of the collapse which usually accompanies them. For some particulars of this case we are indebted to Mr. Wiles, the dresser.

William Rochetsford, aged 46, a carman, was admitted into William Ward, under Mr. M'Murdo's care, on the 13th May, 1851, at six p.m. He stated that he was driving a loaded coal-wagon, and walking on with the horses, (not sitting on the shaft,) when he slipped and fell down. He was not stunned by the accident, but was so much alarmed, that he did not know whether the wheel of the wagon had passed over him or not; and no information on this point could be obtained from the man who accompanied him. He complained chiefly when first admitted of the right great toe, and, on examination, it was found that there was a compound dislocation of its first phalanx from the metacarpal bone, with a wound about three or four inches in length along the inner side of the foot. This was reduced without difficulty, and the wound having been united by sutures, the toe was fastened on a splint. During the dressing, however, he began to complain of very severe pain across the lower part of the abdomen. It was immediately suspected that some one of the abdominal organs had been lacerated by the accident; but, on further examination, this idea was given up, for there was none of that collapse which almost invariably attends such accidents; the surface was warm, and the pulse of normal strength and frequency. There was no external mark of violence on the abdomen, and the man stated moreover, that he was somewhat subject to severe attacks of abdominal pain, and that he did not believe the wheel of the wagon had passed over him. It was ascertained, however, beyond doubt, that the bladder was uninjured, for the catheter was introduced, and a considerable quantity of clear urine flowed in the usual manner.

Ordered warm fomentations to the belly.

About 9 p.m., however, unmistakable symptoms of collapse came on, and the intense pain continued. The pulse was scarcely perceptible at the wrist; he was pallid, and the general surface was cold.

Mr. Mackmurdo, who now saw him, considered it certain that some one of the viscera had been ruptured.

He was ordered morph. hydrochlor. gr. $\frac{3}{4}$ statim.

He remained much in the same state, and died rather suddenly in the night, at one o'clock—seven hours after the injury.

At the *post-mortem* examination, the fatal rupture was found to be in the sigmoid flexure of the colon. The wound had assumed the usual form which appertains to transverse slits in the intestines, and which is well described by Travers—that is to say, the edges of the wound had separated so far, that a circular aperture, about the size of a sixpence, was formed, within which there was a circular lip of the protruded mucous membrane.

There was a considerable quantity of fluid fæces effused, especially into the pelvis. Both the parietal and visceral layers of the peritoneum were much more vascular than usual; and in the neighbourhood of the perforation there was some recent lymph effused. The viscera, both of the chest and the abdomen, were healthy.

The chief points to be learned from the foregoing case are, 1stly, that it affords a confirmation of the fact asserted by Travers, viz., that wounds of the intestines, where the abdominal parietes are uninjured are more likely to be followed by effusion of fæces, and therefore prove fatal more frequently than those punctured wounds produced by the sword or the bayonet; and, 2ndly, that we must be very cautious in our prognosis of a case where the abdomen has had any considerable force applied to it, and not be in too great haste to pronounce the patient safe on account of the absence of symptoms of collapse.

COMPLETION OF Mr. WARDROP'S WORK ON THE HEART.

Our Subscribers are informed that this valuable Work has at length been completed, and that they may now receive, on application to our Printer, (Mr. Tyler, Bolt-court, Fleet-street,) the remaining portion, from page 544 to the end.

N.B.—The readiest mode of obtaining the above, is by enclosing four postage stamps with the application to Mr. Tyler.

THE MEDICAL TIMES.

SATURDAY, JULY 19.

THE BILL FOR REGULATING THE QUALIFICATIONS OF PHARMACEUTICAL CHEMISTS.

WE regard with considerable interest the measure for the registration of qualified pharmaceutical chemists which has been recently brought before the House of Commons by the Member for St. Albans. Himself a druggist on a gigantic scale, and flushed with his recent triumph successively over a Constituency, a Parliament, and a Committee, he advances unscathed to fresh fields and pastures new. Doubtless there is much scope for a good pharmacopolist in the House. He might add a tincture of energy to the deliberations of the Ministry, infuse modesty and honesty into the Irish Members, pulverise the stony-hearted administrators of the Irish Poor-law, prepare concentrated extracts from Hansard, and, finally, might assist Her Gracious Majesty to dissolve Parliament. But the present aims of the Member for St. Albans are higher, being nothing less than the elevation of the whole class of druggists to the rank of pharmaceutical chemists. The existing druggists may continue, protected by their vested interests; but henceforth all future pharmacopolists who may emerge from the womb of time shall undergo supplementary development and lactation in the marsupial apron of their great professional foster-father.

To speak seriously, there is nothing wrong in a druggist advocating his class. The possible motive of such a proceeding is, however, so prominent, that, while the press which guards the public has a right to suspect it, we, who also represent the Medical Profession, are especially bound to examine it. Our estate runs side by side with that of our neighbour: he has long shown somewhat of a disposition to encroach; and, consequently, if we hear he is altering his fences and shifting his hurdles, we are naturally curious to know what he intends doing, and where the new boundaries are to come. He may cultivate his land as he likes, and torture his clods with all manner of steam ploughs and guano. All this he has a right to do; but, if he changes the ancient landmarks at all, we strongly suspect it will not be to recede into his property, but rather to advance into ours.

First and foremost, what entitles a class to a monopoly?

It is very clear, that any monopoly is at first a gain to the class possessing it. Their numbers thus artificially diminished, and competition kept down, the demand exceeds the supply, and the price of the article rises, no matter whether it be cotton or cultivated intellect.

But this advantage to the class,—to say nothing of its being rather fleeting,—is met by the resulting disadvantage to the public of diminished convenience and cheapness. And thus we find only one kind of monopoly excusable; viz., those varieties of professional skill which are of imme-

diate influence on the lives or properties of the public, and which are incapable of being directly appreciated by the judgments of the many who are compelled to make use of them. The safety attained in the assistance thus given to private judgment, overbalances the inconvenience of diminished numbers, and ultimately, perhaps, competition nearly restores the natural level.

What are the functions of druggists?

Manufacturing druggists are, with few exceptions, a distinct class. The bulk of the trade, which the Bill proposes to deal with, may be defined as living by three means: the preparation of the prescriptions of medical practitioners, the retail sale of drugs, and the illegitimate and culpable assumption of medical functions.

The first of these constitutes the *locus standi* of the Bill. As druggists are at present educated, the ignorance of many renders the dispensing of medicines a work of danger to the patient. And the same remark applies (we presume in a less degree) to the retailing of drugs, apart from their mixture. As regards the third element of their trade, the Bill ignores its existence, and expressly stipulates for the integrity of all privileges formerly conceded to, or now possessed by, existing medical institutions.

We object to the Bill on several grounds. First, the interests of the druggists and apothecaries are so closely connected, that to regulate the affairs of the first without any reference to those of the second, is a piece of patchwork legislation which can only make confusion worse confounded. Secondly, the Bill is unfair, and tends to raise the status of one class at the expense of another. By the omission of any clauses regulating the administration of medicines by druggists, the apothecaries may rest assured that they are doomed to speedy annihilation. Thirdly, the Bill is not only thus unfair to the Profession, but it will be injurious to the public, as its tendency will be to supplant the apothecaries, and to supply their place by a body of less educated men. Fourthly, the Bill is unnecessary, since all that is needed to insure what is really good in its provisions, would be a short Act, giving to the Apothecaries' Company the duty of ascertaining that druggists are competent to dispense, before they are allowed to do so. Let Mr. Jacob Bell work with the Medical Profession to obtain a comprehensive measure of medical reform, in which the duties and rights of all classes may be determined; but let him forbear this hasty and partial legislation, which savours more of the ambition of one anxious to benefit a class, than to promote the well-being of all classes of the community.

Perhaps some of our readers may incline to think the step an incidental benefit to the medical profession, as tending to sever the dispensing of medicines from their prescription, and thus likely to bring about what they consider "a consummation devoutly to be wished,"—the conversion of every surgeon-apothecary into a surgeon-physician. But whether this be desirable or no, at any rate it ought to be done openly, straightforwardly, and by the parties immediately concerned,—the public and the Profession. Let the medical man be cautious in trusting to a side-wind of benevolence from a third party,—"timeo Danaos et dona ferentes."

This brings us to the last point we shall at present put forward. The apothecary of to-day was the druggist of two hundred years ago: he sold drugs and spices to the laity, prepared prescriptions for the physician, and under his direction administered remedies to the patient. The public began to perceive, that the man who constantly administered drugs and witnessed their operation must know

a good deal about them. The vulgar are always materialists, and

"Swear that pill or draught has wrought the cure."

Gradually the man of pills and draughts worked his way, by their means, into practice. The praiseworthy efforts of the Apothecaries' Company, aided by the Government, at length transmuted the empirical apothecary into a scientific medical practitioner.

But, in spite of the world-wide benevolence of the medical profession, in affording gratuitous advice to the poorest,—in spite of the medical relief granted by the State, and the charitable institutions which in this country are beginning almost to struggle for guests, the ignorance of many of the poor, aided by their laudable independence of feeling, has led them to regard the druggist as a cheaper medical practitioner. The distinction between selling and recommending a drug is often so fine, that the druggist can deceive himself into the belief that he is not doing wrong in prescribing remedies for disease. And we are sure that all our medical readers, both in town and country, can recall numberless instances where the "stuff from the druggist's" has either aggravated the disorder it was meant to cure, or has at any rate wasted the precious hours which precede or commence a dangerous or fatal illness. We have no hesitation in saying that this "*counter practice*," as it is called, is an enormous evil to the public, a waste of human health and life, and we regret to add, a serious blot upon the morality of an otherwise deserving body of tradesmen. And while we cannot see how the retail of drugs demands so much more skill than that of spices, perfumery, and condiments which is still united with it, as to call for the interference of the State,—while we cannot see but that the practitioner who prescribes might (if necessary) aid local fame in pointing out a trustworthy dispensing druggist to the patient,—we can see, and that plainly enough, how the conferring of a diploma on a tradesman will not only be an unnecessary and inconvenient monopoly to the public, (as Mr. Hume so pertinently remarked,) but will inevitably assist the vulgar to mistake a druggist for a pathologist, diminish the legitimate rewards of an overworked Profession, foster quackery, and therefore, (in a certain per centage of instances,) destroy human life.

Since the above was in type we have received a copy of the amended Pharmacy Bill. We shall take early occasion to call the attention of our readers to any alteration this second edition may contain. In the meantime, we refer to our News columns for what occurred in the House on the 16th upon the subject, and to our Advertising pages for a notice from the Clapham Dispensary, in which the examination of the Pharmaceutical Society is *actually deemed equivalent to the diploma of the College of Surgeons and the license of the Apothecaries' Company!*

WATER SUPPLY FOR THE METROPOLIS.

THE much debated subject of water supply for London seems gradually clearing up, and, although no decisive step will be taken this year, the session of 1852 will probably see this knotty question settled. It will, perhaps, be interesting to our readers to know the exact position of the movement at the present time.

A Committee of the House, of which Sir James Graham is Chairman, is at present sitting on the Government Bill for Water Supply. We need hardly say that this Bill proposes the amalgamation of all the existing Water Companies, limitation of the profits of the Company thus formed to 5

per cent., and control by Government of the sources of supply. The Bill does not provide for the sources of supply, but a clause is inserted, to the effect that this point is under consideration, and that the Government reserves its decision. In forming this Bill, Sir George Grey seems to have had in view the prevention of the loss of property which the destruction of the present Water Companies would necessitate, and the proposed 5 per cent. profit is to be viewed in the light of compensation, which is thus fixed on the present Metropolitan ratepayers and their descendants for ever.

This measure of Sir George Grey cannot be expected to be popular with the Metropolitan ratepayers, who are thus called upon to guarantee a perpetual 5 per cent. to parties from whom they have prayed for these ten years to be freed. But, singularly enough, the Government Bill is also strenuously opposed by the Water Companies themselves, who are the only parties benefited. Of all the Companies, two only, the Southwark and the Grand Junction, represented by Sir William Clay, support Sir George Grey; the remainder, with that infatuation which blinds in order to destroy, oppose all alteration, and thus, most luckily for the ratepayers, are doing their best to repel the generous hand which would soften their fall with a soothing five per cent.

Another Bill is before the Committee, or rather its promoters have been heard there on petition, which proposes to give the administration of the water supply to a Board composed of Commissioners, chosen partly by the ratepayers of the Metropolitan parishes, and partly by the Government. From these Commissioners an acting Board of five members is to be chosen, who are to be removable at pleasure, and who are to be salaried. No compensation to the existing Companies is hinted at, and the source of supply is left to be settled hereafter.

This Bill is founded on two principles, which ought to command the support of every one. The first is, that the supply of water is not to be made a trade, but is to be looked upon as a necessary which all, rich and poor, should receive at the lowest possible rate. The second is that the control and administration of the supply, should be in the hands of those who are supplied, viz., the ratepayers.

Neither of these Bills is likely to meet with the support of a large and influential party represented by the Board of Health, who are not before the Committee, but whose views are sufficiently well known. This party would also remove the supply of water from the trading companies; but instead of assigning it to the ratepayers, would connect it with the Government Boards for other sanitary purposes, such as the Sewers Commission. There are obvious and great advantages in thus consolidating various works, which, to be properly efficient, must be connected; and the conception of "sanitary consolidation" is well worthy of the enlightened party to whose exertions we owe the present movement. It would be well, however, if some means were devised of combining the merits of these two last schemes; that is to say, of connecting the Commissioners of the Water Supply both with the Rate-payers and with the Board of Health and Commissioners of Sewers.

The Committee have not yet made their Report; but the probability is, that they will adopt a modified Bill, which will, however, stand over to next Session, and will then be merely a foundation for a new measure. That new measure will probably be a compromise; and while the grand principles will be, conjoint administration by Ratepayers and by a Government Sanitary Board, there will be some compensation granted to existing Companies, though this can never be at the rate of a permanent 5 per cent.

It will be seen, that the question has been limited, so far, to the formation of the administrative body. When this has been settled, the grand point will be as to the source or sources of supply. This is a most important question, and will no doubt be settled next session also. Next week we shall briefly review the present position of this subject, and we hope to convince our readers, that, before long, the Metropolis will inevitably have a copious supply of wholesome water.

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF
MEDICINE AND SURGERY.

[NINTH NOTICE.]

IN our last notice of this grand exposition of modern art and manufacture, we had under review a series of instruments which have been of greater importance to the physician and naturalist than, perhaps, any other in the investigation of healthy and morbid structure, which have opened a new and previously unknown world to the naturalist. It is to these branches of natural knowledge what the telescope is to the starry heavens. We have already brought under the notice of our readers the instruments of the three principal makers, whose names are so well known to the scientific world, that any praise that we could give to their productions would be superfluous. It is impossible, as we have said, to estimate the power and qualities of any instrument at the Exhibition itself, because the merit of a microscope does not depend at all on the fine polish and beauty of the brass-work, but on the power, clearness, and definition of the lenses; and we are at a loss to know, how the jurors will be enabled to decide on the relative merits of the instruments, unless each is carefully examined by means of test-objects. As we have no opportunity of making such an estimate of their capabilities, we must content ourselves with a passing notice of the names of the other Exhibitors, and then proceed to the microscopic preparations, of which there are several collections. In addition to Messrs. Ross, Powell and Lealand, and Smith and Beck, Mr. Eden (246) exhibits an achromatic microscope; Mr. Pritchard (248) a similar instrument; and Messrs. Field and Son (250), Birmingham, several achromatic and dissecting microscopes, with Wollaston's magnifiers. We presume the doublet is here intended. Messrs. Varley and Son (257), a microscope; Messrs. Chadburn (289), also microscopes; Abraham and Co. (263), a compound microscope; Mr. Pillischer (269) has several achromatic and what are termed students' microscopes, with microscopic apparatus; Mr. King (287), achromatic microscopes, with a peculiar form of prism for throwing a bright light on opaque objects; Mr. Ladd, (291, a,) exhibits a compound microscope, in which a chain and spindle are substituted for the rack and pinion; but we are not aware that any great advantage is gained thereby. Mr. Sharp (308), has a set of ten lenses, with focal lengths, varying from 1-10th to 1-100th of an inch; but the qualities of these, as of the glass-work of all the microscopes, we are totally prevented from forming or giving an opinion.

Next in utility to the power and definition of the microscope, and the capability of the observer, from continued practice, of viewing and interpreting objects aright, is the preparing and preserving these objects, so as to demonstrate to others the truth of what has been asserted. As on the large scale museums are formed to exhibit the healthy structure and the results of morbid changes in the animals, the structure and forms of plants and minerals, so museums of microscopic objects are formed to exhibit the minute structure and forms of those same objects of natural history. Until within the last twenty years, anatomists, whether of plants or animals, were contented with describing and figuring the objects which they discovered; and, as the instrument they employed was more or less perfect, so were the delineations of structure; and thence, doubtless, many mistakes have arisen which required subsequent correction. On this account, as well as the desire of preserving the objects themselves, and the greater satisfaction resulting from demonstration of the actual objects, many modes have been invented, and infinite trouble taken, to obtain the best means of preserving microscopical preparations,—a subject, we must observe, of considerable difficulty, especially when

the more delicate structures, whose characters are altogether destroyed by drying, are to be preserved.

When an object is either originally dry, as wood or bone, or can be dried without injury, as many injected preparations and animal and vegetable membranes, there is no difficulty in preserving them: their sections are made either by cutting or grinding on a hone, and these are placed on a convenient glass slide covered with a plate of microscopic glass, and fastened by pasting paper around them; or if it be desirable to render them more transparent, they are immersed in a drop of Canadian balsam warmed on the plate, and a piece of microscopic glass placed over them, taking care to exclude air-bubbles; and when the balsam is sufficiently solid, the excess cleared off by a knife or small chisel, and a cloth moistened with spirit of turpentine. Preparations in this state may be preserved for any number of years, and are, in a certain sense, indestructible.

But when the characters of the object are injured or destroyed by drying, the case is different, and they must then, as in ordinary anatomical preparations, be preserved in some liquid capable of preventing putrefaction or other destructive changes. Many methods of mounting such preparations, and many preservative fluids have been devised for this purpose; but the method now employed may be succinctly described in the following words, omitting many minor details which are minutely described in the excellent Work by Mr. Quekett, on the Microscope, to which we have already referred.

A glass slide is taken, warmed, and a circle of glass of sufficient size and thickness to admit the preparation, is fixed on it by means of marine glue; the excess of the glue is scraped away, and the glass carefully cleaned. This is then filled with the preservative fluid, an excess being employed, the object is placed in it, and all air bubbles carefully removed by means of the point of a needle. The piece of microscopic or thin glass is next touched with jappanners' gold size around its edges, and carefully placed over the cell containing the preparation, allowing one edge of the thin glass first to touch the liquid, and the whole to gradually fall over the cell; the superabundant fluid is next removed by a sucking tube, or a piece of blotting paper gently applied to the edges, the preparation allowed to remain for a short time in order to allow the evaporation of the superfluous liquid, a thin coat of jappanners' gold size spread around the edges, and after this has become dry, subsequent coats of the same liquid are applied until sufficiently thick to secure the preparation. The preservative liquids are very numerous, but our space will not permit us to notice them further than to say, that a very useful fluid is a mixture of one part of rectified spirit with five parts of water.

With this preliminary explanation of the nature of microscopic preparations, we proceed to notice those contained in the Exhibition. The two best collections are that of Mr. Topping, which includes animal, vegetable, and mineral preparations, and that of Mr. Hutt, which contains injected animal specimens only.

Mr. Topping has long been known as one of the best, if not the most successful, of those who carry on the preparing of microscopic objects as the business of life; and his preparations may always be depended on for their beauty, and the neatness with which they are mounted.

Among the most interesting of the objects contained in the collection exhibited, which are but a tithe of the objects he is constantly preparing, are some beautiful dissections of the tracheæ of insects, the well-known and not less detested itch insect (*acarus scabiei*), the skins of caterpillars, and a series of specimens of salts and other objects for exhibiting the play of colours by polarized light. Added to these we have sections, and very beautiful ones, of bones and teeth, both in their recent and fossilized condition, with the shells of various shell-fish and crustacea; transverse sections of the hair of the elephant and of man, and of the horn of the rhinoceros; blood-discs, apparently dried on the glass, and a large series of injected preparations of animal tissues and organs. Among the latter injections, all of which are injected with the yellow chromate of lead, are portions of the kidney of the dolphin, monkey, leopard, horse, and of the human subject; the lung of the alligator, bear, rattlesnake, and of man, both in the adult and fœtal condition; the skin of man, of the foot of the ostrich, and of other birds; the villi of the small intestines of the rhinoceros; the rectum of the goose; the colon of the sheep; the œsophagus of the ostrich; the stomach, large and small intestine, gall-bladder, and

urinary bladder of man; the tongue of the monkey, and the liver of the rabbit. Besides the above are some valuable specimens illustrative of the structure of plants. Although we were not enabled to examine these preparations with the microscope at the Exhibition, we are enabled to state, from a private view of similar ones, that they are not excelled, although they may be equalled, by those of other preparers of microscopic specimens.

Mr. Hett's collection (Class X. 249) being confined to injected animal preparations, is necessarily less extensive, but by no means inferior in the beauty of the specimens to that of Mr. Topping, and we have the advantage of inspecting them by the microscope. They are mounted on a wheel, so that each object may be brought under a microscope attached at one point of the circle by turning the wheel. They exhibit certain of the most interesting of the tissues in man and animals. Thus, we have the skin of the pig, sheep, monkey, fowl, of the cat, and of the human fœtus; the eyes showing the vessels of the iris in the fowl and lamb; the human tongue demonstrating the vessels of the papillæ; the lung of the monkey, the rook, and of man in its healthy and emphysematous and tuberculated condition. The last of these demonstrates that tubercle is non-vascular. The human stomach, and the stomach of the fowl, show the tubular follicles of the mucous membrane, and specimens of intestine, exhibit the villi and their beautiful reticular capillaries. A specimen of injected muscular fibre exhibits the longitudinal direction of the capillaries between the muscular fibres. The tongue of the monkey and the buccal membrane of the lamb also show the peculiar arrangement of the capillary vessels of these parts; and the mucous follicles of the œsophagus are demonstrated in these parts of the lizard and the rook. The whole collection, including forty specimens, has been, and will be, examined with interest by every visitor belonging to the Medical Profession.

Messrs. Smith and Beck have attached to their model cabinet for microscopic specimens some beautiful sections of bones and teeth, both in the longitudinal and transverse direction, and some of them of very large size.

The remaining collections of Mr. Poulton (252), Mr. Hudson (256), and Mr. Stark (284), possess little or no interest; they are most of them the common objects, which serve rather as toys for amusement than for instruction, and are by no means so well mounted as those we have already noticed. Mr. Stark's collection is chiefly remarkable for the use of rings of gutta percha for cells, instead of glass rings usually employed. This idea, although, perhaps, novel in Edinburgh, was tried and abandoned years ago by Mr. Quekett, who found that the gutta percha could not be made to adhere with certainty to the glass.

We cannot conclude our account of the microscopic portion of the Exhibition without alluding to some beautifully executed drawings of microscopic objects by Mr. Leonard, (Cl. X. 306.) These consist of the microscopic analysis of the coffee berry, and of the root of chicory, so extensively employed for the adulteration of coffee. Several varieties of starch, with the structure of the parts of the plants from which it is obtained, are given from the bean, the potato, arrowroot, sago, and rice. Milk and its adulterations are also shown by drawings of the microscopical appearances of human milk; that of the cow, with its cream and curds magnified 1200 diameters; of calves' brain, used for its adulteration; and of a mixture of milk and linseed-tea, employed to thicken the diluted milk.

Illustrations are also given of human bone, that of the ostrich and the turtle, of the hoof of the horse, a scale of the *Lepidosteus*, the sword of the swordfish, a spine of the ray, and exquisite drawings of injected human lung in its healthy and tuberculated condition.

THE QUARANTINE CONGRESS.—Dr. Sutherland, the Medical Inspector of the General Board of Health, has been appointed to attend the Medical Congress to be held at Paris, on the subject of quarantine, by the medical authorities of the several European Governments interested in the question.

HONG-KONG.—The reports from this Colony state, that sickness has diminished among the garrison, since the appropriation of the Minden to their use. It is a strange thing that the Government were so long learning, by sad experience, the value of human life, and of soldiers trained to their duties, when conveyed to a distant part of the world.

1. *Pharmacopœia Collegii Regalis Medicorum Londinensis*. 1851.
2. *Translation of the Pharmacopœia of the Royal College of Physicians*. By A PHYSICIAN. 1851.
3. *The New London Pharmacopœia*, Translated and Arranged in a Tabular Form with the Edinburgh and Dublin Pharmacopœias; showing at one View the Differences in the Formulæ of the Three Colleges, together with the Tests given by each College for the Purity of the several Preparations. With Practical Remarks. By PETER SQUIRE, M.R.I., Chemist on the Establishment of the Queen, H. R. H. Prince Albert, H. R. H. the Prince of Wales, and the Royal Family. Pp. 174 and 25. London, 1851. Royal 8vo.

We have derived considerable satisfaction from a perusal of the new edition of the *Pharmacopœia*. Many changes have occurred in it; a large transference has been effected from the præparata and composita into the *materia medica*, while some new forms of old remedies have been promoted to the vacancies, and many new preparations have been introduced. We shall carefully notice them, so far as our space admits, in the order in which they occur. In the writing and manner of the preface we recognise the hand of an old scholar whose style has decayed probably with his years, for certainly he never achieved a "first class classic" with such an exhibition of *ut* with the subjunctive so often usurping the office of the frequently more orthodox infinitive and accusative. Beyond this point in particular, and its canine character in general, we have nothing further to observe.

The *Materia Medica*, as it forms the first part of the *Pharmacopœia*, is the one we shall first notice, and in it we have to congratulate our readers on the reform observed in its list. We are happily rid of *oxalis acetosella*, *acorus calamus*, *aspidium filix mas*, *barytæ carbonas*, *calcis hydras*, *erythraea centaurium*, *dorstenia contrajerva*, *euphorbium officinale*, *malva sylvestris*, *ferri percyanidum*, *marrubium vulgare*, *opoponax chironium*, *origanum vulgare*, *rumex acetosa*, *tussilago farfara*, *spigelia marylandica*, *ostrea edulis* (testæ), and *rhus toxicodendron*.

Still the weeding out is not complete; we could well spare *mucuna pruriens*, indeed, much better than *aspidium filix mas*, the oil of which is perhaps as serviceable an anthelmintic as any in the *materia medica*. Among the new articles introduced into the first part of the book we observe tannic and gallic acids, the cod-liver oil, under the title of *morrhue oleum*, the Barbadoes and hepatic aloes, in addition to the formerly recognised *socotrine*, and the *viola odorata*.

In the botanical department there has been considerable care exercised with respect to the proper names of plants yielding certain products, and justice is thereby done to later discoverers. Gamboge is not now asserted to be the produce of *stalagmitis cambogioides*, but of uncertain species of *garcinia*. *Capsicum annum* has changed to *C. fastigiatum*, on the authority of Blume, and the *alpinia cardamomum* of Roxburg to the *C. elleteria* of Maton. *Cascarilla bark*, as long ago suspected by Dr. Lindley, is said to be the produce of *croton eleuteria*, and not of *croton cascarilla* of Don, which, in fact, yields *copalchi bark*. This point seems to have been decided by Dr. Lindley, who, we believe, has received specimens of the plant from the Bahamas. The *cinchonas* are now described as yellow, red, and pale barks, formerly as *cinchona cordifolia*, *C. oblongifolia*, and *C. lancifolia*; and on the authority of Weddell, the yellow is the production of *C. calisaya*, the red of various and uncertain species, and the pale of *C. condaminea*; and in this manner we believe this most vexed question to be at length most satisfactorily disposed of.

In the last edition, ergot was assumed to be a fungus called *acinula clavus*; the authorities adopting the opinion of Guibourt, that it was not an ovary or altered grain, but a fungus, which, after the destruction of the ovary, is grafted in its place on the peduncle; although, in opposition, Berkely asserted, in the second volume of Smith's *Flora*, that ergot was a diseased state of grain, and had not sufficient claim to be admitted among fungi as a distinct genus. In support of this latter opinion, Quekett observes, that the scales at the base of the ergot, the frequent recurrence of the

stigma at the top, and the articulation of it to the receptacle, prove that it is not an independent fungus, but a diseased state of grain. Still many maintain, that ergot has no further relation to grain or other seed, than what arises from the accident of position,—that it is an independent fungus, and not a diseased condition of the seed.

Many of the errors in the old edition are corrected in this; for example, kino was formerly declared to be the produce of *pterocarpus erinaceus*, a plant growing exclusively in Africa; it is now properly referred to *P. marsupium*, a native of the East Indies, whence all our kino is obtained. But we must here close our remarks on the *Materia Medica*, and proceed to the *Præparata* and *Composita*.

We find the acetic, citric, tartaric, hydrochloric, and nitric acids are now articles of the *materia medica*; and a formula is given for a new dilute acetic acid, while most of the other dilute acids have undergone some change in their proportions. Thus, the dilute nitric is ordered to be made with three parts of the pure acid to seventeen of water—the old one being in the proportion of one in nine; and the strength of nitric acid is reduced from sp. gr. 1.5 to 1.42. The dilute sulphuric acid is also altered, but only slightly—its sp. gr. is now 1.103, formerly it was 1.11. The saturating power of dilute phosphoric acid is incorrectly given; it will require near 192 grs. of crystallized carbonate of soda, instead of 132, for full saturation. This acid is about one-twentieth stronger than that of the last pharmacopœia. There is something wanton in these alterations, for we can see no utility or advantage derivable from the change. The acetum cantharides is made with an acid, the pyroligneous,—not sufficiently strong, it will be useful only as a rubefacient; and we observe the acetum colchici and acetum scillæ are directed to be made with the dried, instead of the recent cormus, a praiseworthy proceeding, for by this means a more uniform preparation will be secured. Sulphuric ether has been promoted to the *materia medica*, and its place occupied by a formula for chloroform, which we imagine to be one of the best extant. Aconitina, liquor of ammonia, sesquicarbonate of ammonia, morphia, acetate of morphia, hydrochlorate of morphia, disulphate of quinine, strychnia, and veratria, have also been removed from the pages of the preparations, and some new forms have appeared, viz., a liquor ammoniæ citratis, a useless liquor sodæ, a liquor sodæ chlorinatæ, and liquor morphiæ acetatis and hydrochloratis, each of the latter containing a grain of the salt to a drachm of the solution, and thus being 50 per cent. stronger than the corresponding Edinburgh and Dublin formulæ.

Most of the distilled waters are to be prepared from either the seeds or the oil, and proof spirit is omitted. The utility of this latter proceeding may be questionable in some of the waters. The orange-flower water is omitted.

Cataplasma carbonis, and cat. sodæ chlorinatæ are added to the old list of cataplasms. The vinegar is judiciously ordered to be left out of the cat. sinapis, since its presence interferes with the development of the volatile oil on which the rubefacient action of the cataplasm depends.

Passing to the decoctions, we observe those of the barks under the names of *D. cinchonæ*, *D. C. pallidæ*, and *D. C. rubræ*, corresponding respectively with the barks of *C. cordifolia*, *C. lancifolia*, and *C. oblongifolia*, of the last edition. Decoction of logwood, one of the most valuable preparations for diarrhœa since the invasion of cholera, has obtained a place; so also have taraxacum, pomegranate root, gall-nuts, and *Parevia brava*. Decoc. malvæ comp. and decoc. veratri are omitted. In the emplastra there is a re-introduction in emp. cumini, which was contained in the Pharmacopœia of 1720, 1745, 1787, and 1809, and according to continental and particularly German authorities, is a valuable adjunct to our remedies in various diseases, complicated with tympanitis, and as well in the anomalous pains of hysterical women. The emp. belladonnæ is ordered to be made of equal parts of ext. belladonnæ and emp. saponis; the inefficient old formula giving 6 parts of emp. resinæ to 3 of the ext. belladonnæ; and the new emp. opii contains one part of extract of opium to 11 of the other solid ingredients; the old one containing 1 part of powdered opium in about 38 parts of the whole ingredients. These are changes we feel grateful for. It will be requisite to give adhesive margins to both these plasters, but particularly the first. Emp. roborans we meet under the new face of emp. ferri; and for the accommodation of a few who admire this mode of application, there is an emp. potassii iodidi

in the proportion of one part of the salt to seven of the other ingredients. It has very much the appearance of a cerate. Among the enemata, we have an addition in the shape of enema assafœtidæ; and an important alteration in the strength of the enema tabaci, which is just one-third weaker,—a change, we opine, operating vastly in favour of the patients on whom it may be exhibited; and in enema colocynthidis, the simple extract is ordered instead of the compound, and from two scruples, the quantity is reduced to half a drachm in the pint.

There are extracts also of the three cinchona barks introduced, and an extractum sarzæ liquidum, a form very similar to that given in the *Edinburgh* and *Dublin Pharmacopœias*. The ordinary strength of the fluid extracts of the shops is, we believe, such, that 1 oz. is equal to 16 oz. of the decoction,—the fluid extract here given will be about one-fifth stronger; also a spirituous extract of nux vomica than which for certain forms of vomiting and dyspepsia no more important addition has been made in the whole Pharmacopœia. The ext. digitalis is omitted, and the ext. aloes purificatum of Pharmacopœia 1836, is now ext. aloes. There is also an addition made in ext. aloes Barbadosensis. These forms differ from the ordinary socotrine and Barbadoes aloes, simply in being deprived of their resin, the material on which the gripping and irritating quality of all aloes is supposed to depend. Why the authorities do not order a spirituous, instead of the aqueous extract of stramonium, is a mystery. The present form is neither efficient nor elegant.

We regard with pleasure the introduction of an infusum cinchonæ spissatum, made from yellow bark, intended as a substitute for the empirically manufactured liquor cinchonæ of different establishments. In the treatment of children this concentrated solution has for some time been in general use, and a formula has long been a desideratum in our Pharmacopœias. There is also an infusum cinchonæ pallidæ spissatum, surely an unnecessary addition. Infus. pareiræ scoparii, and simarubæ, are omitted.

Among the linimenta the Kentish oil finds a place; the olive being, however, substituted for linseed oil, and the old lin. hydrargyri comp. is simply lin. hydrargyri. We can only attribute this and some other changes to a certain cacoethes mutandi, an inflection not usual to the learned fellows of our alma mater. There is a new formula for the preparation of tartar emetic. The following is the process, with the probable reactions. Tersulphuret of antimony (the old sesquisulphuret) and sulphuric acid are mixed together and exposed to a gentle heat; by their mutual reaction we obtain tersulphate of oxide of antimony, sulphurous acid, and sulphur. By continuing the heat to dryness, the sulphur and sulphurous acid are dissipated. The product is next washed, the excess of sulphuric acid is thereby removed, and the tersulphate of oxide of antimony decomposed into the subsulphate, a supersulphate, and some teroxide, and these salts, being first dried, are afterwards boiled with the bitartrate, as in the old process, over which it has the advantage of being much simpler and far more economical. We have a new form of arsenic introduced under the name of liquor arsenici chloridi. It is de Valangin's solution, and is identical with that long kept at the Apothecaries' Hall as solutio mineralis solventis. It is composed of hydrochloric acid, arsenious acid, and distilled water; it has the advantage of being a much less irritating form of the mineral than the liquor Fowleri; this is explained on the supposition, that, owing to the addition of hydrochloric acid, the acid secretions of the stomach are unable to effect its decomposition. It is certain that gastric symptoms are of less frequent occurrence under the use of this solution than when the liquor potassæ arsenitis is exhibited. This may partly be referrible to the different strength of the two preparations. The liquor potassæ arsenitis contains 4 grains of arsenious acid to the ounce, while the liquor arsenici chloridi contains only $1\frac{1}{2}$ grains in the same quantity of fluid. All the preparations of barium and silver are expunged or removed to the *Materia Medica*. Bismuth is this year a nitrate, in the "Pharmacopœia" of 1836 it was a trisnitrate, in 1824 a subnitrate. Chloride of calcium, chlorinated lime, and prepared chalk, are properly promoted to the first part of the book. The new preparations of iron introduced are the syrupus ferri iodidi, ferri carbonas cum saccharo, ferri ammonio citras, and the re-establishment of the old vinum ferri. Of the formula for the iodide we have only to say,

that the action of the hot liquor on the sugar, as directed, will be to effect the production of a somewhat delicate article, and one from which the sugar will speedily separate in the crystalline form. A fluid drachm contains about 4·88 grains of the iodide. The strength of the syrup is objectionable, but only so far as it is not identical with that in common use, and known as Dr. Thomson's, which contains 3 grains of the iodide in the fluid drachm, or with the Dublin, which contains 5·73 grains in the same quantity. The ferri carbonas cum saccharo is almost a transcript of the Edinburgh formula for ferri carbonas saccharatum. It is well known abroad as Klauer's ferrum carbonicum saccharatum. The action of the sugar does not entirely prevent the further oxidation of the iron, and the process for its manufacture is objectionable. It should be conducted in closed vessels, and the precipitated carbonate washed with recently boiled distilled water; failing these precautions, a large portion of the iron must become peroxidised. Buchner supposes its composition to be protoxide of iron, sesquioxide of iron, carbonic acid, and sugar. It is a form of iron greatly preferred by many on account of being easily soluble in the fluids of the stomach, and less likely to cause headache than other preparations of iron; it is admirably adapted for children. The ferri ammonio citras, or more properly, as first suggested by Pereira, ammoniæ ferrico citras, on the ground that the iron appears to enter into composition with the acid or electro-negative ingredient of the salt. It is the most eligible form of iron with which to combine alkalies and their carbonates; and, although a feeble chalybeate in comparison with the tinct. of the sesquichloride, yet, on account of its mild unirritating quality, it is a valuable addition to the preparations of this mineral. The tinct. of the ammonio-chloride is just half the strength of the former preparation, and according to the note appended to the formula, the omission of an increased quantity of the ammonio-chloride would seem to be accidental. It states that a fluid ounce of the tincture should throw down 5·8 grains of the sesquioxide on the addition of potass. Now, if the amount of ammonio-chloride were just doubled in the tincture, an ounce would hardly throw down 5·8 grains. The vinum ferri is this time made with wine. Among the preparations of mercury, the biniodide, bicyanide, biniodide, and the sulphuretum cum sulphure are expunged. The acetated and hydrated oxide of lead are removed to the materia medica, and the chloride is omitted.

Among the preparations of potassium, the liquor potassæ effervescens, potassæ bisulphas, and potassii bromidum, are judiciously left out. We have already observed, that it has been thought necessary to introduce a liquor sodæ prepared after the manner of liquor potassæ; the sesquicarbonate of soda is now properly again called bicarbonate, and this, with the carbonate, are removed to the materia medica; so also are the sodo-sulphas and sodæ potassio-tartras; lastly, liquor sodæ effervescens is expunged. The place of sulphate of zinc, which is promoted to the materia medica, is occupied by a formula for the chloride of zinc. Some of the old mixtures are abandoned, viz., the m. assafoetidæ, m. moschi, and m. cascarillæ. Among the pills, our ancient pil. ipecac. co. appears under the new form of pil. ipecac. cum scillâ. A new pil. aloes c. sapone, is introduced, and pil. hydrarg. iodidi and pil. sagapeni compositæ are omitted. The old ext. colocynthidis co. here assumes the form of pil. coloc. co., and we do consider ourselves justified in complaining concerning this alteration. This preparation in the "Pharmacopœia" of 1720 was pil. rudii; in 1745 it became ext. catharticum; in 1787 it achieved the legitimate title of ext. coloc. co., under which appellation it has been known until the appearance of the Pharmacopœia of 1851. At present it has the same name as two other and different compounds of the Edinburgh and Dublin Pharmacopœias, both of which are commonly, and one is in very frequent use in this country. Moreover, the term extract, looking to its composition, is the more correct designation.

Many of the pills are to be made up with soft instead of hard soap. Treacle is also to be substituted in some other cases for gum or syrup. Treacle will make the pills hard, and less easily soluble in the stomach; and soft soap, though good in some instances where it is desirable they should be kept soft, will cause the pills to run together or adhere to each other.

Alcohol spiritus ammoniæ and spiritus lavandulæ are

omitted, and most of the spirits are to be made by the simple solution of the essential oil in the spirit, in which an important objection has been raised by practical chemists; for by this substitution of the old method, viz., the distillation from the seeds or fruit, they contend the preparations will lose their fragrance, the oil will acquire a resinous character, and it will become oxidised. There is a formula given for the preparation of iodide of sulphur; the product is said to be a biniodide by some; others assert the iodide is a more just expression of its composition. Among the syrups we observe the additions of syrupus cocci and syr. violæ. Among the new tinctures we find tinct. aconiti, tinct. belladonnæ, tinct. cinchonæ pallidæ, tinct. ergotæ æthereæ, tinct. limonum, tinct. lobeliæ, tinct. lobeliæ ethereæ, tinct. quinæ composita. With respect to this last, the authorities evidently expected one grain of the disulphate would be dissolved in a drachm of the tincture, and in order to insure this they have ordered the quinine to be digested in the spirit for seven days, or "until it be dissolved!" as if prolonged digestion could possibly have any increased influence on this substance. It is usual to inquire into the solubility of salts in certain menstrua before creating regular forms for such solutions; but this it seems has been thought superfluous by the College authorities, otherwise they must have discovered that but a very small fraction of a grain of quinine would only be dissolved by a drachm of the tinct. of orange-peel. A few drops of sulphuric acid, by converting the disulphate into a sulphate, would have rendered the salt more soluble, but even then the tannin in the orange-peel would precipitate some of the quinine, which must be lost from the solution on filtering. The same amusing instructions with regard to perfect solution and filtration are given in the case of tinct. iodinii co., where the salt is ordered to be digested until perfect solution occurs, and then filtered. If the salt and the iodine be genuine, they must necessarily dissolve in the spirit, and that immediately, and the filtration will therefore be superfluous. We observe tincture of jalap is reduced to half its former strength, and tincture of cubebs is more than three times stronger than the last preparation. Tinct. card. comp. has a double quantity of cochineal ordered, wherefore we cannot divine.

There are six new ointments introduced into the new Pharmacopœia. Ung. belladonnæ, ung. conii, ung. hydrargyri nitratis mitius, ung. opii, ung. potassii iodidi and ung. sulphuris iodidi, and the ung. hydrargyri mitius and ung. hydrargyri biniodidi are omitted. The ung. hydrargyri fort. of the last Pharmacopœia is now simply ung. hydrargyri.

But few words are necessary in speaking of the "Translation of the Pharmacopœia"—and those entirely of praise. It certainly makes no great pretension; but then the editor merely proposes to offer a correct rather than an elegant reproduction. Here, indeed, he wrongs himself, and we cannot but express our appreciation of the manner in which, among other things, he has done the Preface into English. As to the rest, to say that we have found it to be perfectly correct, and therefore trustworthy, is to acknowledge its value and our highest commendation of it. The Profession are under obligation to the "Physician" for this useful little book, and to Mr. Renshaw for its speedy publication.

The third volume on our list is a very valuable one,—in point of fact, fully as necessary to the well-employed practitioner as is either the Pharmacopœia of the College of Physicians or its translation. Mr. Squire's work combines the formulæ of our three Pharmacopœias, and at one glance shows the difference of the strength of the officinal preparations of the three kingdoms. It is a disgrace to the Colleges of Physicians, that a prescription written in one part of the country may be prepared in another with very different results,—that the acetum opii of Edinburgh should be three times the strength of the acetum opii of Dublin, and that the acetum colchici of Dublin is three times stronger than that of Edinburgh and London. There are numerous similar incongruities, and we sincerely thank Mr. Squire for thus placing them in one view before us. The Profession are much indebted to our author; and no member of it who prescribes for patients who may leave England for Scotland or for Ireland, would be justified in doing so without consulting Mr. Squire's work.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

ALKALINE NATURE OF THE BLOOD.

M. Cohen has made a number of experiments for the purpose of ascertaining how far the alkaline nature of the blood becomes altered in disease. It would result from these investigations, that the alkalinity of the blood is diminished by one third in inflammation. On the other hand, in a case of typhoid fever, the alkalinity of the blood was increased by one third. The effects of this increased alkalinity are seen in the inflammatory crust of the blood, which is thus explained by M. Cohen. Albumen and fibrin are composed of the same elements in the same proportions, although endowed with different properties. Solid albumen dissolved in a weak alkaline solution is capable of being deposited in the form of a substance which it is impossible to distinguish from fibrin; and hence it is probable that the disappearance of a portion of alkali with the water in inflammatory blood becomes the principal, if not the sole cause of the inflammatory crust of the blood.—*Bul. de l'Acad.*

SULPHATE OF STRYCHNINE.

This remedy has been employed with success at the Auxerre Asylum to combat the involuntary discharge of fæces, to which the insane are so frequently subject. Dr. Girard administered it in the following manner. Two-fifths of a grain are dissolved in an ounce of syrup. The ordinary dose is four scruples, then six, and so on gradually, up to the ounce, which is given in very refractory cases. When the remedy is administered with prudence, it never occasions any dangerous symptoms; but in three cases, where the dose was pushed to three ounces three drachms, the patients had some convulsive movements, which soon disappeared.—*Ibid.*

CONGENITAL SYPHILIS.

The venereal disease, when it attacks new-born infants, as a consequence of hereditary infection, generally, though not always, assumes the form of a cutaneous affection. It may attack the bones, the peritoneum, the liver, the thymus gland, or finally gives rise to purulent inflammation of the lungs. This latter affection has been studied by M. Depaul. In fifteen cases which he observed, the lungs were more or less studded with small nodules, composed of dense grey tissue, having in the centre a cavity filled with sero-purulent matter. In most of the cases, the infants were likewise affected with pemphigus, purulent deposits in the thymus gland, or enlargement of the liver. In most of the cases, likewise, one or other parent either had or was suspected to have had syphilis, some time previous to the birth of the child.

It should be observed that the pulmonary lesions described by M. Depaul offer nothing specific in their appearance, and hence it may fairly be questioned how far we are entitled to conclude that the lesions alluded to were of syphilitic origin. The majority of the Academy of Medicine were of opinion that it would be unjustifiable, in the present state of our knowledge, to conclude the affirmative.—*Ibid.*

COLLODIUM IN DISEASES OF THE SKIN.

Dr. Spengler has made extensive use of collodium for diseases of the skin, and the results of his experience are very favourable. He relates a case of porrigo dicalvens cured in five weeks by the constant use of a layer of collodium; a case of lichen cured in three days, and many others scarcely less marvellous. For fissures of the nipple, from which so many females suffer, it is a sovereign remedy.—*Neue Med. Chir. Zeitung.*

M. LEBERT ON THE LOCAL AND GENERAL NATURE OF TUMOURS.

The distinction of tumours into malign and benignant, so long employed by practitioners, is an irrational one according to M. Lebert, and the chief cause why the study of these productions has made so little useful progress. The grand question, on the contrary, which should occupy attention, for the sake of prognosis and treatment, is their local or general nature.

To commence with cancer: this disease is undoubtedly one of the whole economy. When we study cancer in a

large number of patients, and in all its principal varieties, we become convinced that the first appearance of the disease is the expression of a general diathesis. In whatsoever part of the body cancer may be first developed, it has a tendency to propagate itself from the original point; it also gives rise to secondary deposits of the cancerous matter, and the general infection always progresses until life becomes extinct.

Hence M. Lebert, with many surgeons of the French school, thinks it is not sufficient to remove the local complaint early and in the most absolute manner. It will return at a later period, either in the original place, or from secondary deposit, and the attentive observer remains convinced that the whole mass of the blood has been tainted, as after certain modes of poisoning.

Numerous affections have been confounded with cancer, but careful examination reveals essential differences between the two classes of maladies; and the more we examine, the more shall we be convinced that the essential characters are not isolated or exceptional artifices of the scalpel, or tricks of the microscope, but that the organic development, progress—the pathological physiology, in a word—point out lines of demarcation, which, in their turn, indicate essential modifications of treatment. Still, although the difference between the local and the general malady be so great, it must not be forgotten that the various local affections which have hitherto been confounded with cancer, present very remarkable differences in their progress and gravity.

Let us pass rapidly in review accidental products, taking their local or general nature as basis. In the first group we have encysted tumours of the skin, erectile tumours, fatty, fibrous, and cartilaginous tumours. Here the manifestation is confessedly local, yet how many differences do we find? Encysted tumours, originating in the sebaceous glands of the skin, are undoubtedly incapable of infecting the economy, but they may become multiplied to an extraordinary degree. I saw an old soldier with more than eighty of these tumours on different parts of the body. In another case, these sebaceous tumours had perforated the bones of the skull, and caused death; yet the disease had never attacked any other structure than the one originally implicated. Its severity did not depend on the economy becoming involved or tainted. The same remark applies to erectile tumours. These often apparently change in consequence of repeated irritation, and surgeons then say that "the tumour has degenerated into fungus hæmatodes or cancer;" yet M. Maunair demonstrated many years ago, in the most peremptory manner, the essential differences. Erectile tumours may kill, but they never degenerate so far as to affect the constitution. Fatty tumours may likewise inflame, ulcerate, and assume a threatening appearance; but it would be much more in concordance with sound reasoning to compare these changes with the inflammation and ulceration which take place in other parts of the body, rather than have recourse to an hypothesis of degeneration, the existence of which nothing proves.

Fibrous and cartilaginous tumours present themselves under the same circumstances of localisation as those already noticed. A woman may have several fibrous tumours in her uterus, yet this does not prove that the disease is constitutional; while its progress and effects are so different from those of cancer, that the most superficial observer will seize the distinction.

Hypertrophy of the lymphatic and mammary glands has often been, and still daily is, mistaken for cancer; but it is impossible to find more clearly marked the difference between a local and a constitutional tumour than on comparing partial hypertrophy of the mammary gland with cancer of that organ. In the former affection, we may have one or many tumours in the gland; but secondary tumours never supervene. The swelling of the axillary glands is merely sympathetic. The general health remains intact. In partial hypertrophy, the tumour is well defined, and composed of glandular lobes or lobules, in which the microscope displays the terminal cæca of the gland. In cancer, the tumour is more diffused; the normal elements of the gland are destroyed, and the characteristic cellules of cancer occupy the interior of the tumour.

Fibro-plastic tumours may sometimes lead to doubt, both on account of the march of the disease, and from the fact that it often returns after extirpation. The relapse is particularly liable to occur after operation for fibro-plastic

tumours of the bone. Here, however, the relapse is a local effect; being rather a continuation than a reproduction of the original malady. The fact is, the periosteum is much more extensively diseased than would appear after examination, and the germs of the disease are thus left behind; but in no case do secondary deposits occur at a distance from and independent of the original tumour.

The last class of diseases to be noticed are those fungoid ulcers found in the skin, the tongue, lips, etc. These have always been confounded with true cancer. It was, indeed, remarked by the older surgeons, that they were often cured, and it was hence concluded that cancer of the skin was milder than any other species. But this is a serious error, for true cancer is just as inveterate and malignant when it attacks the skin as any other organ.

About six months ago, M. Ecker in Germany, and M. Lebert in France, demonstrated that a great portion of those cutaneous or mucous ulcers were merely alterations of the epidermis of the glandules, or of the dermis itself. In true cancer, we have new products; in these canceroid tumours we have exaggeration of normal structures; the progress of canceroid tumours is different from that of cancer, and when removed by the knife freely, they either never return, or are reproduced on the original site. They are mainly composed of epidermis or epithelium, are diffused in the surrounding tissue, and hence subject to relapse after incomplete extirpation. As for secondary tumours, however, relapse occurring at a distance from the primary tumour, or constitutional infection, M. Lebert has met with nothing of the kind in more than 100 cases of canceroid disease, twenty of which were examined after death.—*Gaz. Méd.*

EXTRACTION OF FOREIGN BODIES FROM THE BLADDER.

The great difficulty of extracting foreign bodies (not calculi) from the bladder, has led our principal authorities to lay it down as a maxim, "that it is better in all cases to cut into the bladder than to attempt extracting the foreign body by the natural passages." M. Leroy-d'Etiolles, on the other hand, has clearly established that the difficulty depends on the imperfection of the instruments hitherto used for the extraction of such bodies. With proper instruments, such as those employed by M. Leroy-d'Etiolles, a great variety of foreign bodies may be extracted from the bladder through the urethra, and the danger of lithotomy avoided. Since 1841, M. Leroy has performed fourteen operations of this kind, and extracted from different individuals, "the handle of a mustard-spoon, two hair-pins, seven bougies or catheters, two branches of a *brisé-pierre*, and several splinters of bone, which had become nuclei of stones, from men wounded during the revolutions of February and June."

It were impossible to describe the great number of instruments invented by M. Leroy for the above purpose, because they vary with almost every case, according to the nature, size, and form of the obstacle to be removed. It may, however, be mentioned, that M. Leroy, with great liberality, offers to lend them to any surgeon who may have occasion to use them. They will be furnished by M. Mathieu, instrument maker, Rue de l'Ancienne Comédie.—*Bul. de l'Acad.*

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

DEATH OF MR. MOIR, OF MUSSELBURGH.

In the last number of the *Medical Times* the death of Mr. Moir of Musselburgh, one of our most esteemed medical brethren in this neighbourhood, was announced. The news of his illness and death was unexpected, and when made known in Edinburgh in the beginning of last week, took the literary as well as the medical world by surprise. No lover of poetry in or out of the Profession was insensible to the loss which had been sustained by the premature departure of that genius, which, during the last thirty years, had inspired the lays of "Delta" in the pages of *Blackwood's Magazine*.

It appears that Mr. Moir some ten days before his death felt indisposed, and with the purpose of recruiting, set out on a short

excursion to Ayr and Dumfries, accompanied by his wife—that at Ayr he had a threatening of inflammation of the peritonæum; but, nevertheless, proceeded on to Dumfries, where, on the fifth day from the commencement of the attack, he sunk under the disease. His funeral, which was numerously attended by his medical brethren and literary friends, took place on Thursday of last week, in Inveresk churchyard.

Mr. Moir was in his fifty-fourth year. He was born in Musselburgh in the beginning of 1798. In 1829 he married Miss Charlotte Bell, of Leith, by whom he has left eight children. His eldest daughter is the wife of Dr. T. R. Scott, who, for some years past, has been his partner in practice. On completing his medical education at the Edinburgh School, and obtaining a surgeon's diploma, he settled in Musselburgh, his native town, where he became a general favourite, and attained a considerable practice.

He seems to have commenced his poetical career in the year 1817, when no more than nineteen years of age; and, from that time till this, he has continued to pour forth his lays in the sweetest strain of poetry with a boundless profusion. It would be premature to attempt to assign to him the place which he is hereafter to hold among English poets. In the meantime, looking to the poets who have belonged to the medical profession, we cannot hesitate to associate his name with those of Akenside and Armstrong. Like Armstrong, "Delta" had a turn for the humorous in prose composition. His "Life of Mansie Waugh, Tailor in Dalkeith, written by himself," will more than bear a comparison with the humorous prose dialogues of Armstrong.

When "Delta's" detached pieces, now scattered through the numerous volumes of *Blackwood's Magazine*, come to be presented to the public in one work, we may safely anticipate that he will be pronounced by general acclamation one of the sweetest, the tenderest, the most pathetic, of modern poets. Up to this time, only two small poetical works of his have been published separately, namely, "The Legend of Genevieve, with other Tales and Poems," in 1825, and "Domestic Verses," in 1843. We are indebted to the editor of the *Edinburgh Evening Courant*, for recalling to our recollection the following notices of these volumes respectively by two eminent critics:—

"'Delta,' " said Professor Wilson, "has produced many original pieces, which will possess a permanent place in the poetry of Scotland. Delicacy and grace characterise his happiest compositions; some of them are beautiful, in a cheerful spirit that has only to look on nature to be happy; and others breathe the simplest and purest pathos. His scenery, whether sea-coast or inland, is always truly Scottish; and at times his pen drops touches of light on minute objects that, till then, had slumbered in the shade, but now 'shine well,' or lie as component and characteristic parts of our lowland landscapes." And Francis Jeffrey wrote to the author in the following flattering terms on the publication of his "Domestic Verses":—"I cannot resist the impulse of thanking you with all my heart, for the deep gratification you have afforded me, and the soothing, and I hope bettering, emotions which you have excited; I am sure that what you have written is more genuine pathos than anything almost I have ever read in verse, and is so tender and true, so sweet and natural, as to make all lower recommendations indifferent. From the same source we borrow one other testimony to "Delta's" poetic merits:—"The fastidious taste of Dr. Butler, the late Bishop of Lichfield, singled out Delta's lines on Mount St. Bernard, as worthy of a Latin version—one of the most felicitous things in Mr. Drury's collection of the 'Arundines Carni.'"

To Delta's labours in the fine arts must be added a work but recently published,—"*Sketches of the Poetical Literature of the past Half Century*," in six lectures, delivered at the Edinburgh Philosophical Institution in the spring of this year.

It is true that Lord Bacon anathematizes the extra-professional pursuits of medical men. He says,—"*Among physicians you find good poets, good linguists, good mathematicians, good philosophers, but how few good physicians;*" thus, more than insinuating, that medicine would improve faster if a less divided attention were bestowed upon it. This sentiment of Bacon's is not correct to any great extent. There have, perhaps, been periods in the history of medicine, when medical men too much neglected their proper study for other pursuits. But that was hardly the case even in Bacon's time. It is not so much from any deficiency of application in the medical Profession that medicine has often shown a slow progress, but because the exertions made were not directed in the right course.

Nothing could more effectually perpetuate any false bent which the medicine of an age might have acquired, than a general rule as to the limitation of the pursuits of practitioners in the art to purely medical studies. If we would keep medicine above the mere Bar-

bætonsor's vocation, it must be liberalized by all the secular knowledge to which the inquisitive world applies its attention; nor are we to place under the ban even the cultivation of a poetic vein.

It is not necessary,—not even desirable,—that, as in Sir William Temple's experience, great learning should characterise the physician beyond his fellows in the other liberal professions; but it is desirable that the credit of the Medical Profession with the public should be kept up by members of that Profession, as in past times, being distinguished by their attainments in all the most attractive and instructive branches of human knowledge. It is not a thing to be wished that every Medical Practitioner should be a poet, a linguist, an orator, a mathematician, a naturalist, or a philosopher; but it should be an object of our ambition that men possessed of a bent for one or another of these pursuits should belong to the Profession.

As respects "Delta," however, no apology is requisite for having failed to apply the great talents with which he was gifted to the improvement of that vocation in life which he had deliberately chosen. He has been a zealous and skilful practitioner in medicine for more than thirty years. Moreover, he applied his talents with much success to the elucidation of a subject which, it must be confessed, is too much neglected by the Medical Profession at large, namely, the history of ancient medicine. On the history of medicine nothing is easier than to write scores of lectures and ponderous volumes; but to make a readable book within a small compass, embracing all that is most essential to be known respecting the history of ancient medicine, requires the hand of genius,—and this Mr. Moir accomplished in his "Outlines of the Ancient History of Medicine," published in 1831. This history has strong claims on the attention of the general reader, as well as on that of the Medical Student and Practitioner. It is an admirable compendium. There is nothing more striking in the whole history of human science than the preservation of the works of the ancient Greek physicians among the Saracens, by Arabic translations, and their re-introduction into Europe, when, after the lapse of some centuries, the Gothic mind began to emerge from the slumber of ignorance. Accordingly, one of the most interesting portions of Mr. Moir's history, is that which gives an account of the rise of Arabic medicine, its progress, and final decline, by the growth of the Turkish power, so much less favourable to the cultivation of knowledge than the milder dominion of the Caliphs. One of the peculiar excellences of Mr. Moir's work arises from the pains he has taken to estimate the character of the most prominent physicians in the several periods of Greek, Ægyptian, Roman, and Arabic medicine. Some of these characters are master-pieces of medical history.

A recently published book has just fallen into our hands, which contains, we observe, eleven poetical pieces by "Delta." It is entitled "Flowers and their Poetry," published by a medical brother and brother poet, Dr. J. S. Bushnan. Dr. Bushnan, in the Preface, while explaining the circumstances under which these poetical pieces were produced, seems to intimate that the publication took place at Delta's request, and that his pieces were contributed to enhance the value of his friend's volume. The following piece, entitled "Fading Flowers," (p. 106), is appropriate to the occasion, and shows how fleeting are all the concerns of mortality:

The leaves are falling from the trees,
The flowers are fading all,
More chill and boisterous is the breeze,
More hoarse the waterfall;
The sky, o'er mantled now with clouds,
Looks grey, and waned, and pale;
The mist-fog spreads its hoary shrouds
O'er mountain, grove, and vale.

How lapse our years away! how fade
The raptures of the mind!
Onward we pass to storm and shade,
And leave blue skies behind;
Like yellow leaves, around us fall
The friends best loved and known;
And, when we most have need of all,
We oft are most alone.

Still more alone! blithe spring comes round:
Rich Summer circles by;
And Autumn paints with gold the ground,
Till Winter's storm-blasts fly.
One after one, friends drop away,
As year on year rolls on;
And month by month, and day by day,
The old are more alone.

Still more alone! alas! 'tis vain
New hopes, new hearts to find;
What magic can restore again
Youth's brightly-visioned mind?
Age walks amid an altered world,
'Mid bustling crowds unknown;
New scenes hath novelty unfurl'd,
And left the old alone.
"Sere leaves that dangle from Life's tree"—
Thus speaks the hoary head—
"A relic of the past are We,
A remnant of the dead;
Like emblems of forlorn decay
We linger to the last;
But Death's long night shall turn to day,
When Time itself is past!"

GENERAL CORRESPONDENCE.

ASIATIC CHOLERA.

[To the Editor of the Medical Times.]

SIR,—The following is a case of true malignant Asiatic cholera, which occurred on board a ship during a passage from Calcutta to the West Indies, with native emigrants, in which I was surgeon. This was the only case in which a European was attacked on board during two successive voyages, although we lost several natives coming down the river both voyages; but the disease, in both instances, ceased on our fairly getting to sea. This, however, occurred on the third day after leaving the Sand Heads, and about 300 miles from land; and no doubt the infection was still lurking in the ship, and only wanting an opportunity to develop itself should a predisposition offer. My opinion is, that cholera does not arise spontaneously at sea, but that the cause is on land. I know of no instances of its ever having broke out at sea; perhaps, however, you or some of your readers may. I should like to hear of any well-authenticated case.

The subject of cholera seems again almost forgotten, (out of sight, out of mind;) perhaps a case or two now and then will assist to remind us what it has been, and that it may possibly pay us another visit some day or other. No doubt, true prevention is better than cure; the cause and *modus operandi* being of such a subtle nature as to elude our grasp. A little discussion, however, now and then, on the subject can do no harm; and I pick out this case as the most perfect I ever saw. I watched it all through, being absent only about an hour.

Feb. 14, 1848.—Geo. G—r, aged 19, a strong, robust lad, after having diarrhoea the two previous days, of which he took no notice, was seized quite suddenly on his way to the water-closet, and fell on the poop as if struck with lightning. He was quite doubled up from the severity of the spasms and cramps. This occurred about eleven at night, and, from the suddenness and severity of the case, no doubt could be entertained of its being the onset of a true cholera case, as we had lost several of the native emigrants two or three days previously, and he had been very active in assisting me attending them. Gave him immediately cal. ʒj., p. opii. gr. ij., which was retained. Mustard plaisters were applied to the legs, pit of stomach, and abdomen, and constant friction to the hands, feet, etc.

At half-past eleven, gave him Jeremy's drops, ʒj. in brandy, which was immediately rejected. Purging and vomiting continuing, with most distressing cramps and spasms in the fingers and toes, which were only relieved by constant friction.

One o'clock, a.m.—The symptoms not abating, put him into a warm bath. Took cal. gr. iij., pulv. opii. gr. j. quaq. horâ, with a stimulating mixture composed of ammon., ether, tinct. opii., and camphor, which he retained. To drink warm tea *ad libitum*. After coming out of the bath, I left him in a doze and quiet, with bottles of warm water in the bed to keep up the warmth. The pulse from the commencement was small and quick; urine and perspiration almost entirely suppressed; a constant craving for drink.

Two o'clock to half-past.—The spasms, with vomiting and purging, returned as violent as ever, with great restlessness; the stools were destitute of colour, a clear albuminous-looking fluid, with dark-coloured flakes floating in it, and of a peculiar odour. The cramps were so violent, that attendants were kept constantly employed rubbing the fingers and toes with hot turpentine, and were at times drawn quite back. Medicine rejected. Countenance shrunk; a cold, clammy sweat over the body and extremities; no pulsation at wrist; the heart's action irregular and feeble; breathing hurried and oppressed, 25 in a minute; quite sensible, but in a state of collapse and sinking.

Four a.m.—Cramps constant, and at intervals truly distressing; purging and vomiting still continuing, but not so violent; could retain warm tea only; heat was constantly applied and friction; tried now a mixture with amon. conf. arom., tinct. opii. and camphor, a dose every half hour, which he retained, and somewhat alleviated the spasm; he took likewise some sago with brandy, but was getting gradually weaker, with death stamped on his countenance.

Half-past Five.—Purging continued; administered an enema of starch, opium, and camphor, which was retained with temporary relief; continued the stimulating mixture; mustard plaisters were kept over the abdomen and pit of stomach; hot water to the feet; friction to the hands and feet, which were quite cold, in fact dead; he lay quiet, insensible unless moved; the head alone warm; heart's action irregular and ceasing; breathing embarrassed; and countenance quite blue. Death occurred about eight o'clock, and terminated his sufferings.

Here is a case which at first sight might favour the contagionist, as this lad was in close attention upon those who died in the river. On the other hand, who more likely to take it than I was, if the disease were contagious, as for two days and nights I was in close attendance, and had not my clothes off during that time, and not out of the ship; and, again, if the disease be contagious, how was it possible that the boys escaped, who for hours together were rubbing this poor lad's limbs? Notwithstanding occasional cases will occur which leave room for doubt, I think it may be fairly concluded that the disease is not contagious; but that the poison, miasma, or whatever it may be called, is floating in the air ready to take effect wherever it may find a constitution unable to resist it, or what is generally called a predisposition to the disease, and that its effects are not lost until the miasma is neutralised or destroyed by some atmospheric change, or a removal into a purer air, away from its influence. In the case above it may be thought perhaps as one occurring spontaneously at sea, as we were three hundred miles from land, and had no fresh case for two days; but in this instance might not the disease have lain dormant for two days in a good constitution; or the previous diarrhoea, the disease in a mild form, with a strong constitution struggling to resist it, when the sudden exposure to the night air suddenly produced the disease? This is the only case which has occurred to my notice of the disease occurring so far out at sea, as on both the previous voyages no case occurred after leaving the Sand Heads at Calcutta. The symptoms which arise in this disease are so varied and inconstant, the cause and nature of its origin are of so subtle a character, that I know of no other so difficult to treat, or so perplexing to a medical man. The great difficulty is to lay down any general law, as in most instances no two cases are alike, and this is especially the case among the natives in India, who have not usually sufficient power to resist the disease; consequently, some have only spasms slightly, and soon followed by collapse, no purging nor vomiting; others purging and vomiting, only with collapse again. You will see some sink at once into a state of collapse, as if unable in any way to resist the disease; but, however, so far as this is concerned, it is perhaps of no great moment, as in many other diseases, such as fever, venereal, etc., we have the same modifications, according to the constitution or temperament of the patient; and whatever may be the origin of cholera, its effects are undoubtedly chiefly on the sympathetic system, as is seen by the secretions being suppressed, such as the bile, urine, and perspiration, and the predisposing causes are such as would chiefly affect these, as grief, fear, anxiety, ill-ventilation, and bad living; and its attacking the apparently healthy subjects, can be accounted for, as those coming fresh into an infected atmosphere are less able to withstand the change than persons in weaker health, who have become in a measure inured to it; and although nature is constantly changing, yet she is averse to a sudden change.

I am, &c.

Worthing.

JAS. GAIRDNER.

COLLEGE OF SURGEONS' COUNCIL ELECTION.

[To the Editor of the Medical Times.]

SIR,—As there is some misapprehension as to the reason why a ballot did not take place for Mr. Gulliver at the meeting of the College of Surgeons, I trust you will give this note a place in your Journal, for the purpose of removing all misapprehension on the subject.

Mr. Gulliver is, as is well known, the distinguished Surgeon of the Blues, and under ordinary circumstances his regiment would have been at Knightsbridge Barracks on the 1st of July. That would then have been his place for practising his profession. It happened, however, that the Foot Guards occupied a portion of the barracks, and that the authorities determined that no change should take place until the Exhibition was closed; and therefore, as Mr.

Gulliver's place for practising his Profession is wherever his regiment is stationed, it is the fact that, at the meeting of the College, that place was Windsor.

The certificate to be signed, specifies that, at the time a candidate for the Council is proposed, he is *bonâ fide* practising his profession within five miles of the General Post-Office.

Mr. Gulliver's friends felt that it was impossible to sign such a certificate, unless upon a representation of the facts the President, upon the part of the Council, admitted that the circumstances would justify them in signing it. These were the reasons which induced me to put the question I did to the President.

As he declined to answer the question, and as the Council have the power to remove any person they may deem not duly elected, and as Mr. Gulliver's friends had reason to think that, in the event of his election by the Fellows, of which they had no doubt, the question would be raised in the Council, they felt that they were not justified in placing him in such a situation.

The fact of his being out of England for the temporary purpose of a tour, would not, of course, have deterred them from proposing him for election.

I am, Sir, &c.

Wimpole-street.

B. PHILLIPS.

NEW SPLINT.

[To the Editor of the Medical Times.]

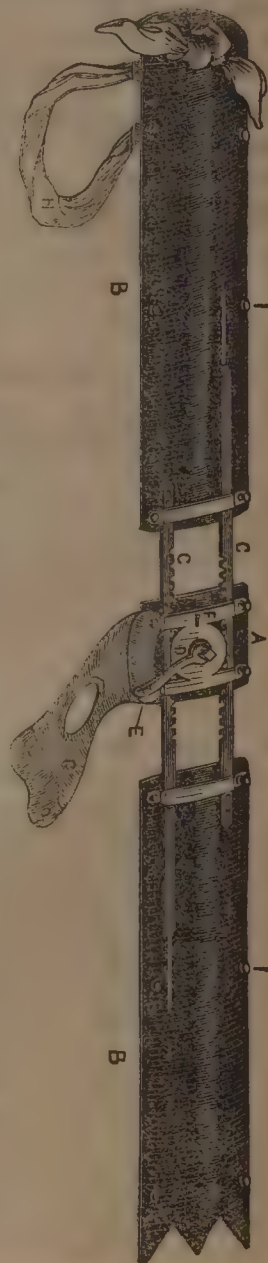
SIR,—Numerous cases of shortened and distorted limbs are frequently met with in practice, more especially after fracture of the lower extremities, arising principally from the difficulty of fixing the splint to the extended limb, and afterwards retaining the fractured bones in an extended position, such as to prevent the slightest chance of shortening. The disadvantage of the ordinary splint, is that if any of the bandages have become loose, either from the subsidence of the tumefaction consequent on injuries of this nature, or from any other cause, it almost always becomes necessary that the whole apparatus requires to be re-adjusted, and the limb to be extended as at the commencement of the treatment, thereby retarding the process of cure. To obviate this as much as possible, I used various contrivances, and ultimately succeeded in producing the splint, a sketch and description of which I have taken the liberty of sending for insertion in the *Medical Times*, should you deem it worthy the notice of the Profession.

Yours, &c.

F. G. WILLIAM MULLAR,
M.D., L.R.C.S.E.

3, Maitland-street, Edinburgh.

The splint is made of hard wood, 4 feet in length, $3\frac{3}{8}$ inches broad, and $\frac{3}{16}$ of an inch thick; it is covered externally with very thin sheet iron, to give a proper support to the toothed wheel and rods, which are attached to it. When unscrewed, it is perfectly portable, and of light weight; it is divided into three parts, AAA, the centre short, and the two end pieces long; the notched piece being for the foot, and that with the round holes for the hip, through which is passed the perineal band H; on the centre piece is fixed the toothed wheel, covered by the shield D, which at the same time binds down the two toothed rods CC, thereby keeping them in close contact with the wheel by which they are moved, either to lengthen or shorten the splint. E, the lever handle by which the wheel is moved; F, a small check for fixing the wheel when the required extension has been obtained; G, an elastic belt for supporting the knee; the rods are fixed each with its opposite extremity upon one of the long pieces of the splint, while the other end is allowed to slide in the groove, (as shown by a white line at the opposite end of each rod); *iiii* are small buttons for supporting the pad.



UNIVERSITY OF EDINBURGH.

The following Correspondence has been forwarded to us:—

TO THE REGISTRAR OF THE UNIVERSITY OF EDINBURGH.

SIR,—As I have some idea of coming to Edinburgh, for the purpose of receiving a medical education, will you have the kindness to inform me of the advantages I shall enjoy at the University, and whether I shall be instructed chiefly in homœopathy, allopathy, or animal magnetism.—I am, Sir, yours respectfully,

T. VERYFLAT.

SIR,—At the University of Edinburgh, you will have, in addition to the clinical teaching of Professors Christison and Alison, who practise allopathy, the advantage of receiving instruction in homœopathy from Professor Henderson, and in animal magnetism from Professor Gregory. The former will make manifest the virtues of decillionths of a grain of charcoal, the latter can demonstrate to you the existence of the newly-discovered power termed "odd," and inform you how to play on phrenological bumps, how to make young ladies religious or lascivious, according to your own will and pleasure. He can convince you,

"That as the bumps are touched, the mind is pitched
To sigh with saints, or dance with debauchees."

Now, just reflect on the pecuniary advantages it may be to you in after life, to say that you have sat at the feet of Christison, of Henderson, and of Gregory.

The public mind is in a very unsettled state; when you commence practice you may meet with patients who *will* be treated homœopathically. Think, then, how agreeable and profitable it will be to be able to say,—I am your man, I studied Homœopathy under the celebrated Professor Henderson. Another *will* have his inside examined by a clairvoyante, and *passes* made over his lungs every day; to him you may say with truth,—I was a pupil of Professor Gregory, I will attend you. Another desires to be treated allopathically; and to him you say,—I was taught by Professor Christison, and can administer physic with any man. In fact, if tolerably sharp, you need never lose a patient.

No other school offers the same advantages. Instruction in Homœopathy, Animal Magnetism, and Allopathy, by regular Professors; and the whole crowned by a degree,—think of that!

With reference to the second part of your question, as to whether your chief attention is to be directed to Homœopathy, Allopathy, or Animal Magnetism, by the University Authorities, I can only say to you, as you will hereafter be enabled to say to the public,—“You pays your money, you takes your choice.”

I am yours faithfully,

DONALD MCPUFFEM.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. HODGSON, Esq., F.R.S., President, in the Chair.

THE President, on taking the chair, requested that the Fellows present would allow the evening to pass without discussion, as there were a great many papers to be read;—in fact, they could be read in abstract only.

ON SOME SECONDARY PHYSIOLOGICAL EFFECTS PRODUCED BY ATMOSPHERIC ELECTRICITY.

BY PROFESSOR C. F. SCHONBEIN.

After referring to the more obvious effects of electricity upon the organs of sensation, and more especially to those of smell and taste, and stating his belief that the peculiar odour observed when an electrical discharge takes place, or in the neighbourhood of points from which electricity is passing, is not due to the electricity itself, but caused by the presence of a peculiar matter which he has named ozone, the author proceeded to lay before the Society the opinions held respecting it, viz., that either pure or atmospheric oxygen, when exposed to the action of electricity, is transformed into this odoriferous body, which he was at first inclined to consider a peculiar peroxide of hydrogen, but which other eminent chemists believe to be merely an allotropic modification of oxygen. With reference to its exact composition he declines, however, to give a decided opinion. This body, whatever its actual nature may be, is a most powerful oxidising agent; at ordinary temperatures

it oxidises silver, forming iodic acid from iodine, nitric acid from nitrogen; and converts the acids ending in *ous* into those which end in *ic*, the salts which terminate in *ite* into those which end in *ate*; metallic sulphurets into sulphates. It decomposes the gaseous components of hydrogen with sulphur, selenium, phosphorus, iodine, arsenic, and antimony, and exerts many other energetic chemical actions, both on organic and inorganic substances. It has a strong electro-motive power, similar to that of chlorine, bromine, and iodine; and lastly, it has certain physiological effects upon the animal system, similar to those of chlorine and bromine, acting powerfully as a poison, even in minute doses. Ozone is being constantly generated in the atmosphere by the electrical action going on. When in excess it has a sensible effect upon the mucous membranes of those exposed to its influence, and its presence is indicated by starch containing the iodide of potassium being turned blue. The author has availed himself of this fact in the construction of his ozonometer, which consists of a box containing test-paper thus prepared, and a chromatic scale. He believes that certain catarrhal affections are produced by the presence of ozone in the atmosphere, and he has availed himself of the assistance of medical friends in ascertaining the co-existence of unusual prevalence of catarrh with what he terms his *blue days*; and he suggests that more extended observations are desirable for this purpose. The author then referred to the existence of poisonous miasmata in the atmosphere, which are generated by certain “purely chemical, or physical, or physiologically chemical actions,” which take place within the earth, or on its surface, in stagnant or running waters, or in the atmosphere itself. Of these poisonous gases or vapours, there are two sorts which are antagonistic to and destroy each other. Of the first class, sulphuretted, and perhaps phosphuretted, hydrogen alone are produced by natural causes, and these in such minute quantities that they do not, except in a few localities, exert any general influence upon animal life. Of the second class there is one, namely ozone, which exists in appreciable quantities in the atmosphere. But the abundant source of gaseous matters is that which the decomposition of vegetable and animal substances affords. Some of these are well known, such as carbonic acid and ammonia; others are of unknown chemical nature, and though the absolute quantity of such deleterious matters may be small in comparison to the immense volume of the atmosphere, their accumulation would render the air unfit for the support of animal life, unless some agent were at work to neutralise or decompose them. The author states, that the purification of the atmosphere which we attempt to effect on a small scale by chlorine fumigations, is accomplished in the great processes of nature by the agency of ozone, a task for which it is peculiarly fitted by its high oxidising powers. He gives the details of some experiments upon air tainted by putrid flesh, which was purified by ozone disengaged by the action of moistened phosphorus. Ozone, which is formed in the atmosphere by the electrical discharges constantly going on, acts upon and decomposes the oxidable miasmatic gaseous matters which contaminate it, and thus the atmosphere is preserved in a state fit for the support of animal life, and, at the same time, the ozone, which, if allowed to accumulate, would become deleterious, is in its turn neutralised or decomposed by the miasmata. During a thunder-storm large quantities of ozone are formed, and the Author supposes that the unhealthy state of the atmosphere which exists in the hot season of the year may be caused by the accumulation of miasmata produced by animal decomposition; and that it is by the generation of ozone that thunder-storms purify the air. The Author considers that there are probably certain states of the atmosphere in which the quantity of ozone does not bear a due proportion to the miasmata it has to act upon, and that under such circumstances it is that certain diseases—cholera, for instance—make their appearance. He is also of opinion, that in the winter there is more atmospheric ozone than in summer, and that the higher strata of the atmosphere contain more than the lower; and as the generation of some diseases, such as the yellow fever, appears to be connected with certain seasons and geographical positions, he thinks that by an extended series of observations it might be ascertained whether these diseases bear any relation to the ozoniferous state of that portion of the atmosphere where they happen to occur. The paper concludes with a reference to experiments which prove that ozone produced by the action of electricity, or by the agency of phosphorus, is identical.

ON A NEW METHOD OF TREATING CERTAIN CASES OF EPIPHORA.

By WILLIAM BOWMAN, Esq., F.R.S.

This paper describes a new mode of treatment of those cases of epiphora which depend on a displacement of the puncta lacrymalia out of the course of the tears, or on an obstruction of the canaliculi

between the punctum and caruncle, the inner extremity of the canals, together with the lacrymal sac and nasal duct, remaining healthy. The author describes the exact nature of these cases, and relates examples. The treatment which he has devised consists in slitting up the canal from the punctum on the conjunctival aspect, so as to carry backwards the orifice at which the tears are received on to the mucous membrane near the caruncle; and he finds that the tears are in fact taken up by the remaining portion of the canal, while the end towards the punctum is converted into a groove. For the cases of obstruction from injury or other cause, he suggests a modification of this operation, by which the canal between the obstruction and the sac may be slit up for some way, so as to receive the tears at a new opening. The cases to which these new operations are applicable, have been for the most part abandoned by surgeons as incurable.

DESCRIPTION OF AN OPERATION FOR THE RADICAL CURE OF OBSTINATE STRICTURE OF THE URETHRA.

By Dr. NEVERMANN, of Mecklenburgh.
(Communicated by B. Phillips, Esq., F.R.S.)

The author states, that after having tried all methods of treating obstinate stricture, the operation with a trocar catheter appears to him the most rational. The patient is placed as for lithotomy, and the catheter introduced as far as the seat of obstruction. The operator introduces one or two fingers into the rectum as a guide to the instrument; he then grasps the handle of the instrument, whose point is exposed, with the right hand, and pushes it steadily and forcibly forwards in the axis of the pelvis towards the bladder. When the resistance is found to cease, the trocar is drawn out and the catheter is left in the canal. In four or six days it is replaced by an ordinary elastic catheter. The paper is accompanied by drawings of the instruments and a description of them.

CASE OF OBTURATOR OR THYROIDAL HERNIA SUCCESSFULLY RELIEVED BY OPERATION.

By HENRY OBRE, Esq., formerly Assistant-Surgeon to the
St. Marylebone Infirmary.
(Communicated by Professor Erichsen.)

After commenting on the extreme rarity of this form of hernia, and stating that he had been unable to find any record of its having been detected and relieved by operation during life, the Author relates a case in which he operated successfully. The patient, a female, aged fifty-five, the mother of a large family, was seized with symptoms which led her medical attendant (Mr. Gardener) to believe that she was suffering from rupture. She denied that this was the case, and a careful examination convinced Mr. Gardener, that there was no hernia in the usual situations of that disorder. A little below the femoral region on the right side, however, he detected a degree of hardness resembling a small gland, and deeply seated, with some general fulness about the part. The Author saw this patient on the fourth day after the symptoms had begun; at this time she was suffering extreme abdominal pain in the umbilical region. During the previous twelve hours, her vomiting had been stercoraceous and incessant; the countenance pale and contracted; voice faltering; pulse weak, small, and intermitting—in short, all the symptoms of pending dissolution from strangulated intestine were present. On careful examination, nothing could be detected but a slight degree of fulness in Scarpa's triangle on the right side; that on the opposite side being well marked. On using firm pressure with the ends of the fingers over the neighbourhood of the femoral artery, and a little below the saphenous opening, a distinct hardness was to be felt, slight in extent, but giving the impression as if the sheath of the vessels was being pressed on. The state of the patient was such as to induce the author to propose to make an incision into the upper part of the thigh, down to the hard structure, in the hope that he might find confined intestine low in the femoral canal. He made a straight incision into Scarpa's triangle, as in the operation for tying the common femoral artery, beginning about three inches below Poupart's ligament. When the cribriform fascia was opened, and the saphenous opening exposed, no hernial sac was found, but the hardened structure could be felt lying deep to the inside of this opening. The dissection was with some difficulty continued downward; the fascia lata was divided, and the pectineus muscle exposed. The fibres of this muscle were divided transversely for about an inch and a half or two inches, and a hernial sac was exposed, which rose up into the wound to the size of a pigeon's egg. The finger being passed along the sac, entered the obturator opening. The sac was opened, and the intestine was found to be a portion of the small gut, blue and congested. The opening through which it passed did not tightly enclose its neck, but it was con-

sidered prudent slightly to divide the edge. In doing this the saphena vein was wounded, and it was necessary to apply a ligature to its upper part. This was the only ligature required. After the operation no medicine was given; in the course of the day the bowels acted three times, and in a few days afterwards the patient had quite recovered.

SOME OBSERVATIONS ON THE PATHOLOGY OF THOSE AFFECTIONS OF THE EAR WHICH PRO- DUCE DISEASE IN THE BRAIN.

By JOSEPH TOYNBEE, Esq., F.R.S.,

Fellow of the Royal College of Surgeons in England, Aural Surgeon to St. Mary's Hospital, and Consulting Surgeon to the St. George's and St. James's General Dispensary.

In this communication the author has a twofold object: the first is to point out the nature of the several affections of the ear which produce disease in the brain; the second to show that each of the cavities of the ear has its particular division of the encephalon, to which it communicates disease. Thus, that—1. Affections of the external meatus and mastoid cells produce disease in the lateral sinus and cerebellum. 2. Affections of the tympanic cavity produce disease in the cerebrum. 3. Affections of the vestibule and cochlea produce disease in the medulla oblongata. 1. In speaking of the external meatus, its intimate relations with the lateral sinus and cerebellum are pointed out; the affection most frequently producing disease in these parts is shown to be catarrhal inflammation of its dermoid layer, one of the numerous diseases which have hitherto been classed together under the term otorrhœa. This affection of the external meatus is fully described; and it is shown that it is found to endure during many years, without the presence of pain, or any other symptom calculated to apprise the surgeon of the presence of a formidable disease, while the bone may be becoming slowly carious, and portions of the dura mater and cerebellum disorganised. In the second division of the paper, the tympanic cavity is described to be the part of the ear from which disease is most frequently propagated to the brain. This circumstance is accounted for, firstly, by the great liability of the mucous membrane of the tympanum to undergo pathological changes; and, secondly, by the existence of very intimate relations between this membrane and the dura mater. The affection of the tympanum which most frequently produces disease in the cerebrum is chronic catarrhal inflammation of the mucous membrane, an affection thus far only known as an otorrhœa. The four changes in the dura mater and cerebrum produced by the affections of the tympanum are—

1. Inflammation of the dura mater, and its separation from the surface of the petrous bone by serum.
2. Ulceration of the dura mater, and its complete detachment from the petrous bone.
3. An abscess in the substance of the cerebrum.
4. Undefined suppuration of the substance of the cerebrum.

From a careful examination of cases, it appears that chronic catarrhal inflammation of the mucous membrane of the tympanum may exist as many as twenty or more years, without the production of any disease beyond it, or at least, without the existence of symptoms by means of which the presence of such disease can be diagnosed; nevertheless, in the great majority of cases, vital structures become sensibly affected in a much shorter period. The third section of the paper is devoted to the consideration of the labyrinth, and it is shown that purulent matter in the vestibule or cochlea sometimes causes disease of the auditory nerve, which is transmitted to the medulla oblongata, producing suppurative inflammation of the meninges and death, without the presence of any caries of the bone. In the course of this paper, the author shows the necessity of abolishing the use of the term otorrhœa, and of using in its place the names of the several diseases, eight in number, of which a discharge from the ear is one of the symptoms. In conclusion, the facts which he is desirous of impressing upon the minds of medical men are, that the bone, dura mater, and substance of the brain may be slowly undergoing disorganisation, without the presence of any other symptoms calculated to reveal to the medical man the existence of formidable disease than the presence of a discharge from the external auditory meatus; and that, consequently, no person suffering from catarrhal inflammation of the dermoid layer of the meatus, the membrana tympani, or of the mucous membrane of the tympanum, can be assured that disease is not being prolonged to the temporal bone, the brain, and its membranes; and that any ordinary exciting cause, as an attack of fever or influenza, a blow on the head, &c., may not induce the appearance of acute symptoms, which, as a general rule, are speedily fatal. Appended to the paper are tables, giving the particulars of sixty-five cases of disease extending from the ear to

the brain, in which tables the duration of the chronic and acute symptoms, and the *post-mortem* appearances, are concisely detailed.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS.—The President and Fellows of the Royal College of Physicians have named Wednesday, the 30th instant, for their second *soirée*, to be held at the College, Pall-mall East, for the reception of distinguished and scientific foreigners and other visitors.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 11th inst. :—

ANNESLEY, CHARLES CASTRAIT DE REUZ, Hon. East India Company's Service, Bengal.

BRINGLOE, CAPEL, Beccles, Suffolk.

CHAPMAN, JOHN, Leith, Mid-Lothian.

DAY, FRANCIS, Uckfield, Sussex.

DILLON, PATRICK, Ennis, County Clare.

DOBBYN, WILLIAM AUGUSTUS, Dublin.

ELSOM, JOSEPH FREDERICK, Limehouse.

MERRYWEATHER, JAMES, Brook-street, Grosvenor-square.

MILLAR, GEORGE COCHRANE, Clifton-street, Finsbury-square.

MARTYN, SAMUEL, Brook-street, Grosvenor-square.

VIVIAN, JOHN FREDERICK, Alladulha, near Sydney, Australia.

WILKIN, HENRY JOHN, Connaught-terrace, Hyde-park.

At the same meeting of the Court, Mr. FRANCIS HENRY BLAXALL passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date July 26, 1847.

The following were admitted Members on the 14th instant :—

BAINES, JOHN, Falcon-square.

BREEZE, CHARLES, Belfast.

BYNE, HENRY THOMAS LUCAS, Hammersmith.

GAGEN, ROBERT THOMAS, Crown-row, Mile-end.

HICHENS, JAMES STACEY, Redruth, Cornwall.

JONES, SAMUEL WALL, Ludlow, Salop.

O'REGAN, CHARLES, New Orleans.

PUGHE, DAVID WILLIAM, Carnarvon.

RITCHIE, JOHN JAMES, Tean, Staffordshire.

SHAW, HENRY THOMPSON, Ballynahinch, County Down.

SMITH, FREDERICK MOORE, Much Hadham, Herts.

COLLEGE NEWS.—From an advertisement on our cover it will be perceived that the next professional examinations for the Fellowship of the Royal College of Surgeons will take place on Monday and Wednesday, the 4th and 6th of August.—The next *conversazione* will take place on Wednesday, the 13th of August, on which occasion, Mr. John Quekett will deliver a lecture on the "Organic Basis of the Vegetable and Animal Skeleton," with microscopic illustrations. A very handsome tea-service in silver, consisting of tea-pot, coffee-pot, sugar basin, and cream ewer, has just been presented to this gentleman.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 10 :—

GREENWAY, HENRY, Plymouth.

HEADLAND, FREDERICK WILLIAM, Guildford-street Russell-square.

MACKINTOSH, JOHN, Inverness.

TAYLOR, THOMAS HENRY, Henbury, near Bristol.

THE PHARMACY BILL.—House of Commons, July 16.—Mr. Wakley moved that the House should go into Committee on the Pharmacy Bill. The Bill had been read a second time, on the understanding that it was not to be passed this session. On Friday se'nnight he had put a question to the Secretary for the Home Department, whether, if all objection were withdrawn by other parties, the Bill would be allowed by the Government to proceed. The reply of the right hon. gentleman was, that if other parties offered no opposition the Government would offer none. The hon. member for Oxfordshire, however, had frankly stated his objections; and, finding that there were still such objections, he (Mr. Wakley) would not press the Bill further this Session. The measure was almost the first brick in the fabric of Medical Reform. The members of that House, however, he found, had no taste for physic; but he hoped, that next session, the Bill would be taken into consideration in the spirit which had at present been shown to exist, because the House might be assured that they

could not legislate on the subject without rendering great service to the public, whose interest it was to have, say 10,000 men, highly educated and thoroughly acquainted with science, introduced into all parts of the kingdom. With respect to the competency of the Pharmaceutical Society for the duty which it was proposed to devolve upon it, he had long conducted a journal, and could say that he had not heard complaints made of that Society, which had been established fortwenty-seven years. It was disheartening to the Profession that more than thirty years should have elapsed since the subject of medical reform was mooted, and yet not a single measure had been enacted by Parliament to meet the necessities of the case.—Mr. Henley thought the hon. gentleman had treated the House with some injustice when he accused them of having a very great distaste for physic; for they wished to leave open the trade in physic, which the hon. member sought to restrict. He (Mr. Henley) viewed the Bill as dealing with only part of a large and difficult subject, and he thought that more inquiry was necessary. The Society to which reference had been made might be well adapted for its purpose, but the House had no evidence on that point; the Bill would give the Society great power; and the proper course, he thought, would be for the hon. member early next Session to move the appointment of a Committee, with the view of procuring further information on the subject.—Mr. J. Bell had no objection to the proposed plan of appointing a Committee, and he looked forward to meeting the question in that way when Parliament assembled next Session. But it was only proper to explain, that the Bill was not intended to restrict the science of medicine or to create a monopoly. The only object was, to improve the education of those who were engaged in the Profession; and, even if the Bill were passed this Session, its effects would be so gradual that it could not operate unjustly to any one. He was anxious that the Bill should not be mixed up with the question of medical reform, but should be dealt with as an isolated measure. The order for going into Committee on the Bill was then discharged.

THE PHARMACY BILL.—A Petition has been presented to the House of Commons against this Bill from the authorities of the Royal College of Surgeons of Edinburgh. They are the first, it appears, to move against a Bill fraught with injury to the Profession.

THE UNIVERSITIES AND THE HOUSE OF COMMONS.—The following sums were voted a few nights since in the House of Commons for the maintenance, partial or complete, of the Universities :—2006*l.* for salaries and allowances to certain professors in the Universities of Oxford and Cambridge; 3920*l.* for the University of London; 7610*l.* for the Universities of Scotland; and 1620*l.* for Queen's University, Ireland. In addition, the very large sum of 36,260*l.* was voted for the Royal Dublin Society; 15,623*l.* for the Museum of Practical Geology and the Geological Survey of Great Britain and Ireland; 2421*l.* for scientific works and experiments; 10,000*l.* for building a National Gallery in Edinburgh; 46,824*l.* for the British Museum; 31,221*l.* for new buildings at the Museum; and 3500*l.* for purchases for it. We trust a large portion of the last amount will be employed for the Layard excavations at Nineveh.

MILITARY APPOINTMENTS.—8th Foot, Surgeon Francis Charles Annesley, from the 21st Foot, to be Surgeon vice Tice, who exchanges; 21st Foot, Surgeon John Charles Graham Tice, M.D., from the 8th Foot, vice Annesley, who exchanges.

NAVAL APPOINTMENTS.—Assistant-Surgeons James Henry, (1842,) recently of the Antelope, mail steam-packet on the Mediterranean Station, to the Scorpion, 6, surveying vessel on the North America and West Indies station; George F. A. Drew, (1851,) from the Impregnable, flag-ship at Devonport, to the Cumberland, 70, on the West Indies station; and James Sproule (acting) to the Cumberland.

OBITUARY.—On the 6th inst., at Teplitz, in Bohemia, William Teevan, Esq., surgeon, Bryanston-square, aged 49.—On the 15th inst., at Brentford, in his 75th year, William Ralfs, Esq., forty-four years surgeon to the Royal Westminster Regiment of Militia.

M. DAGUERRE, inventor of the Daguerreotype, died at Petit Briè, near Paris, on the 10th inst.

MEDICAL APPOINTMENTS AND VACANCIES.—The office of Surgeon to the Kent and Canterbury Hospital is vacant by the resignation of Mr. Major. The election will take place on the 31st instant.—At the Ardwick and Ancoats Dispensary, Manchester, the office of Physician is vacant; candidates must be graduates of a British University.—A resident medical tutor is about to be appointed at Queen's College, Birmingham; stipend 120*l.* a year, with room in College, coals and candles. Application to be made before the 10th of August.—The guardians of the Bromyard

Union require a Dispenser to assist the Union Surgeon, and visit occasionally; salary, 50*l.* a year. No mention is made of board or lodging. The election is to take place on the 21st.—At the Clapham General Dispensary, the office of Resident Dispenser is vacant. Candidates must be M.R.C.S. or L.S.A., or have passed an examination before the Pharmaceutical Society. Salary 60*l.* a year, with furnished apartments, coals and candles. The Committee of this Institution most impertinently place the certificate of examination from the Pharmaceutical Society on a par with the diploma of the College of Surgeons and the licence of the Apothecaries' Society. Cool, very! and one of the first fruits, we presume, of the proposed Pharmacy Bill.

ST. MARY'S HOSPITAL.—The new Hospital of St. Mary's, Paddington, has been fairly launched into its sphere of usefulness. The out-patient department is in full operation, and thoroughly appreciated by the poor of the neighbourhood. Many accidents, and some of them of a severe kind, have been admitted, and all the beds that the Governors have appropriated for present occupation are filled. On Wednesday, at half-past one o'clock, the surgical operations are to be performed; and on the 9th inst., at the appointed hour, the large and well-arranged operating theatre was filled with friends and governors of the Institution to witness the first execution of practical surgery. Mr. Coulson performed the operation for lithotomy on a child four years of age, and rapidly extracted the stone. He then delivered a short and appropriate address on the occasion. Subsequently, he extirpated several steatomatous tumours. Mr. Haynes Walton excised a very large exostosis, situated on the frontal bone, and which entered the orbit and pressed on the eye. In texture it was as dense as ivory, and offered much resistance to the saw. He then exhibited a most interesting case of a child of five months old, in which he had tied the common carotid artery on the previous Saturday for an aneurism by anastomosis in the orbit. The wound had completely healed by the first intention, and not a single untoward symptom had presented itself. The effect of the ligation of the artery, together with the pressure on the eye, was beneficially shown, and there seemed every prospect of ultimate success. The protrusion of the eye-ball, which had been so great as to prevent the closure of the lids during sleep, was now so far reduced, as to enable the eye to be easily shut during repose. We trust that Mr. Walton will lay the full particulars of this important case before the Profession.

THE CHOLERA, &c.—The whole of the Cape de Verde Islands, excepting Teneriffe, are suffering from extreme want. Cholera and typhus are raging in the Canary Islands and Palmas. In Grand Canary 2000 deaths have taken place, and the island is in a most deplorable state from want of the common necessities of life. There have been, it is said, some cases of yellow fever in Bahia. The *Times*, of the 16th inst., gives a sad account of the ravages of cholera in the Grand Canary. The document may be said to be official, as it emanates from the British Vice-Consul, Mr. Houghton. The disease commenced about the end of May, when some of the inhabitants of a place called San José died suddenly, under circumstances which led to the belief of poisoning. In a day or two, a similar case occurred in another part of the town, in a person who had visited San José the day before. Early in June matters became more alarming, and soon all doubt as to the presence of the epidemic was dispelled. On the 7th, the deaths in San José increased from five to twenty, and so great was the dread inspired by the pestilence, that the inhabitants fled in all directions. The next day the scourge broke out in full force; on the 10th, out of 16,000 inhabitants, not more than 4000 remained in the town; the others having fled, even those who had no means of support running away, and all the ties of nature being broken. The roads were covered with the dead bodies of the runaways, and the deaths soon amounted to 100 daily. The hospitals were overwhelmed with the dying and the dead. The burial of those who perished was effected by soldiers forcing the wretched inhabitants, at the point of the bayonet, to enter the miserable huts in which the dead bodies lay, to remove and inter them. This continued for some days, when a lull occurred; the weather changed; a "*levante*," as it is termed, a hot and dry wind blew, and an evident diminution in the mortality ensued, which, at the last report, still continued. Two merchants, the Messrs. Ripoché, are highly applauded for their excellent and courageous conduct in braving all danger, and setting an example which it were well if it had been more generally followed. The outbreak is referred to direct contagion, but the cause assigned is decidedly inadequate to explain its occurrence, and the consequent fearful devastation. The total number of deaths is not given.

THE CHICORY NUISANCE.—Mr. Liddle, of Alie-place, a surgeon

of repute, who has devoted much time and attention to sanitary matters, has complained to the police magistrates of the chicory nuisance. Several gentlemen of the neighbourhood joined Mr. Liddle in coming forward to request the magistrate's kind interference to remove the most offensive manufactory which could be established in such a crowded locality as Great Alie-street, which was intersected with courts and alleys. From an early hour of the morning, until the middle of the day, and sometimes till a late hour in the evening, the smell of roasted grain, chicory, and other substances was exceedingly disagreeable. The effluvium from the manufactory was exceedingly hot and pungent, and had affected the health of every one present. He was accustomed to many nuisances in the course of his professional duties, and was not very fastidious; but he could assure the magistrate, that his own health had suffered greatly by the nuisance, while the health of his wife had been more seriously impaired by it. But the magistrate, unfortunately, had no power to interfere.

THE QUARANTINE LAWS.—The French papers state, that it is in contemplation to hold a Sanitary Congress, with a view to the better regulation of the quarantine laws. The following is said to be "semi-official":—After the resistance offered by the Sanitary Board of Marseilles to the new regulations presented by the French Government, with a view to diminish the oppressive operation of the quarantine regulations, it was resolved to propose to the maritime powers, that an inquiry should be made into the true character and effect of the diseases (the yellow fever, plague, and cholera) against the propagation of which restrictive measures are adopted in different countries, in order to come to some general understanding on the subject. It was proposed by the French Government, that a congress should be held at Toulon, and that each maritime power should send to it two delegates, one to represent the commercial interest, the other a member of the faculty of medicine. The suggestion of a Congress was universally approved of, but some of the powers disapproved of the place of meeting, and proposed Montpellier. On this the French Government proposed Paris, as being central, and affording to the delegates not only immediate access to the best information, but also giving to them the advantage of being able to communicate at once with the embassies of their respective countries, in the event of such a course being necessary. This proposition has been acceded to, and the Congress will commence its labours soon after the middle of the present month. We understand, that the principal points to be submitted to the Congress by the French Government, are, 1st. Is the cholera contagious? Are quarantine regulations against this disease necessary for public security? In cases of plague is it safe to adopt the system practised by Austria, of allowing the quarantine to commence from the date of the sailing of the vessel from its last port, instead of that of its arrival at the port of destination? Is it not advisable to form a General Sanitary Board, representing all the maritime powers, and to appoint for each port where a quarantine shall exist, a medical man, who shall represent, not merely the country in which he resides, but all the maritime powers, and whose declaration shall be conclusive, unless it be set aside by the decision of the Board on the remonstrances to which it may give rise.

SHOREDITCH COUNTY COURT.—**HOOPER v. THE GRESHAM LIFE ASSURANCE SOCIETY.**—Judge, Mr. Serjeant Storks. This was an action by Mr. Hooper, surgeon, of Queen's-road, Dalston, for the recovery of a guinea fee for a professional opinion, etc., respecting the life of a Mr. Jacob Davies. The plaintiff having proved the service and the refusal of the fee, Mr. Devonshire, the solicitor of the Society, first demanded proof that the plaintiff was duly qualified, and the latter, who said he was M.R.C.S., and L.S.A., not having his diplomas with him, Mr. Devonshire then demanded a non-suit. The Judge at first considered the objection fatal, but doubted, as the plaintiff did not seek to recover for medical skill given, the object of the 55th Geo. III. c. exciv., s. 31, being skill and science for the public. He thought, therefore, that the case did not come within the meaning of the statute. Mr. Devonshire then contended that the plaintiff could not charge a third party, the Society, with payment for his services, as he had not had any retainer, nor was there any contract. The legal contract, if any, was with the assured. If the plaintiff had intended to charge the Society, he ought to have stipulated for payment, and he (Mr. Devonshire) considered the services rendered were not in themselves chargeable. He thought the case similar to that of a master giving a servant a character, for which no charge is ever made. He (the plaintiff) was not bound to answer the questions. The Judge, not finding that there existed any contract, dismissed the case. [Medical men, in these matters, should always refuse to answer the questions, unless they receive a written promise to pay the fee. The circumstances should be explained to the proposed assurer, and he should be recommended to those offices which act justly and fairly to the

Profession. The others, who are now fattening on the labours of medical men, would then be compelled to change their line of conduct, by the diminution of their business.]

SEAMEN'S HOSPITAL SOCIETY.—The sum of 1,000*l.* has been received from Mr. Green, as the proceeds of the fancy sale held on board two of that gentleman's ships, on behalf of the Society. Subscriptions and donations from other sources, amounting to 146*l.* 11*s.*, have also been added to the funds of this very useful Institution.

THE West India Mail Steamer brings over twenty-eight serons of ipecacuanha, and 400 barrels of tapioca.

AGAIN THE PICKWICKIAN SENSE.—The spirit of Pickwick is in possession of the House of Commons. Last week we had the altercation between Sir Robert Inglis and Mr. Williams, and now we have a precisely similar exchange of incivilities and civilities between Sir John Tyrell and Mr. Wakley. In a discussion on the adulteration of coffee, Sir John Tyrell stated, that "a correspondent of his seemed to be impressed with a notion which went to show, that the hon. Member for Finsbury was not altogether like Cæsar's wife, unsuspected, for, said his correspondent, the belief is, that all this agitation against chicory has been got up by the coffee-growers, and they do seem to say that the *Lancet* and other publications are in their pay." Upon this provocation Mr. Wakley attacks Sir John Tyrell as follows:—"That hon. Baronet was at one time esteemed and respected as a noble-hearted, very droll—(laughter)—but straightforward and honourable man. Let the House mark, however, the effect produced by the practices of the Government. That hon. Baronet did not now hesitate to read in the House a letter conveying an odious and scandalous imputation. The hon. Baronet had not given the name of the slanderer, although he (Mr. Wakley) had it in the letter which he held in his hand. In former times, before the hon. Baronet was reduced to his present wreck of morality—(laughter)—if he had been acquainted with a single fact or circumstance which could have justified him in conveying such an insinuation to the House and the country, the hon. Baronet would have boldly named the party who made the accusation. ('Hear,' and a laugh.) It appeared, however, that the hon. Baronet, though an English country gentleman, and notwithstanding his former high character, had sunk to such a degraded level that he could make these insinuations." Sir John Tyrell is thus reduced to a wreck of morality, and sunk to such a degraded level, as to be capable of conveying calumnious falsehoods; yet, concludes Mr. Wakley,—"He could assure the hon. baronet that he did not intend to say anything that could be painful to him, for he entertained the greatest respect for the hon. gentleman's personal character. ('Hear,' and laughter.)" That is to say, Mr. Wakley has the greatest respect for the character of a man "reduced to the wreck of morality," and "sunk to a degraded level,"—in a Pickwickian sense. Pickwick now in turn inspired Sir John, who, in explanation,— "Assured the hon. member for Finsbury that, in reading the extract from the communication he had received, he did not mean seriously to convey any insinuation against him." Sir John had imputed corruption to Mr. Wakley, but without any intention to convey a serious insinuation. It was but poisoning in jest. The lie will next be given in sheer playfulness. It is very remarkable, that the members who have the kindest feelings, and the very highest respect for each other, are those who are found engaged in these foul personalities. They are like the clown and pantaloons in a pantomime, who, after kicking and cuffing, always fall to slobbering and fondling each other. It would, indeed, almost seem that the abuse was a mere pretext for bringing about the subsequent exchange of fulsome panegyrics, and preposterous tributes to character. Thus the members who misbehave themselves are those who receive high compliments upon their conduct and position, while those who act with undeviating decorum may pass their lives in Parliament without ever being assured that they are held in the highest respect and esteem by this or that honourable gentleman.—*Examiner*, July 5.

CRIMINAL POST-MORTEM EXAMINATIONS.—Medical men, when directed by a coroner's warrant to perform a *post-mortem* examination, should not be content with inspecting the part suspected to be the seat of the fatal lesion, when they find a sufficient cause for death in that portion of the human body, as lawyers are on the *qui vive* sufficiently to put questions which might in that case puzzle and injure the medical practitioner. An instance of this occurred lately in the City, where, at an inquest on an Irishman, reported to have been "done to death" by a member of the police force, the surgeon contented himself with examining the head. The astute counsel for the accused finding no other part of the body had been examined, questioned the surgeon as to the appearances that might have been found, if the body had been carefully explored,

and the man had been a drunkard. The result of such an inquiry must tend to fix at least a charge of negligence on the examining surgeon, and sometimes something more; but, at any rate, even the accusation of negligence is a dangerous thing to a surgeon, in a case where the life and character of a human being are at stake.

TREATMENT OF INFLUENZA.—Dr. Maxwell, of Trinchinopoly, writing to a friend at Canobie, in Dumfries-shire, who had related to him divers cases of influenza that had occurred in that neighbourhood, says:—"Why did not you give antimonial wine, and ipecacuanha wine, in repeated doses, every half-hour, with drinks of nice made gruel, with a little wine in it, the patient to drink as he feels inclined; and continuing these, aided by a few leeches, two, three, four, or so on; but, N.B., keeping them till relieved. In short, the patient finding relief, will call for more; not over-doing or overstepping the design and object, but gradually assisting the efforts of nature. A large warm poultice over the leech-bites always affords relief—the leech-bites slowly bleeding. Then also the antimonial wine, acting on the patient, or rather nature, will, with the aid of the nice hot drinks, break out into a fine warm relieving perspiration. The patient will say, "I feel relieved." The pulse will fall from 110 and 120 to 70, almost at once, if the treatment is commenced in time; if not, the pulse will continue to fall daily to the natural number. If the leeches, and these medicines, treatment, etc., do not relieve all the pain, then blisters, properly applied, are of powerful efficacy, great care being taken that the ointment is good, and that part to be blistered is first well washed with hot water and soap. Great care also should be taken to put a pad of tow well on to keep the blister to the skin. The larger the blister the better; even nearly as large as the whole of a letter-sheet; or two or three can be applied at the same time. And, N.B., when the blister has been ordered and determined on, then let the patient first have some nice warm drink, with some weak wine, or some hot, thin, chicken broth,—weak, but relished by the patient; then, in half an hour or less, let some ten grains or so of Dover's powder be given, (with the other remedies or not,) and repeated in half an hour or so; and when the patient feels inclined to sleep, then let the blister be applied; and, if the judgment is well exercised, then will the patient drop off into a deep and sound and long-refreshing sleep, and will awaken convalescent. Nature having been relieved by the great drain, or derivation, falls off to sleep. From first to last let the patient have what he asks for; try various drinks, including chicken-broth, strained thin, weak; or, if the patient cannot take it, let the goblet or sauce-pan, reeking, be held beneath the blanket, and let the patient inhale the steam thereof, before it has been too long boiled upon the fire. I have now come to the end of my letter, but not to the end, but only to the beginning of my subject. From your account (which I fear to read over again) it is indeed a miracle how our dear patient survived. If both lungs had been attacked, woful would have been the result. I will only hastily add, the feet and legs should be frequently bathed and rubbed in hot water, and then the very coarsest ploughman's stockings or overalls put on, which soon brings on an itchy feeling, which relieves the lungs. It appears to have been the raging epidemic, running rapidly into influenza, and settling on the right lung. This form is very fatal. You said, I think, you gave quinine at first; but the first stage had been so obscured as not to attract your attention. But when you found it did not answer, you should have combined the antimonial wine with it; or, rather, as I have related in the foregoing. Quinine is of great use as a tonic, especially if there is any expectoration of matter, weakness, &c. If it disagrees, leave it off: I have seen it cause excessive expectoration of matter when nothing else would. Sometimes I give it in combination with ipecacuanha."

ST. MARY'S HOSPITAL.—The following is the amount of subscriptions, etc., already obtained on behalf of this Institution:—Total amount of donations and subscriptions to the maintenance, building, and maternity funds, 37,412*l.* 9*s.* 10*d.*; ditto to the furnishing fund, 1,888*l.* 15*s.* 4*d.* There is a debt still due to the contractor, and a sum of 1,000*l.* is owing for the site. At present only fifty beds are in use, for want of the necessary funds.

THE PUBLIC HEALTH now presents a more favourable aspect. In the week ending last Saturday the number of deaths registered from all causes declined to 881. In the ten corresponding weeks of 1841-50 the average number was 877; but as population has been growing throughout that period and up to the present date, an average mortality, corrected for the rate of increase, may be estimated at 965, compared with which the deaths of last week exhibit a decrease of 84. The progress of the summer months in reducing the mortality, is perceptible in all those classes of disease which make the principal contributions to the aggregate amount, with the exception of the class of epidemics in which there now appears some disposition to increase.

DEATHS in the Metropolis for the week ending
Saturday, July 12, 1851.

CAUSES OF DEATH.	July 12.				Sum of Ten Weeks.
	0	15	30	All Ages.	
ALL CAUSES	441	274	157	881	8774
SPECIFIED CAUSES	437	274	157	869	8722
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	185	25	14	224	2355
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	20	19	44	400
3. Tubercular Diseases.	43	117	8	168	1833
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses,	44	16	23	83	1107
5. Diseases of the Heart and Blood- vessels	1	23	8	32	227
6. Diseases of the Lungs, and of the other Organs of Respiration ...	60	20	29	109	781
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	17	24	10	51	628
8. Diseases of the Kidneys, &c. ...	...	6	4	10	65
9. Childbirth, Diseases of the Uterus ...	...	8	1	9	86
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	1	4	6	72
11. Diseases of the Skin, Cellular Tis- sue, &c. ... ..	...	...	...	...	5
12. Malformations	6	...	...	6	18
13. Premature Birth and Debility ...	38	3	...	41	194
14. Atrophy	30	1	1	32	228
15. Age ... ..	...	...	31	31	431
16. Sudden	1	1	3	5	88
17. Violence, Privation, Cold, and In- temperance	6	9	2	17	200
Causes not Specified	4	...	...	13	52

TO CORRESPONDENTS.

Lithotomy.—A. B. applies to us for information as to the possibility of obtaining the statistics of lithotomy and lithotripsy cases in the London hospitals. In reply, we unfortunately can only express our regret, that the surgical records of these Institutions, which might be made so useful, are defective to a degree. We doubt, in fact, if any records, at least any of the slightest value in a statistical point of view, exist. Mr. South has published the statistics of the cases at St. Thomas's Hospital; and there are, we believe, some records of cases at St. George's and University College. In St. Bartholomew's Hospital, also, a faint attempt, wholly inadequate to the end, has been lately made; but precious time has been lost, and it will require years of careful labour, on a much more extended scale, to produce a record worthy of the Hospital and useful to the Profession. We are thoroughly disgusted with the lavish expenditure of money in furnishing up wards and refacing the square, when a homœopathic quantity of the sum so squandered would have been far more beneficially spent in recording the surgical experience of this great Institution.

A Student.—The rejections which have this year taken place at the examinations for the membership at the Royal College of Surgeons proceed from no greater severity on the part of the Examiners, but from the general laziness which has pervaded all classes during the summer. In this respect the Crystal Palace has much to answer for. Nevertheless, our Correspondent should perfectly understand, that a man who cannot pass his examination after his third year, had better turn his mind to other pursuits. He is unfit for his Profession.

[To the Editor of the Medical Times.]

SIR,—Allow me to suggest the propriety of the insertion of the *pass-list* from the Apothecaries' Hall in the columns of the "Medical Times." Such a pleasing and interesting source of information, so generally admitted into the papers of the day, ought at all events,—you will agree with me,—to be found in the publications specially devoted to medical science, and to matters of general interest to the Profession at large.

I beg to congratulate you upon the determined stand you have taken against the Homœopaths, the Warburgites, and such like; and I trust you will persevere in your endeavour to render the "Medical Times" a leading organ in support of the true dignity of the Profession. I am, &c.

A COUNTRY SUBSCRIBER.

[We will willingly publish the list if forwarded to us.]

[To the Editor of the Medical Times.]

SIR,—*Ecce iterum* Dr. Warburg! So long since as March 30, 1839, among the Notices to Correspondents, you will find the following rebuke addressed to Dr. Warburg, who is now trying again to puff his "specific drops":—"We can have nothing to do with Dr. Warburg's 'specific drops for fever.' Let him tell what they are and how they are prepared, and we may then possibly be induced to try them."

Who keeps secret a remedy which he sells, sells it not for the good of others, but for his own gain. This nostrum-vendor Dr. Warburg, is trying a new way,—getting nostrum-doctors to puff for them. Both must be put down. We may safely leave them in your hands. Give them no quarter, Sir. Deal with them as you would with quack-doctors, homœopaths, mesmerists, and *hoc genus omne*.

Battley's *Liq. opii sedativus, cum multis aliis*,—nostrums all,—sold for lucre,—have no proper place in our pharmacopœia. We can do quite well without them. But you will "return to the subject."

I am, &c.

M.D. Edin.

T. D. P.—We will shortly state our views on secret remedies.

DR. KNOX'S WORKS.

[To the Editor of the Medical Times.]

SIR.—Can you tell me if the rumour be correct, that the works of Knox are at last to be given to the medical world in a collected form? The news is too important to be neglected, and almost too good to be true. If it be any encouragement, I shall be most happy to put down my name for a copy, and accordingly enclose my card. I am, &c.

AN OLD EDINBURGH MAN.

[The Editor of this Journal, in connexion with other old pupils of Dr. Knox, determined to collect and edit the works of their former teacher. They proposed to address all Dr. Knox's pupils, and to publish the volumes by subscription. As soon as Dr. Knox furnishes a list of these gentlemen, they will be written to upon the subject.]

A General Practitioner r.—Dr. Murphy was not justified in giving the certificate. To place such a weapon in the hands of an irregular practitioner was a serious error in judgment. With the Profession it can only excite a smile; but in the hands of an artful man it may seriously injure another practitioner in the opinion of the public and of his patients. The pathology contained in it is imagination.

Mr. Wilde's corrected proofs did not reach us in time for the insertion of his paper in the present number.

M. H.—1. The Board of Examiners of the Apothecaries' Society will not receive a candidate for examination who has not arrived at twenty-one years of age. 2. Two: a Latin and a general examination. 3. Write to the Secretary for particulars. 4. Six guineas for country practice, and ten guineas for Metropolitan practice. 5. Throughout the year.

A Country Surgeon need not be alarmed. No Act of the kind can be made retrospective. The Board of Guardians in the case referred to are decidedly wrong to refuse an extra fee. Apply to the Commissioners, and do not forget to send a detailed statement of the case.

R. S.—Rumours of the correspondence have reached us, but as we do not know the facts, cannot pretend to give an opinion. It is a fair case for a Court Medical. Such Courts should consist of twelve persons, and not less, according to the old English custom for forming juries. They have failed hitherto, in consequence of the small number of persons composing them not giving sufficient authority to their verdicts.

M. D.—It has been published by the Sydenham Society. Some of the works of old authors are valuable for their semeiology. More striking and graphic accounts of disease are to be found in them than in modern authors. Those described what they saw, and described clearly; these, frequently, what others have seen, and *obscurely*.

Chirurgus, Marylebone.—Your only legal claim for attending the accident, although summoned by the police officer, is on the patient.

BEBEERINE.

[To the Editor of the Medical Times.]

SIR.—On my return from a lengthened visit to London, I read in your observations on Dr. Warburg's letter, that "it is supposed the active ingredient of his 'nostrum' is Bebeerine," and you express a hope that Mr. Savory, of Bond-street, will prepare a compound of Bebeerine for trial by the Profession.

When I was a student at the University of Edinburgh, in 1839 and 1840, a sulphate of Bebeerine was prepared, and proposed to the Profession by Dr. Douglas MacLagan, which I have since frequently used as a febrifuge and anti-periodic tonic; and which, though less effectual than Quinine, I have found of great value, as it does not affect the head, which Quinine certainly does in some cases. I also introduced it at the West Norfolk Hospital, when I was attached to that establishment as physician, some seven or eight years ago.

I doubt not many others can bear testimony to its use.

I am, &c.

Ilfracombe.

ALBERT DE MIERRE, M.D.

Mr. Grove's paper is in the hands of the printer.

Dr. Rooke's Hospital Report will appear next week.

Professor Lizars' communication has not been received.

A Subscriber.—The sesquicarbonate.

WE do not decide bets, nor answer questions which a tyro ought to know and will easily find in any elementary work.

OWING to an accident, Mr. Quekett's Lecture must stand over till next week.

COMMUNICATIONS have been received from—

Mr. BEALE, of King's College Hospital; Mr. LEVINGSTON, of Surrey-grove, Old Kent-road; Mr. ROBERTSON, of Union-place, New Kent-road; SECRETARIES of the EPIDEMIOLOGICAL SOCIETY; Dr. RADCLIFFE, of Henrietta-street; AN OLD EDINBURGH MAN; A COUNTRY SUBSCRIBER; The SECRETARY to the COURT of EXAMINERS of the APOTHECARIES' COMPANY; Professor LIZARS, of Edinburgh; A GENERAL PRACTITIONER; A. B.; A STUDENT; M. H.; Mr. KENT, of Stanton; Dr. RAMSKILL, of St. Helen's-place; The PRESIDENT and TREASURER of ST. THOMAS'S HOSPITAL; Mr. GROVE, of Wandsworth; Dr. ROOKE, of the Hospital Ship Dreadnought; A SUBSCRIBER; Dr. DE MIERRE, of Ilfracombe; Mr. HENRY JAMES JOHNSON, of Suffolk-place; A COUNTRY SURGEON; R. S.; M. D.; CHIRURGUS.

ORIGINAL LECTURES.

LECTURES ON HISTOLOGY.

DELIVERED AT THE
ROYAL COLLEGE OF SURGEONS, LONDON.By J. T. QUEKETT, Esq.,
Assistant-Conservator of the Hunterian Museum.

(Continued from page 8.)

ADIPOSE TISSUE.

We now come to another class of true cellular tissues, viz., the adipose tissue, which consists of cells having walls of structureless membrane, within which is contained the material known as fat. This exists, in ordinary animals, in three states, either as oil, lard, or tallow; but in one species of whale, viz., *Physeter macrocephalus*, it is in the form of spermaceti; the three first being distinguished by their relative firmness at different temperatures. In the majority of works on anatomy, and in common parlance, the term *fat* is given to masses of these cells, but in modern science adipose tissue is the name applied to the mass of cells, and fat to the contents of the same. The cells of adipose tissue, when occurring singly are of circular figure, but when subjected to pressure, as shown in Fig. 57, A, they are, like vegetable cellular tissue, of a more or less dodecahedral shape. In the young subject they vary in diameter from 1-300th to 1-800th of an inch, in the adult, they are rarely smaller than 1-700th of an inch; when first developed in the embryo they have a nucleus, but this very soon disappears. Adipose tissue exists in the form of lobules, which may occur singly or in masses of many pounds' weight; a certain amount of it is considered a sign of health, but an excess, especially if it be in one mass, as in the tumours now before you, constitutes disease.

In all works on anatomy and physiology, even of so late a period as last year, and in the admirable work of Professors Todd and Bowman on these subjects, it is distinctly stated, that adipose tissue exists in invertebrate animals; this, however, I find to be incorrect, and it cost me no small amount of labour to prove it. Fat certainly does exist in insects, crustacea, and mollusca, but no true adipose cell is ever present; it could not be developed without its accompanying blood-vessels, and these are not found in invertebrata. The tissue resembling the adipose in general belongs to the liver or other glandular organ, and the fat exists in its cells in the form of oil.

I here show you a portion of the liver of the larva of a goat moth, *Cossus ligniperda*, which consists of a series of cells or vesicles, containing a large number of globules of oil, and again another specimen, taken from a cockroach, in which there are tubes, also full of oil globules, but in neither case, and not even in the Cephalopoda, is it contained in adipose cells.

Immediately, however, we pass the barrier between the invertebrate and vertebrate sub-kingdoms, we find that even in the lowest members of the class of fishes true adipose cells occur, and you are all doubtless aware, that in the liver of the cod, and of many cartilaginous fishes, fat exists in the form of oil without any adipose tissue; in this point the liver resembles that of an invertebrate animal. I here show you a portion of the liver of a cod, and, with the exception of a few secreting cells, you will find, as shown in Fig. 57 B, that it is composed of a mass of oil globules of various sizes; but in this specimen from the peritoneum of the same cod, you may notice a mass of adipose cells full of a dark brown liquid oil. The adipose

cells exist in lobules, and have areolar tissue running amongst them; this invests the lobules and supports the capillaries distributed to the cells, as is well seen in this preparation, taken from under the skin of a young child; and I would beg of you to bear in mind the size of the cells, as in the next object you will have an opportunity of seeing under an equal magnifying power, the adipose tissue of an adult, in which the cells far exceed those of the child in diameter.

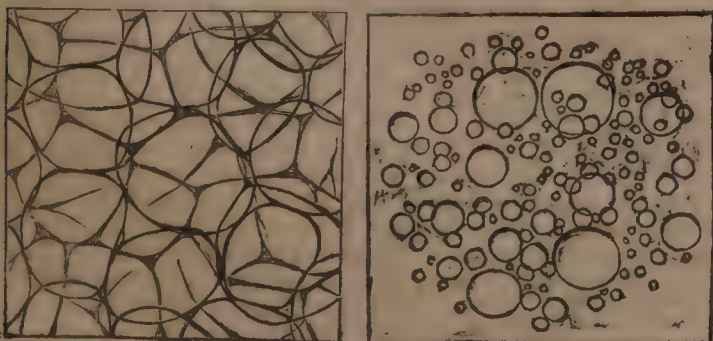
I will now allude to Hunter's observations on this subject, which are contained in the third volume of the Physiological Catalogue of the Museum, and are so valuable as to merit an attentive perusal; there are, however, a few trifling errors present, which arose from his being unaware of the existence of the adipose cell, especially as occurring in the whale tribe, the fat of which animal he supposed to be contained in the interstices of the fibres constituting a great portion of the blubber; I will send round the preparation put up by him to show this fact, but the receptacles it exhibits are for the lodgment of the adipose cells containing the oil, and not for the oil only. The second preparation which I pass round, is a section of the skin of a whale, taken from near the tail, and was also put up by Hunter, to show that in this part of the animal there were no receptacles for the oil. The chief value of the adipose tissue of the whale tribe appears to consist in its containing oil which is liquid at all ordinary temperatures, the train oil of commerce: on the same account, the fat of the bear is also very valuable, and is largely employed by the perfumer. I once had an opportunity of dissecting a bear, and, although it was during frosty weather, the quantity of oil that flowed from between the muscles was very great, amounting to many gallons, and hence I concluded, that the value of the oil of the bear, or grease,—as it is usually termed,—to the perfumer, depended on its continuing in a fluid state, even at so low a temperature; the nearest approach to the fat of bears is, perhaps, the marrow from the lower part of the bones of ruminants, which is often used as a substitute for bear's grease. In the whole tribe of these animals we have a very firm fat known as tallow; in the pig it is still firmer and called lard; if a portion of either of these substances be cut transversely, the fat is so dense as to allow of the adipose cell being divided, and such tallow or lard is perfectly solid in all temperatures of this climate, and is capable of being employed in the manufacture of candles. In the turtle, we have under the carapace a quantity of adipose tissue contained within delicate areolæ, formed principally of a loose kind of white fibrous tissue; this is well known as the green fat, and is much prized by epicures; this fat is more digestible than that from ordinary animals, and I have frequently observed, that those persons who cannot well digest the fat of beef or mutton, can consume large quantities of the fat in question without annoyance.

I have stated, that the adipose tissue is supported by a fibrous net-work; this holds good in the majority of cases; but, in the marrow of bones, no supporting tissue is present, and I here take the opportunity of showing you a point of interest, being constant in occurrence throughout the vertebrate kingdom, viz., that in the bones of the arm or leg the marrow of the humerus and femur is exceedingly firm, whilst that of the lower part of the tibia or metatarsal bone is always more or less liquid; it is from such bones as I now exhibit, that the ordinary neat's foot oil is procured. The same thing is evident even in skeletons, and in this bird you will notice that the bones of the extremities are greasy at their distal ends, the contents of the adipose cells being always of a liquid nature, and having no tissue to support them.

According to chemists, fat consists of a liquid and solid principle, the former being termed elaine and the latter margarine; and in all the firmer fats, such as lard, a third principle, termed stearine, is also present. Most of you, I have no doubt, will recollect, that when I was speaking of oil in vegetables, I showed you the analogy between it and that of animals, and pointed out that a stearine had been for some time procured from palm oil, by subjecting it to great pressure; I now show you a specimen of stearine obtained from human fat, which cannot readily be distinguished from that of vegetables.

It is generally known that the elaine and stearine of the fats are compounds of acids, the elaic and stearic, with a base termed glycerine, a substance now much used in medicine, and also in the mounting of microscopical objects.

A Fig. 57. B



This material I now show you, it is obtained largely in the manufacture of soap, for when the alkali and tallow are boiled together the liquid residue is glycerine; it is, in fact, the sweet basic principle of fats and oils, the best kinds, however, are obtained in the manufacture of lead plaister; when the oil and lead are mixed together the resulting liquid is almost pure glycerine.

There are cases, too, occasionally met with in the adipose tissue of old persons, in which the solid element, or margarine, will separate in the form of needle-like crystals from the elaine, and I now show you a portion of adipose tissue from a female, seventy years of age, in every cell of which, as represented in *Fig. 58, A*, you may observe a stellate mass of these needle-shaped crystals; this fact is more strikingly exemplified in the adipose tissue of the spermaceti whale; in the specimen I now exhibit, the adipose cells, as shown in *Fig. 58, B*, are of large size, and in every cell may be seen the crystalline substance known as spermaceti; this material, however, as represented at *a b*, frequently occurs in masses of needle-shaped crystals out of the cells, and in some instances a tabular form of crystal is more common than the needle-shaped one.

A *Fig. 58. a* B



The adipose tissue under the skin is most abundant in those animals that are destitute of hair, such as whales, and even man himself; other animals, especially ruminants, have it stored up around the loins and kidneys, and that derived from this latter situation has received the name of suet; the whales, on the contrary, have no adipose tissue within the cavity of the abdomen, whilst one animal in particular, viz., the hare, rarely has adipose tissue in any part of its body. In fishes adipose tissue occurs among the muscles; but in the cod and some of the cartilaginous species it is found in the liver in the form of oil. In reptiles, as the frogs and newts, it is stored up against winter in the form of long cœcal appendages situated above the testicles. If a frog be examined in the autumn these appendages will be found of large size; but by the spring they will have nearly disappeared. The same thing occurs amongst hibernating quadrupeds, such as the dormouse and hedgehog, but in these animals the fat is principally subcutaneous, forming in fact a winter overcoat. In snakes the fat exists in the form of lobules attached to the sides of the mesentery; in turtles it is principally underneath the carapace; in birds it is chiefly present under the skin, and in the peritoneum; in many of these animals, especially those of the order palmipedes, the adipose tissue contains an abundance of oil.

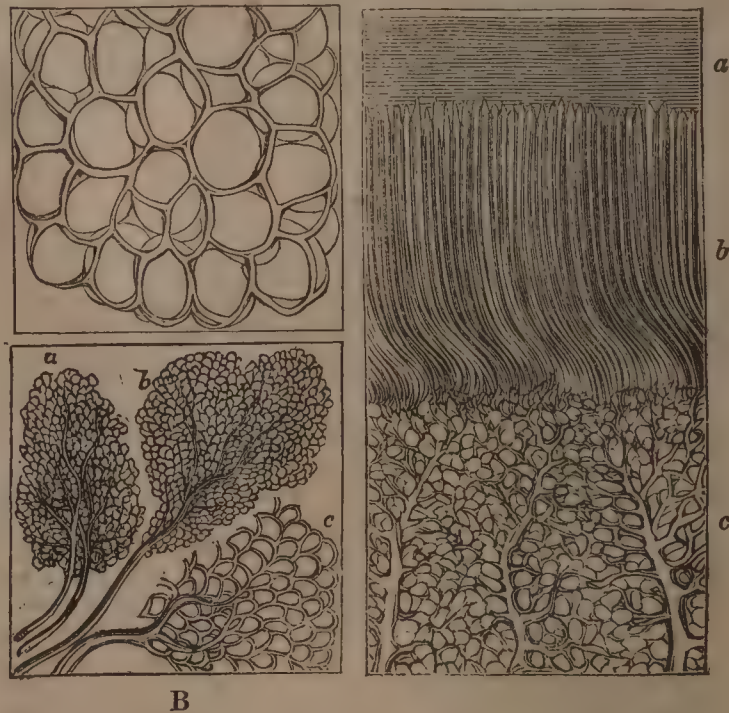
Having made frequent allusion to a peculiar kind of fat found in the sperm whale, and known by the name of spermaceti, I will now describe it more particularly: it is a crystalline substance, of a white or yellowish white colour, and is found in large masses in the head of the animal; though found as a liquid, its more solid portion readily separates, as shown in this specimen from the Museum. In former times it was considered a useless substance, and hundreds of tons have been thrown into the Thames; it is now largely employed in the manufacture of candles, and is even more valuable than the oil itself, from which, as you had an opportunity of seeing on a former occasion, it separates in flaky crystals. When spermaceti is exposed to a heat of 115° Fahrenheit, it melts, and will crystallize again on cooling; in this condition it has the property of polarizing light, and the specimen which I now send round will be a thin layer of its crystals, which, as you will see, exhibit a beautiful series of colours; the same property is also possessed by a substance somewhat like spermaceti, but which

is produced by the decomposition of certain animal tissues, especially the muscular, and is known by the name of adipocire; a fine specimen of this material is now before you, formed from the thigh of a man by the action of a stream of water. Like spermaceti, adipocire is easily melted, and crystallizes on cooling, I shall presently show you that it also polarizes light. Having now described to you the contents of the adipose cells, I will next point out the mode in which they are supplied with blood; I have already stated that the cells are arranged in lobules, and that each lobule is invested by areolar tissue, which passes among the cells, and gives support to the blood-vessels.

I now show you a portion of the pleura costalis, having upon its upper surface two or three minute lobules of adipose tissue, in which the fat is quite solid, and of a yellow colour, in the same specimen are other lobules from which the fat has been dissolved by turpentine; in both kinds the blood-vessels have been injected; those, however, that are of a yellowish colour, show very distinctly that a capillary loop surrounds each adipose cell, a portion of this specimen is represented in *Fig. 59, A*, as seen under a magnifying power of 250 diameters.

In the next preparation you will see a large quantity of adipose cells, each having its fat dissolved away by turpentine; the capillaries are arranged precisely in the same manner as those in the preceding specimen, and, when viewed by transmitted light, the walls of the cells are still visible. In birds the adipose cells are of smaller size than in mammalia, and when injected the capillary net-work is closer. I now send round an example from the rook, in which this fact is well shown. Small lobules of adipose tissue sometimes surround the pulps upon which the feathers are formed, and the capillaries of these lobules very much resemble those of some glandular organs, as is strikingly exemplified in this portion of the skin of a young pigeon, (*Fig. 59, B*). At *a* and *b* are seen the capillaries of two lobules magnified 40 diameters, and at *c* a portion of one of the same, magnified 200 diameters.

A *Fig. 59.* C



When speaking of the adipose tissue of the whale, I showed you the receptacles between the fibres for the lodgment of the cells; such a specimen as I now hold in my hand would, when injected, exhibit an extraordinary amount of vascularity; I cannot, however, show you an injected preparation of the blubber of the whale, but I can of that of the porpoise, *Fig. 59, C*. The upper part of the preparation (*a*) exhibits the non-vascular cuticle, into which long papillæ (*b*) project; below these are seen numerous trunks (*c*) giving off capillary vessels: these belong to the adipose tissue. The amount of vascularity, therefore, of the blubber of a large whale must be truly astonishing, if we judge from this specimen from one of the smallest of the cetacea. A somewhat similar structure to that of the blubber of the whale occurs in the pig;

this, when salted and dried, is known as bacon, I here show you a small piece of it injected, the capillaries, when successfully filled, are as numerous as those of other specimens of adipose tissue.

The next preparation I shall exhibit, is a small mass of adipose tissue taken from the arm of a child; it consists of a series of small lobules in the areolar tissue, between which the injection is extravasated, and forms a well-marked boundary to each lobule; the capillaries of the cells are much smaller than those of the two first specimens shown you, which were taken from an adult human subject. When fat occurs as a tumour, it is most frequently of a yellow colour, and contains few if any vessels which bleed on its removal or when cut into; but it sometimes happens that the mass is of a red colour, and contains a very large amount of blood. The preparation I now pass round was removed after death from the mesentery of a child, by Mr. Pittard, formerly one of our students; in its general appearance, it precisely resembled a mass of malignant disease, and when an incision was made into it, a large quantity of blood escaped. Its true nature was only ascertained by microscopic examination, when it turned out to be nothing more than a mass of adipose tissue; although it has been in spirit and exposed to the light for the last two years, it even now retains a portion of its red colour.

LECTURES ON PUBLIC HEALTH.

ADDRESSED TO THE STUDENTS OF THE THEOLOGICAL DEPARTMENT OF KING'S COLLEGE.

By WILLIAM A. GUY, M.B. Cantab.,

Dean of the Medical Department of King's College, Professor of Forensic Medicine, and Physician to King's College Hospital, &c.

(Continued from page 35.)

CONTENTS.—Overcrowding in small Country Towns and Villages.—In Lancashire and Dorsetshire.—State of the Poor-houses.—Reports of the "Times" Commissioner and of the Correspondent of the "Morning Chronicle."—Extract from the Report on "The Laws of Settlement and Removal of the Poor."—Disastrous Operation of the Law of Settlement.—Impolicy of Poor-laws.—Poor-rates levied on the Employers of Labour, often upon the very poor.—The condition of the Pauper often better than that of the Rate-payer who supports him.—A Humane Poor-law impossible.—The Poor-law Immoral, and an Encouragement to the Idle and Vicious.—Close and Open Parishes.—The Law of Settlement a Premium on the Dilapidation and Destruction of Cottages.—A Disorganizer of Labour in the Rural Districts.—The Labourer forced to walk or ride several miles to his work.—The operation of the Law of Settlement brings about the same consequences in the Country as Metropolitan Improvements have occasioned in London.—Overcrowded state of Union Work-houses.—Marlborough House, Peckham.—Mr. Drouet's Establishment at Tooting.

HAVING proved to you in my last lecture that, in the metropolis and our large provincial towns, all the physical evils pointed out by Howard, as existing in the prisons of his day—deficient supply of air, light, and water, defective drainage, filth, and overcrowding—prevail in the dwellings of the labouring class and the poor, I now proceed to demonstrate the existence of these same evils in small country towns and villages, typhus fever being the consequence of this state of things in the one case as in the other.

In August, 1838, Mr. M'Donnell reported to a meeting of the British Association the state of 309 cottages at Ramsbottom, near Bury, one of the best districts in Lancashire. In 137 of these cottages there was only *one* bed-room, and in 172, *two*. 137 families, consisting of 777 individuals, had each only one bed-room; and some of these families consisted of from eight to thirteen individuals.

The Statistical Society of Manchester reported of the villages of Eggleston and Branstown, in Rutland, and Dukinfield and Bury, in Lancashire, that in Eggleston, 14 in the hundred, in Branstown, 19 in the hundred, in Dukinfield, 33 in the 100, and in Bury, 35 in the 100, had *more* than three persons to a bed.

The "Times" Commissioner, reporting on the condition of the Dorsetshire labourer, in 1847, thus expresses himself:—"The 'poor-houses' in some parishes are particularly deserving of reprehension. The building in the parish of Yetminster, which rejoices in the

above title, is, perhaps, as complete a scene of wretchedness as the county is capable of producing. Within the four walls of this place I was informed that upwards of sixty persons are living; and certainly, a more neglected and unfit abode for human beings cannot be well imagined. Dirt and misery are the only features of the place. * * * In one instance, (says the Commissioner,) I found a man, who was employed in the clay-pits, and earning 15s. a week, occupying a garret in the poor-house, where, in a single room, in which I could barely stand upright, himself and his family, numbering in all eight individuals, are herded together. In one of the beds a child was lying ill of what the mother termed 'slow fever,' and was apparently in a dying state. She informed me that another of her children died of the same complaint about three weeks previously, and that she had, at different times, lost three of her family. The mortality could not be surprising to any one whose nostrils had been offended by the impure and loathsome atmosphere of the den which this man is forced to consider his home. * * * In another part of the same building, a man and his family were in the occupation of two rooms, in one of which the whole family slept. The eldest son is 19 years of age, the eldest daughter 20. I also visited other houses in the village, and, in one instance, found two families in the joint occupation of a small cottage; one of these families numbered seven individuals, two of whom want of space compels to find their night's lodging at the house of a neighbour, which is not so thickly tenanted."

These poor-houses, or parish-houses, of which this is a description, are the houses in which the poor were accommodated previously to the erection of the union workhouses. Many of these parish-houses were sold to assist in defraying the expense of building the workhouses; but the overseers have kept others of them, which they let at low rents to persons just on the verge of pauperism. The Special Correspondent of the *Morning Chronicle* gives the following description of one of these parish-houses which he visited on the borders of Devon and Cornwall, not far from Launceston. (You will, perhaps, recollect Howard's description of the county-gaol, Launceston, the very climax of prison squalor and filth.) This parish-house "consisted of two houses, containing between them four rooms. In each room was a family, who used it both night and day. The lower rooms were about twelve feet square; in one of them were a man and his wife and five children; in the other were a man and his wife and eight children; in this latter there were but two beds,—the father and mother and two children occupying one, and the other six being huddled together into the remaining bed. They lay *head and foot*, as they termed it,—that is to say, three with their heads at the top, and three with them at the foot of the bed. The eldest girl was between 15 and 16, and the eldest boy between 14 and 15. The closeness of this room was overpowering. The beds were necessarily large, and occupied most of the floor; indeed, when the whole family was assembled, several of the children were placed upon the beds to keep them out of the way. In this way the beds may be said to have never been cold." The reporter inquires, naturally enough,—“How can health be retained, or morals preserved, under such circumstances as these?” How, indeed! Speaking of another of these parish-houses, situate in the parish of St. Martin's Cornwall, and in a similar state of filthy dilapidation and overcrowding, the reporter states, that “the cholera entered it and claimed five victims—the rest fled in terror from the plague.” He adds, that in one room “so great was the number crowded into it, and so small was the space appropriated to them, the beds, which were three in number, (for it served the purposes of bed-room and sitting-room,) were piled one above another, like the shelves of a book-case.” Since the cholera has dispersed its inhabitants, this pest-house has been suffered to fall into decay. The reporter goes on to say, that the Duchy of Cornwall is as chargeable with neglect in the matter of cottages as the private proprietors, thus reminding us again of what Howard tells us of the prisons that were private property, and what I told you in my last lecture of Church-lane, St. Giles's. Neglect of plain duties, and assertion of very questionable rights, seem to be the rule of the owners of property, with rare exceptions, from the highest to the lowest.

But these frightful evils of bad house-accommodation and over-crowding are by no means confined to parish-houses. They are not even confined to one county or one district, but

are common to the cottages of the poor in ninety-nine out of every hundred parishes in England. In endeavouring to choose from the reports of the Special Correspondent of the *Morning Chronicle* a few cases in illustration of these evils, I have found myself literally overwhelmed with what the French call an *embarras de richesses*. I will give you one or two examples. This is one from a village in Dorsetshire, not very far from the residence of a clergyman who has done much to expose the wretched state of the labouring poor in the county of Dorset. The Reporter says:—

"The first house which I visited here was a low, wretched tenement, built of bricks, which were fast crumbling to decay. It was inhabited by a family of eight, bearing the name of Haywood. Some time since they mustered twelve, and only two months since ten. Death had, about the latter period, taken two from their number. They had two rooms, the lower one being about twelve feet square, with scarcely any furniture, and a cold, damp, and broken earthen floor. The upper room, which was in the roof, was in a state of almost perfect dilapidation. It contained three beds, once occupied by 12 people, but now left to the eight who remain. When it rains, the beds have to be removed from place to place, to avoid the water which comes dripping through the roof. When the two died, they had fever in the house. Several of the children were ill, but it proved fatal only to these. Six of them were at one time crammed into one bed, to avoid infection. Of the two who died, one was a young man, the other a child. The burials were five days apart. In each case the body lay in the sleeping-room of the family until it was removed. The rent paid for this hovel is 1s. a week, to one of Lord Rivers' lessees. There is no garden attached to it, and the same may be said of most of the houses near it."

Speaking of a village near Axminster, in Devonshire, the Special Correspondent of the *Morning Chronicle* says:—

"In one hovel with two rooms I found no fewer than eleven people. The sleeping apartment was upstairs as usual, directly under the thatch. There were three beds, two of which were on the floor. In that having a bedstead, slept the father and mother and two children—a not uncommon arrangement. The remaining seven occupied the beds on the floor. The eldest of the family was a girl sixteen years of age, the next a girl about fifteen, and the third a boy about fourteen. They sometimes had a long tattered shawl hanging between the bed occupied by the parents and those on the floor; but in winter they generally had it down to serve as an additional covering for the children. The family was scarcely ever free from disease, the younger children being pale and emaciated, and diarrhoea being a very common ailment with them all. Their diet was scanty, and the situation of the cottage bad. There was no drainage, and in wet weather a strong infusion of manure from a neighbouring dung-heap would trickle in at the cottage door. They were dirty in their habits, but to have kept their house anything like clean would have required so constant and energetic a warfare with filth, that they shrank from engaging in it."

I might multiply such quotations as these to any extent, or I might give you, from the same source, in reference to every county in England, short summary statements of the wretched house accommodation to which the labouring poor are forced to submit. But I prefer turning to a late Report on the Law of Settlement, issued by the Poor-law Board, and making a few short extracts from it.

One of the Reporters, Mr. G. A. à Beckett, whose duty it was to report on the counties of Suffolk, Norfolk, and Essex, and the Reading Union in Berkshire, says, "It is almost impossible to imagine the misery, dirt, degradation, and consequent immorality in which a large portion of the labouring classes of this country are at the present moment living." He then goes on to speak of the more crowded parishes, and says of them, "The dwellings are for the most part wretched, damp, unwholesome, inconvenient, excessively high-rented, and crowded with inmates to such an extent as to render it impossible that health or comfort could be enjoyed, or the commonest rules of decency observed."

Captain Robinson, another of the Reporters to whom were allotted the counties of Surrey and Sussex, says—"In some of the crowded alleys of Guildford, Farnham, Chichester, and other towns, inhabited by rural labourers, the state of impurity and loathsomeness there to be witnessed cannot be exceeded, save in the worst districts of London or Westminster." He adds, "The indiscriminate crowding together

of persons of all ages and both sexes that ensues from the labourer being driven into towns and large villages, causes a degree of discomfort, of profligacy, and corruption hardly to be described."

To a similar effect is the Report of Mr. John Revans, from an Appendix to which, and on the authority of Mr. Biddle, relieving officer of the Alton Union, Hampshire, I quote the following:—"Many labourers who reside at Alton go daily to work at Froyle, three miles distant; to Hartley, three miles; and even to Bentworth, which is five miles off, because they cannot get cottages nearer to their work than this town. Cottages have not increased in the villages, but they have in such towns as Alton." "In the villages the people were much more crowded than they were twelve years ago." And then an instance is given of a woman who had "just been confined in a room in which the whole family slept, viz., her father, mother, a sister 25 years of age, and her brothers, about 15 and 16 years of age. There were four beds in the room." And then another instance is given "of a woman ill of fever, and who had just miscarried, being in the same room in which slept her father, mother, and three or four children, of whom one was a girl of 10 years of age."

Mr. Francis Howell, another of the Reporters, speaks of the crowded state and high rents of the cottages in the "open villages;" and he says of the labourer, that "he is obliged, in many cases, to live far from his work; and, besides the additional fatigue to which he has to submit, his hours of rest and leisure are curtailed, and he is often ill-lodged, and at a high rent, in crowded and unhealthy situations."

Mr. Robert Weale, another Reporter, says, "that it is a very common thing for whole families, with grown up sons and daughters, to occupy the only bed-room the cottages afford."

Mr. Grenville Pigott, after stating that the cottage accommodation in the counties of Berks, Buckingham, and Oxford is, generally speaking, insufficient, justly remarks: "Where this deficiency exists, it entails more privations and evils of every kind upon the families of labourers, than perhaps any other cause whatsoever, depriving them of all possibility of domestic comfort, precluding from the exercise of the common decencies of life, robbing them of their health, leading to unchasteness and prostitution, and, as the records of the courts of assize and quarter session abundantly show, too often to the commission of the darkest crimes."

Lastly, Mr. Hawley states, "that the cottage accommodation in Northumberland is generally insufficient, and the domestic arrangements consequently objectionable, a whole family being frequently obliged to occupy one apartment, which serves for the general purposes of sitting-room and dormitory."

Of this Report, or series of Reports, from which these few quotations are taken, I may say, as I did of the letters of the Special Correspondent of the *Morning Chronicle*, that I find myself almost bewildered by the multiplicity of facts and illustrations. Some of the most striking I have been obliged to omit, simply because they were too long to suit my present purpose and my very narrow limits. I have said that these extracts which I have now read to you are taken from a Blue Book, just published, entitled, "Reports to the Poor-law Board, on the Laws of Settlement and Removal of the Poor;" and, as it is most desirable that you should be fully informed, not merely of the physical evils which impair the health and undermine the morals of the people, but also of the remote causes which lead to these physical evils, I must detain you for a short time while I say something of this Law of Settlement, premising that, in conformity with what I said in my first Lecture, I look upon all physical and economic evils which profoundly affect the moral and religious condition of the people, as truly religious questions. It happens, fortunately too, that this Law of Settlement is not one which stirs up the strife of parties, so that I can speak of it without any fear of trenching upon the domain of politics in any objectionable sense of that term.

As the law of settlement is a constituent part or essential adjunct of the Poor-laws as they at present exist, it is, perhaps, expedient that I should at once avow myself, in common with two distinguished members of your Profession—Malthus, and the late Dr. Chalmers, whose example emboldens me to enter into the subject—in common, too, with some of the most humane men among the laity and clergy of Scotland—an opponent of those laws, and a sceptic as to the policy of such laws in any form at all analogous to that

which they now assume. I believe them to be unsound in principle, and ruinous in their operation. Instead of endeavouring to bring about the highest and greatest good of the greatest number (which is the only intelligible principle of action for a great nation), they aim at averting a certain contingency, with which the individual is supposed to be threatened, though all experience proves that it is a very remote and improbable one—I mean the contingency of *starvation*. But even admitting that starvation, instead of being a very rare and a very improbable event in an industrious and opulent nation like our own, was an event of very frequent occurrence, it will admit of the gravest doubt, whether a poor-law could by any possibility avert it; that is to say, whether it could save more persons from starvation than it condemns to it.

The food, clothing, and shelter, which a Poor-law professes to supply to those who are in need of these things, must be bought with money; and we all know that that money is collected, in the form of Poor-rates, from the pockets of persons who, directly as producers, or indirectly as consumers, set that labour in motion by which the working-man is fed, clothed, and lodged. Every farthing of the money, therefore, which is collected as Poor-rate comes, in a certain very intelligible sense, out of the pockets of working-men. Poor-rates, therefore, are paid by the poor to the poor. I have said that *every farthing* of the money raised as Poor-rate comes ostensibly out of the pockets of the rate-payers, but virtually out of the pockets of the labourers. This strong expression requires some explanation, and, perhaps, a little modification. In the first place, there are some few people in the world who hoard money, and a Poor-rate, like any other tax, may in this case bring money into circulation which would otherwise remain for years idle and useless. Again, a still larger number of persons save money, which they let out at interest. But this money, you will remember, is employed by the borrowers in consuming or producing, and therefore in labour. And, lastly, there are others who spend money in luxuries, which we all feel to be very unnecessary and even pernicious. Now, though I have no wish to defend such modes of spending money, I must remind you that the production of these very luxuries feeds the working man. The man who builds a carriage, or drives it, the man who cooks a feast, or waits at table, earns his bread by that which may give the owner of the carriage, or the master of the ceremonies, a fit of the gout. Though the money might have been better employed, the working-man is kept from starvation by the employment which it gives him. On the other hand, we must not forget (and this is a very valid argument against all Poor-laws,) that, whereas the money collected from the rate-payer is not employed in purposes of reproduction, a certain considerable portion of the same money, if left in his hands, must of necessity have been reproductive. It would be used in reclaiming waste lands, or in improving the cultivation of land already reclaimed, or it would be employed in making or repairing roads, and thus, by economising time, would increase the wealth of the nation, or it would be laid out in other reproductive ways, which I need not stop to particularise. Then, it must be borne in mind, that a very considerable fraction of the entire Poor-rate is expended in costly establishments, which, except as means of administering the fund, are of no use whatever to the poor. Moreover, we must take into consideration this further disadvantage which the Poor-rate shares with all taxes, that its collection impedes for a time the use and circulation of the money collected; so that it suffers a very inconvenient arrest in the hands of the tax-gatherer. But there is still one economic consideration of which you will at once admit the force; namely, that no inconsiderable part of the Poor-rate is raised from very poor persons, whose own families are much worse provided with all the necessities of life than the paupers whom they are obliged to support. I once heard this great objection to the Poor-law very forcibly illustrated by a relieving officer, who told me that he knew of men within the workhouse refusing to wear the shoes provided for them, because they were not “rights and lefts,” while the children of more than one of the rate-payers whom he could name, had not even shoes to their feet.

Any one who will take the trouble fairly to balance the arguments for and against a Poor-law, and who will take care not to lose sight of the fact, that the money raised in the shape of a Poor-rate comes out of the pockets of those who by

directly employing labour as capitalists, or indirectly stimulating its employment as consumers, and by so doing, are engaged in preventing the very poverty which Poor-laws are intended to palliate, cannot, as I think, avoid the conclusion to which Malthus arrived chiefly on economic, and Chalmers on moral grounds, and many benevolent men upon grounds of humanity, that all Poor-laws are a delusion and a snare; inoperative for good, and most active for evil.

If from purely economic objections to a Poor-law, we pass to those which may be urged on the score of humanity, we discover still fewer arguments in its favour. I will not take up your time by proving to you that the existing law is often very harsh and cruel in its operation, but will content myself with expressing my own firm conviction that a truly humane Poor-law is not in the nature of things. The reason is obvious. A Poor-law must give a *claim* to relief; that claim acts invariably as a temptation to all the idle, improvident, intemperate, and vicious; the administrators of the funds, whoever they may be, soon grow conscious of this, and inevitably come to look upon objects of real distress with the same eye with which they regard the unworthy recipients of the nation's mistaken bounty; thus measuring out to the deserving few the harsh treatment with which the worthless many must be visited, if the nation is not to be swallowed up in the yawning gulf of pauperism. On the moral and religious aspects of the Poor-laws I refrain from offering any observations in this place, that I may preserve intact the principle which I laid down for myself in these lectures, of not trenching on the province which properly belongs to the Professors of the Theological Department, and to the Rev. Principal of this College. Perhaps, however, I shall not be deemed to step beyond the limits which I wish to impose upon myself, if I advert for a moment to the nature of the claim to relief which the Poor-law establishes, and its obviously most immoral tendency. In a very melancholy case of alleged starvation by the neglect of a Poor-law official, tried at Winchester on the 6th of this month, (March 6, 1850,) before Mr. Justice Talfourd, the learned Judge laid down the law of England as it now stands in these (to me) very awful terms:—“The most abject and degraded person in the realm, who had brought his misery entirely upon himself by his own vicious conduct, had an equal claim to relief, when plunged in the depths of poverty and distress, with the man of the highest virtue and morality, who might, by no fault of his own, be placed in a similar situation of suffering.” This is the text of the law of England from which the State preaches perpetually to the people the harmlessness, for all practical purposes, of the great cardinal vices of intemperance, improvidence, and waste. I am sure that I need not point out to you the great and essential difference which exists between an individual forgetting previous character and conduct in the duty of relieving distress, and the nation, in its collective capacity, announcing this utter confusion of right and wrong as its principle of action.

These few observations on the policy of a Poor-law, considered as a question of economy and humanity, are intended as an introduction to the subject of the Law of Settlement, and its operation in restricting and otherwise injuring the house-accommodation of the poor. Without entering into a minute detail of the several ways in which a man may obtain a *settlement* in a parish, and with it a right to relief at the hands of the Poor-law authorities of that parish, it will suffice to observe that, in order to prevent a man from obtaining a settlement, it is necessary to prevent him from procuring a residence. If he can succeed in establishing himself in a cottage for the term of five years, he has become settled in the parish in which the cottage is situate, and has earned a legal title to relief at the hands of the authorities of that parish. Now, there are two sorts of parishes, known as *close* and *open* parishes. The close parish is in the hands of a single proprietor, or of one or two proprietors; the open parish, of a considerable number of proprietors. Hence, as a general rule, towns and large villages, where property is apt to be much subdivided, are open parishes, or are made up of them. Now, the Legislature, with the best intentions in the world, but with a strange ignorance of human nature, and especially of the nature of its own members, has actually, by this Law of Settlement, offered a temptation, against which, as experience proves and evidence attests, scarcely one man in a hundred is proof,—has offered to the great landed proprietors a temptation to allow cottages to fall into ruin, to pull them down as oppor-

tunity may offer, to refrain from adding to their number, and, in a word, to drive the poor labourers who work on their estates, and who may fairly expect to dwell upon them, into villages and towns already crowded to excess. This subtle temptation has worked, and is working, to an extent which it is perfectly awful to contemplate,—the result being, the utter disorganisation of labour in rural districts, the destruction of the vigour and health of the peasantry, and the rapid deterioration of the character of the rich man who has yielded to the legal temptation, and of the poor man who is the victim of the legalised wickedness. I say nothing of the monster meanness of thus shifting from one's own shoulders to that of one's neighbour the burdens which ought to be fairly and equally borne by all. Such, Gentlemen, (and it is most important that you, of all men, should understand it,) is the awful amount of physical and moral evil which it is in the power of an ill-conceived statute to inflict. Now, the effect of this state of things upon the health of the rural population, and of the town population of rural districts, (for to the great health-question I must bring myself back from all my digressions,) is twofold. It undermines the strength of the labourer by excessive fatigue, and the health of himself and family by excessive overcrowding, and all its unwholesome and unseemly accompaniments. What I am about to state may appear to some of you almost incredible; but, alas! it is too true, that, in consequence of the rooting out of the labourer from close parishes, and his expulsion from the open country, which is his natural home, to remote towns and villages, he is sometimes obliged to walk four, five, six, and even seven miles to and from his work. So that, besides a day of hard work, he has imposed upon him a walk which most of us would consider a good day's labour. The consequence is, that his strength fails him, and he becomes a more ready victim to the diseases which lie in wait for him in his filthy and overcrowded dwelling. This disastrous law, in one instance, issued in a result of a painfully ludicrous character. The poor ill-paid labourers were driven so far from their work, that they found themselves under the necessity of providing donkeys to carry them backwards and forwards.

I commend this truly important subject to your earnest consideration, should you hereafter possess any facilities for studying it, and noting the operation of this cruel law. It is one of those very cases, you will observe, that I spoke of in my last lecture, in which the clergyman can of himself do little or nothing, but a case which comes naturally into the category of religious questions, in which all proper means of obtaining redress are sanctified by the end to be attained,—namely, the physical and moral improvement of the poor working man.

You will recollect that, in my last lecture, when speaking of the improvements which have nearly annihilated the Rookery of St. Giles's, I showed you that these improvements were advocated partly on the ground of the benefit they were calculated to confer on the poor, but that they had really issued in the very same evils which have been the subject of this lecture,—namely, the overcrowding of the few streets which were not destroyed, and of other districts of London on which the ejected tenants of St. Giles's were thrown; this overcrowding being accompanied by an increase of rent both to the old inhabitants and to the new comers.

Now, these Metropolitan improvements were set on foot and carried forward under the sanction of law, and under the immediate superintendence of a department of the Government (the Woods and Forests) possessed of large experience in the direct and indirect bearings of such improvements on the interests of the public; and yet you have physical consequences resulting from these improvements attended with moral evils which the most devoted and persevering labours of the clergy are altogether unequal to counteract, and scarcely able in any appreciable degree to palliate.

The operation of the Law of Settlement offers, in every respect, a remarkable parallel to the effects of these metropolitan improvements. Here you have a law, or rather a series of laws, designed to guard against the great evil of vagrancy, and conceived in no unkind spirit towards the labouring man, but in a marvellous unconsciousness of its natural and inevitable tendency, having (to use the expression of an Assistant Poor-law Commissioner) "the immediate effect of reducing the labouring man to the state of the serf," and entailing, in addition, the complicated evils of overwork, overcrowding, with its disastrous physical and moral

consequences, conflicting interests, great injustice, constant heart-burnings, and utter disorganisation of labour. And, in this case, as in the case of Metropolitan improvements, you have a hideous mass of moral evil spread through the length and breadth of the land, with which the utmost exertions of the spiritual teachers of the people are utterly unequal to contend.

Once more, I must repeat what I have already so often stated, that questions such as these are not political, but in the highest sense of the term religious—questions, to which, as clergymen, you cannot refuse to give your attention without a manifest dereliction of duty.

I must now remind you that these observations on the Law of Settlement and on the Poor-law, of which it is a constituent part, sprang out of the details which I had occasion to lay before you in proof of the overcrowded and unhealthy condition of the dwellings of the labouring classes in rural districts, a condition nearly allied to that of the gaols in Howard's time, as the typhus fever, which so often breaks out among their inhabitants, is to the gaol distemper of his day.

Having thus given you some idea of the state of the houses of the poor in town and country, I now proceed, in accordance with my programme, to prove that some of our public establishments, especially our workhouses, or those buildings in which paupers have been placed under the superintendence of private individuals, with the full concurrence of the parochial authorities, are, or have but lately been, and must in the very nature of things, to a greater or less extent, continue to be, in the same state in which Howard found the prisons of his time.

Marlborough House, Peckham; the Union Workhouse of the City of London, a building in which the male paupers of the City had been farmed nearly ever since the formation of the Union in 1837, till a comparatively recent period, will serve as an illustration.

One of the Medical Reports of the London Fever Hospital, contains a description of this building, which may serve as a pendant to the description of Launceston Gaol, that I gave you in a former lecture:—

"Considerably more than one-fifth part of the whole admissions for the year—no less than 130 patients—were received from one house alone, namely, Marlborough House, Peckham, the Union Workhouse of the City of London. At no time during the year has the hospital been without patients from this house; and the circumstances connected with the prevalence of fever in this place are deserving of particular notice, because they afford an illustration of the mode in which this malady commonly arises and spreads. It would appear, from the patients' own account of this establishment, that it is the most easily accessible asylum for the houseless poor in or near the Metropolis. It is, therefore, filled to excess every night; but on particular occasions, as at the termination of the harvest and hopping seasons, commonly *fifty*, and sometimes, it is stated, from *ninety to one hundred men* are crowded into a room thirty-three feet nine inches long, twenty feet wide, and seven feet pitch in the centre, the roof sloping from the middle to the side, at which part the ceiling is described as not being more than *two feet* high. It is under this shallow portion that the men's heads are placed. The room is closed at night. There are only two small apertures for windows about eighteen inches square, so that the whole of this dormitory does not allow more space,—that is, does not afford a larger bulk of air for respiration,—than is appropriated in the wards of the hospital to three patients. Neither are there any means of separating those who come in obviously affected with fever, or with other diseases, from those who are well. It is only by constant attention to cleanliness, repeated changes of linen, the entire removal of the paupers' own clothing, and free ventilation by means of large windows and fireplaces, that the atmosphere of the hospital has been kept free from contamination by the influx of patients from this workhouse."

Here, then, we have an instance of an establishment under the management of parties authorised by the local Poor-law authorities, constituting a perennial source of fever cases, a great focus of infection, an ingenious contrivance for giving birth and currency to a most loathsome and costly pestilence; an illustration, on the large scale, of the position for which I contend, that the Poor-law is the means of destroying many more lives than even its supporters will contend that it is capable of saving. I can-

not allow myself to doubt, that for every single life which this Black Hole of the 19th century may possibly have been the means of saving, by acting as a shelter for the houseless casual poor, it has destroyed a hundred lives at least by fever, dozens of lives over and above those which would have perished, even if these houseless vagrants had slept in the open air, or in the miserable lodging-houses to which they are in the habit of resorting; for I need scarcely tell you, that the chances of imparting and catching fever are greatly increased by every increase in the number of persons brought together under the same roof. When I come to speak of cholera, I shall be able to illustrate and enforce this position still further, by reminding you of the tragedy at Mr. Drouet's establishment, in which you will recollect that a large number of pauper children were farmed out, crowded into a narrow space, and exposed to other unwholesome influences, the result of which unwise procedure was upwards of 150 deaths from cholera, 149 of which would, in all human probability, not have taken place if these poor children had been left to the chance kindness of their poor neighbours or friends in the wretched dwellings of the wretched class to which they belong.

You may perhaps feel inclined to regard the establishments at Peckham and Tooting as solitary exceptions to a general rule. If so, I think that I shall have no difficulty in undeceiving you; for there is good reason to believe that the same evil of overcrowding exists (though not, of course, to the same frightful degree) in most of the metropolitan workhouses. The reasoning which I am about to advance in support of this opinion I think you will admit to be conclusive.

I must, however, reserve it till my next Lecture.

ORIGINAL COMMUNICATIONS.

PRACTICAL OBSERVATIONS

ON

DISEASES OF THE EAR;

WITH RECORDS OF CASES TREATED AT ST. MARK'S HOSPITAL, DUBLIN.

By W. R. WILDE, F.R.C.S., &c.

(Continued from last Volume, page 506.)

No. 7.—OTORRHOEA AND POLYPUS, RESULTING FROM SUPPURATIVE INFLAMMATION OF THE TYMPANUM AND MEATUS AUDITORIUS.

March 27, 1850.—M. B., female, 14, has been deaf of right ear for the last twelve months. The disease came on with an attack of pain from cold caught by sitting at an open window. Felt the pain during the day-time, but particularly going to bed, and compares the sensation to that when light be experienced from a sword or other sharp-pointed instrument piercing the inner ear. Experienced a great noise in the head, and was very ill for two or three days at the time. States that within four-and-twenty hours after the first accession of pain some blood and a discharge of matter came from the ears; and that she then got relief. Has been deaf ever since, sometimes better and sometimes worse, —generally according to the state of the weather; is always worse if she has been exposed to cold. The discharge has never ceased altogether, but varies very much in quantity and colour. The meatus is now filled with a muco-purulent discharge of the consistence of thick cream, and having a fetid smell.

In this instance, if we can depend upon the account given by the patient, the pain came on at an unusual time,—for generally the first accession occurs between two and six o'clock in the morning. This was an ordinary case of inflammation of the tympanal cavity, which ran its course in a very short time, the membrana tympani having burst, and allowed the contents to be discharged through the aperture, leaving an otorrhœa, or chronic inflammation, attended with excessive muco-purulent secretion, ever since. The treatment resorted to at the time of the inflammation consisted in the application of several blisters over the mastoid process. My experience of blistering in acute otitis does not induce me to

recommend the practice, as it does not afford relief to the pain, and it seldom prevents suppuration. In the chronic stage of the disease, and in many affections of the ear, blisters are highly beneficial, but I do not think they ought to be relied upon in cases like this, at least not until local depletion and other means have been resorted to. Analogy with other diseases might have taught us this, but people seldom think rationally about diseases of the ear; and hence, because blistering may be good for one class of affections of the auditory organs, it is prescribed for all.

Left Side.—She hears only upon touching. The bottom of the external auditory passage is covered over with discharge, above the surface of which may be perceived a reddish granulation. The parts having been cleansed by syringing with tepid water, we perceive that a polypus, in appearance like a ripe raspberry, fills up almost the entire meatus. With a fine blunt-pointed probe fixed in a handle, and introduced through the tubular speculum, while the patient was in an advantageous position for catching the light, the size and attachment of the polypus was examined, in order to ascertain the spot from which it grew, so that it might with the greater facility be removed, and that the sensitive tympanal membrane behind it might not be pressed upon or irritated during the operation. This fungus does not grow from the tympanal membrane; it is attached to the lower side of the fundus of the auditory canal, and it can be lifted up and drawn a little forward by means of the probe. The polypus snare was passed over it and the great bulk of the growth removed with scarcely any pain. The hæmorrhage is in all these cases considerable—I think it rather salutary than otherwise; it, however, prevents your doing much more to the ear for the next twelve hours, as the blood wells up into the meatus, and obscures your view. I have, however, by quickly introducing the speculum after the ear has been syringed, assured myself that the tympanal membrane is perfect, though much thickened and altered from its natural condition. A small oblique portion of the polypus remains where the body was sliced off from the neck by means of the wire-cutter of the snare. Hearing was increased to three inches immediately after the removal of the offending body, but lost again as soon as the blood accumulated and coagulated in the passage. She was given a weak alum solution with which (after the blood had ceased flowing) to wash out the ear two or three times a day. Upon the next visit the stump of the polypus, then much shrivelled and paler than the original mass, was touched with solid nitrate of silver applied upon a porte-caustic. In about ten days the discharge had quite ceased; the hearing had increased to eight inches, and the patient discontinued her attendance on the institution.

Right ear affected with simple otorrhœa.

The instruments mentioned in the foregoing case, I have already described and figured in the Essay on Otorrhœa, in the *Dublin Journal of Medical Science* for January, 1844, and also in my observations upon the Inflammations of the Membrana Tympani, in the *Dublin Quarterly Journal* for November, 1847, p. 379. The only improvement I have made since then is that of substituting fine steel wire, softened by heat to render it more pliable, instead of the silver wire which I formerly employed, but which was very brittle, and apt to cut and break off where it passed through the oilet-holes at the end of the stem of the snare.

No. 8. — SPECKLED OPACITY OF LEFT, AND TOTAL DESTRUCTION OF RIGHT TYMPANAL MEMBRANE, FROM SCARLATINA.

Jan. 16, 1850.—E. S., a female, 20, has suffered from disease in her ears since she had scarlatina, three or four years ago. Has not experienced pain, but a running has continued from the *right side* ever since the first attack. Can hear the watch at five inches distance. Upon removing the discharge which lies at the bottom of the external auditory passage, we perceive that the membrana tympani has been completely destroyed, and the surface which we are now looking at is the mucous membrane lining the inner wall of the tympanum, which has become red, thickened, and pulpy, from exposure to the atmosphere. It is but right, that persons commencing the study of diseases of the ear should know why this diagnosis is formed, and also learn to make the necessary examination in cases similarly situated hereafter. It is not at all sufficient that the patient is not able to press air

through the external ear, to prove that the tympanal membrane is still intact, because the Eustachian tube may be, and is very often, in such cases, impervious. We must call in the aid of sight and touch, as well as hearing, to guide us. The eye tells us, that the peculiar curve seen at the bottom of the external auditory aperture is not that which the tympanal membrane ever assumes in any stage of disease. Moreover, the whitish projection of the malleus is wanting, and the whole is placed at a greater depth than usual from the surface. On passing down this fine button-pointed probe, and making gentle percussion on the part which meets the eye, the fingers at once perceive that it knocks against some hard resisting substance; this is the bony protuberance of the promontory which you are aware exists in that situation, and which is made so red by the touch of the probe. The patient says, "she is conscious of the instrument 'knocking against her head.'" The colour of the part is likewise of some value, as the membrana tympani rarely, if ever, takes on the same dark-red tint. Furthermore, when it is inflamed, and consequently red, it is almost always dry; whereas, the membrane here is smooth, polished, and moist, from the discharge which it secretes. Now, in cases of otorrhœa without perforation, where there is a sort of chronic catarrhal inflammation of the external surface of the membrane, and also of the lining of the lower portion of the meatus, the former does not assume the character of mucous membrane, like that now seen at the bottom of this ear, but becomes white, thickened, and opaque, with a few large vessels ramifying upon it not unlike a cornea in the advanced stage of pannus. Very frequently, in examining an ear such as this, we perceive a small bubble of air towards the anterior and lower portion of the cavity; this marks the opening of the Eustachian tube; and, in many cases, there is a white projection towards the upper and back part. This latter is the malleus, and perhaps the other ossicula, which are generally drawn into that situation, and here the white streak is quite apparent. Where the membrana tympani does not exist, there is no tinnitus aurium; even when there is a large aperture in the membrane, the patient does not experience noise, and therefore it is, that persons, even though incurably deaf, have got relief from the great annoyance of the tinnitus by perforation of the membrane. Where the membrana tympani has been very extensively removed, or altogether destroyed by ulceration or other diseases, the muco-purulent discharge either lessens considerably, or ceases altogether. The only case which you could well mistake for destruction of the tympanal membrane, is that of a large flat polypus lying low down, and covering over the existing membrane. The examination with the probe will, until your eye has become accustomed to such appearances, enable you to distinguish between them.

Left Ear.—Meatus quite dry and scaly; tympanal membrane white, thickened, partially opaque, collapsed, and studded over with small, densely white specks, something like that deposit which we see upon the cornea after certain forms of ulcerative inflammation, and which are sometimes purely the result of the disease, and sometimes caused by the salts of lead, or alum, used as lotions in such cases. She cannot inflate the tympanum on this side, and only hears the watch upon its being pressed against the auricle; whereas, as already stated, she can hear it at several inches distance upon the other side, where the membrana tympani has been destroyed, proving what I have frequently remarked to you, that patients hear much better without any tympanal membrane than with one as opaque and thickened as this. In measuring the hearing distance you will remark great variety; some patients, whose hearing distance is but four or five inches by the watch, appearing to hear conversation much more readily than others who hear the watch at double that distance. This arises I believe, in great degree, from the natural quickness of apprehension in such persons, and their having had naturally good musical ears. This young woman is very intelligent, although she has neglected herself so long, and therefore she picks up conversation much quicker than others who are constitutionally dull, and of a phlegmatic disposition. In this case there is very little to be done in the way of treatment; it is not possible to restore the right, nor repair the mischief in the left membrana tympani. General directions with respect to her health, the avoidance of cold; keeping the discharge removed from the right ear, and showing her how to apply the oil and cotton succedaneum, as I explained in Case 1, is all that you can with honesty recommend.

No. 9.—THICKENING AND OPACITY OF THE MEMBRANA TYMPANI.

Jan. 18th, 1850.—A. H., female, 30. Complaints of deafness, tinnitus aurium, and constant pain in her right ear, and partially in the left. General health impaired, she says, on account of her aural affection; the almost incessant hammering noise, and the pain—aggravated whenever she gets cold, rendering her very miserable and nervous. The membrana tympani upon the *right side* is of a pearl colour, and evidently thickened by some interstitial deposit; it has lost its polish but retains its natural position, and the patient can press it outward by inflating the drum. Posteriorly, there is a well-defined streak of dense white opacity proceeding downwards and outwards from the point of the malleus. Hearing distance three inches. *Left side* nearly natural; hearing distance twelve inches. Scarcely ever feels any pain unless when much exposed to cold. I have seen this case several times before. I think the right tympanal membrane looks more healthy than when I last examined it. Blistering behind the ear has always afforded relief. She has experienced benefit from the internal administration of bark and of iron.

No. 10.—INFLAMMATION OF TYMPANAL CAVITY, THICKENING AND OPACITY OF THE MEMBRANE.—TYMPANITIS.

Jan. 18th, 1850.—T. M'K., male, 25; has been attending the Institution for some weeks on account of pain and deafness upon both sides, but is now much better. He has been slightly salivated, and is still under the influence of mercury. On the right side the membrana tympani is red, highly vascular, and apparently swollen. Cannot hear the watch even when pressed against the meatus. On the *left side* he hears faintly on touching. The membrana tympani has very much improved in appearance since he first presented himself three weeks ago; it is less vascular, but it looks very dry, and exhibits a deep, pink-coloured ring round its lower edge. Towards its upward and anterior side there is a dense white spot, apparently the result of a lymph deposit very well-marked. Twelve days later we find these appearances altered thus: The pinkish ring at the lower edge has become white, something like the arcus senilis in the cornea, and the white speck upon the upper portion of the membrane now appears like a slight feather. He still hears the watch only on touching. The membrane of the throat shows increased redness, and is somewhat swollen. There does not seem to have been any syphilitic taint in the constitution. The mercurial action has been kept up steadily since the last report. I have little doubt that in this case the inflammatory action pervades the middle ear, and possibly the parts beyond, otherwise the improvement in the appearance of the membrana tympani would have been followed by a greater increase of hearing. We cannot always tell what state the drum may be in, nor what lesion may have resulted from the prolonged inflammatory action going forward within, no more than we can measure the amount of mischief done to the eye in a case of iritis or internal ophthalmia. The cornea and lens may remain transparent; the iris may recover its colour, and the pupil its shape; the lymph may be absorbed; all vascularity may have vanished; no morbid change may be visible externally, and yet, from the inflammatory action having extended to the choroid and retina,—from effusion having taken place between them, or between the former and the sclerotic, &c., vision may be greatly impaired or altogether lost. Whereas, on the other hand, you may have the iris considerably disorganised, and the pupil attached so extensively to the capsule of the lens, that there is scarcely a spot upon the latter remaining transparent larger than a pin's head; and yet, for years patients will, under such circumstances, retain an almost incredible amount of vision. In these delicate organs of sense, we cannot measure the amount of special sensitive power lost by the existence or absence of apparent morbid change. In this case we have no means of knowing how much the membrane of the fenestra ovalis may have been thickened; how much the articulations of the ossicula deranged, or the membranes of the labyrinth and other portions of the internal ear affected by the inflammatory process of which we have had such apparent evidence externally. I have mentioned the case of internal ophthalmia, because I think, in treating these forms of deafness you ought to keep the analogy between the diseases of

the eye and ear, and their treatment constantly before you. The treatment in this case should consist in keeping up mild mercurial action for some time longer, and in improving the state of the general health, while counter irritation over the mastoid process must be resorted to continually. After a while the preparations of potass and iodine will assist the cure. We must also carefully avoid all mechanical interference with the drum by pumping or the introduction of instruments into the Eustachian tube. On the right side he hears better; we cannot, however, make a sufficient examination of the membrana tympani, because there is a small abscess in the auditory passage which obscures our view. These little abscesses are not at all uncommon, particularly after the subsidence of an attack of inflammation like that which this man has suffered from. The abscess was opened, and a single drop of thick matter flowed from the incision.

Feb. 13.—Hearing very much improved since last report; the loud noise of which he complained previously is now reduced to a confused sound, somewhat resembling the falling of water. Upon the nature and character of noise in the ear I shall have occasion to remark at a future period. On the left side he can now hear the watch at one inch distance. The membrane lining the meatus is white, polished, and totally devoid of cerumen. The membrana tympani now looks like a mottled cornea which had suffered from long-continued inflammation. Among these specks of opacity we may observe one large and more defined than the rest, of an elongated shape and extending from the handle of the malleus to the anterior edge of the membrane. The redness has nearly disappeared. Upon the right side the appearances are very nearly the same as upon the last report, and the hearing has not improved. The treatment to be continued some time longer; counter-irritation behind the ears, and the internal administration of iodine and hydriodate of potash. This man visited the hospital about a month subsequently. The hearing had then increased to three inches upon the left side, but no alteration had taken place in the right.

SPECKLED OPACITY AND COLLAPSE OF THE MEMBRANA TYMPANI.

No. 11.—Jan. 18.—R. E., female, 30. Has complained of some deafness, together with a sawing noise in her ears, for upwards of a month.

Left Side.—Meatus remarkably small; membrana tympani collapsed, particularly towards its lower and anterior portion, where it is spotted over with patches of a dirty grey colour. It is very dry, and looks like a piece of old, crumpled parchment; cannot inflate the drum; hearing distance, twelve inches. *Right side* in very much the same condition, but not so bad. The collapse is not so great, and there is still a clear spot upon the vibrating portion of the membrana tympani. The patient has never been conscious of pain in the parts: never experienced an attack of ear-ache. The disease is evidently of a very chronic character, and has come on very slowly. Cases such as this are not susceptible of much improvement. You may pass a stream of air through the Eustachian tube into the drum and so press out the membrane, but it will collapse again very soon. Rubbing over the external surface of the membrane with a camel-hair pencil, wet with a solution of nitrate of silver of the strength of eight or ten grains to the ounce, every third or fourth day for a couple of months, will sometimes assist to remove the opacities; but it is not certain, and the remedy must be used with caution. Such patients should always be informed of the impossibility of having their hearing perfectly restored.

ON CHORDEE.

By JOHN L. MILTON, Esq., M.R.C.S. Lond.

[Concluded from page 67.]

The cases given here are merely extracts from my notes. I have purposely restricted myself to the treatment of chordee, the limits of my paper preventing me from going into detail. The reader will therefore conclude that when nothing further is added, chordee did not recur, and that the gonorrhœa was treated at the same time by medicines, injections, etc. It will be observed, that in the earliest

cases, the remedy was administered in doses of twenty drops. Having never seen the camphor given in this form, I was obliged to experiment with those inefficient but safe quantities, till success made me bolder.

Case 1.—R. S., has now, July 10th, 1850, chordee three or four times every night. It is painful while it lasts, but disappears when he gets up.

Sp. camph. mxx at night.

July 13th.—He took the mxx on going to bed. It took away the chordee completely, and the same results ensued the next night; but this morning he found a little of it.

To take the camphor in the morning also.

22nd.—The chordee absent since the last dose. The gonorrhœa improving.

29th, 30th, and 31st.—The same report.

August 3rd and 6th.—The same report. When last seen, the gonorrhœa also was cured, and he had suffered from no return of the chordee.

Case 2.—John S., July 8th, 1850. Has chordee very bad; the pain is extremely severe, and attacks him in the day time as well as at night.

To take mxx of sp. of camph. every time it comes on.

9th.—The chordee was instantly relieved by the camphor.

10th.—The camphor again took away the chordee last night.

11th.—The chordee came on yesterday in the day-time, but the camphor chased it away, so that he has had none since.

15th.—He has very little chordee; it did not come on at all last night, but it troubles him in the day time. He only takes mxx of the sp. camph. in the twenty-four hours.

16th.—The chordee and erections are gone, under the sp. camph. He had no more till July 29th, when he was a little troubled with it on rising. He had latterly only taken the camphor three times a week; and it was therefore directed to be used more frequently. In all the subsequent reports of his case, both chordee and erections are marked absent.

Case 3.—A. S., has now, July 8th, 1850, had clap upwards of three weeks. The last night or two the chordee has been very severe.

To take 3ss of sp. camph. on sugar.

9th.—The camphor made his mouth very hot; but the chordee was absent for the first time. To go on.

10th.—The chordee was again absent. He took last night thirty drops on sugar, which produced great heat in his mouth. The strong taste went away in about a quarter of an hour, and he fell asleep.

11th.—The spirit of camphor has again driven away the chordee. He took mxx., which again made his mouth extremely hot.

12th.—No chordee. He took mxxx. last night.

13th.—No chordee. He now takes mxxx. regularly, without any bad result.

15th.—The chordee gone at night. It comes on somewhat in the morning before he gets up. The gonorrhœa disappearing.

To take the camphor also in the morning.

16th.—He took no drops, but had also no chordee.

18th.—He took the camphor again last night, as the chordee again came on the night before.

23rd.—No chordee; but he is troubled with erections in the morning, which are, however, only slightly painful.

26th.—The same report exactly. He is just well.

Case 4.—C. G.—July 9th, 1850.—Has had gonorrhœa four or five days. Last night the erections were so exceedingly painful that he had to rise twice.

To take the sp. camph.

11th.—It has made him rather sick, though he restricted himself to twenty drops, and had taken nothing to eat since tea.

13th.—He took the camphor immediately on going to bed. He had some slight chordee.

15th.—The chordee has been allayed by twenty drops, taken a quarter of an hour before going to bed; but it still comes in a subdued form two or three times in the course of the night. The under surface of the urethra is then painful. It passes away, however, so soon as he sits up for a few minutes.

To continue.

He recovered without being any more troubled with it.

Case 5.—D. M.—July 9th, 1850.—Has had gonorrhœa

ten days; the chordee came on this morning. To take mxx. of the sp. camph.

10th.—This dose somewhat checked the chordee, which only came on twice last night; previously, he had it nearly all the night through.

To take thirty drops.

12th.—The chordee is better. To take forty drops.

15th.—He has had chordee only once since last date. To take the camphor whenever it comes on.

16th.—He has had no chordee.

There was never any more discharge or chordee. I saw him July 30th for the last time; there had then been no symptoms of gonorrhœa for a fortnight. Erections were confined to the day-time, which were somewhat painful.

Case 6th.—J. M.—July 10th, 1850.—Has had gonorrhœa seven days. The chordee was so bad last night that he had to rise twice.

To take mxx. of the sp. camph.

12th.—The chordee was not in any way allayed by the sp. camph. To try mxxx. twice in succession.

16th.—The chordee went under the first dose; it only recurred once, and was not so painful as at first. He took a second dose and subdued it again.

18th.—The chordee only slight; it came on once last night, and once the night before.

20th.—The chordee gone; he had one slightly painful erection last night. He only took mxxx. of the sp. camph. on going to bed.

23rd.—He has had no chordee or erections for two nights; the gonorrhœa going away. To continue the camphor.

25th.—He is worse in every respect, having had a complete relapse; the erections were painful this morning. To take the camphor. Lost sight of.

Case 7.—T. R.—July 31st 1850.—Has had gonorrhœa some days; chordee has come on. To take sp. camph. twenty drops every night.

August 1st.—The chordee gone; had one painful erection this morning. To continue.

2nd.—Chordee gone; one painful erection at 4 p.m. To take 30 drops.

3rd.—No chordee: one erection at 12 p.m. He had taken 30 drops of camphor at half-past ten. To take the camphor whenever the erections come on.

6th.—No chordee. He generally has one erection about 5 a.m., but a dose of the camphor soon allays it.

8th.—He took some beer yesterday, and is in all respects worse; had two painful erections this morning. To go on with the camphor.

9th.—No chordee; had one painful erection at 4 a.m.

10th.—No chordee or erections.

13th.—No chordee; the erections are still somewhat painful, but do not occur above once or twice. He takes his drops only once at night. From this time till the 27th he had generally one rather painful erection every night; he never increased the dose of the camphor, nor did his gonorrhœa diminish much. From the 27th, till Sept. 2nd, he had no erections at all; but on this latter date he suffered a complete relapse of the disease, accompanied by a return of the erections and sleeplessness.

To take the pulv. camph. c. opio.

Sept. 3rd.—He has had no chordee or erections, as he was not in bed all night.

4th.—No chordee; there is a little tendency to erections, accompanied by shooting pains in the penis. To take the sp. camph. again.

6th.—Another and worse relapse; he had a painful erection this morning.

7th.—He has taken some beer; had a slightly painful erection this morning. The dose of camphor, now increased to a teaspoonful at bed-time, does not completely keep them off.

8th.—No chordee; a little painful erection this morning.

From this time forth, this dose of camphor taken at bed-time, kept the erections in check, or prevented them from being painful, though the gonorrhœa was not completely cured till the 28th.

Case 8.—T. J.—August 1st, 1850.—Has a very bad gonorrhœa; the chordee has been most distressing; he has some painful erections, which compel him to rise two or three times in the night. To take mxx. of the sp. camph. at bed-time.

2nd.—No chordee; a painful erection at 4 a.m. To take the camphor on sugar.

3rd.—No chordee or erections. Continue.

7th.—He had a little painful erection on Saturday night, and both nights since. To take the camphor more freely.

9th.—The chordee and erections gone again.

In these cases, the camphor was given every night, and was just sufficient to check the chordee for a short time. In some of these cases the chordee went as soon as large doses were given.

In the next series of cases, the dose was much larger, but not continued beyond a night or two after its full effect had been produced. But by this I do not mean to say that when some four or five doses of camphor have been taken, the chordee will never return, though the clap continues unabated; what I mean is, *that once an impression is made on the symptoms, it will rarely return without a relapse in the disease, and if it does return, that it will be in a much milder form.*

Case 9.—A. N. applied to me, Oct. 15th, 1850. He has had gonorrhœa two months, and has been treated with salines and injections nearly all that time. The chordee is very troublesome.

To take ʒi. of the sp. camph. every night on going to bed.

19th.—This produced very little effect; but on the succeeding night the pain gave way a little.

To take ʒij.

21st.—He went last night to the extent of ʒiiss., with complete relief to the chordee.

23rd.—Slightly troubled with painful erections.

26th.—He may be considered cured of the gonorrhœa. The chordee never returned, and the erections were only trifling, and unattended with pain.

Case 10.—J. S., a well-built healthy young man, presented himself to day, Oct. 17th, 1850. He has clap for the first time; his bowels a little confined; the scalding is just coming on. He had felt no symptoms of any kind till to-day, when his attention was drawn to it by some itching of the glans.

The soda and jalap powder twice a day.

22nd.—The scalding has undergone no abatement, and the pain on making water extends over the iliac regions. He has such painful erections, that he could not rest all last night.

To continue the powder, and take ʒi. of the sp. camph. every night.

This had the desired effect. For the first time he rested tolerably well, being only disturbed three times. The next night he repeated the dose with the same success, and only awoke twice. After the third night, he remained completely free from it; but what most of all excited his admiration was, that he was at once relieved of all scalding by the camphor (?) and that the discharge decreased rapidly after using it, perhaps in consequence of the decrease of irritation.

Case 11.—N. S. contracted clap, July, 1850; it was very bad, and accompanied by much scalding pain, etc. He took copaiba, and used lotions and injections, but without benefit, and came at last to me, Nov. 14th.

On the 20th, the chordee, with which he had been previously tormented, again came on. On the 26th, he complained of this, and was ordered ʒi. of the sp. camph. every time the chordee came on; this was perfectly effectual, and, after the 27th, he had no more annoyance from it.

Case 12.—W. H.—Dec 17th, 1850.—Has severe gonorrhœa. He is disturbed almost every night by painful erections.

To take the essence of camph. in ʒi. doses.

14th.—They have now nearly disappeared, and with them the running. He works in a warm shop, and as soon as he gets warm the erection comes on.

To take the camph. in the day time also.

He had no further return of them after the second night, and those in the day-time were almost as rapidly allayed by the use of the essence.

Case 13.—B. S.—Dec. 19th, 1850.—Had gonorrhœa accompanied by chordee. The pain is very severe, lasting for some time after the erection had gone down; but he has remarked that the chordee is averted by directing his attention to something else.

To take the camph. in ʒi. doses.

20th.—After the first dose, he had no pain; he woke naturally in the night, and took a second.

21st.—Last night he took a dose before going to bed. He had no erection through the night.

24th.—Since that time he has had no return of it; when

he first began to take the camphor, the pain was so bad as to annoy him considerably even in the day-time, and allow him no rest at all at night.

Case 14.—T. M.—This patient, who has lived very irregularly for some time, came to me Oct. 27th, with a severe gonorrhœa. The penis was swollen; the foreskin could not be retracted, and he complained of such painful erections, that he was utterly deprived of sleep.

To take ʒi. of the sp. camph. and repeat it if he awoke.

He took the camph. as directed. One dose was enough, he having slept well for the first time since this symptom came on, and not having had one erection since.

Case 15.—J. B.—Feb. 22nd, 1851.—Has had gonorrhœa for some time. It is very severe, the running being thick and green, and the penis much swollen; the scalding is not very severe.

Feb. 26th.—Last night the chordee came on very bad, so that the whole night through he was never free from it, and even when he fell into a doze, he had a dreamy consciousness of pain. Every half hour or so he was awakened by an unmistakable pain, accompanied by bending of the penis.

To take ʒi. of the camph. on going to bed; and ʒi. each time the chordee comes on.

27th.—He took ʒi. on going to bed, having had erections for two or three hours before, and even some on going to bed; this soon left him after the camphor was taken, and he fell asleep. Soon after 2 a.m. he awoke with it, and took a dose of the camphor. He remained restless and feverish, but had no more of the chordee.

28th.—He took ʒi. of the camph. on going to bed; he had no more chordee, or, if he had, was not aware of it, as he slept soundly till next morning.

Case 16.—Sarah H.—Nov. 13th.—Has had gonorrhœa for two months; it is very severe, and accompanied by bearing-down pains. In the early part of December she suffered relapse, in consequence of catching cold, and the pains became so severe as to confine her to bed. Here they even seemed to get worse. On December 12th, I ordered her 20 drops, three times a day, of ess. camph., to be taken in some saline mixture.

Within forty-eight hours the pains were so far relieved, that she left her bed, and scarcely ever suffered from them afterward. The gonorrhœa also rapidly declined; perhaps from her not being so much exhausted by pain.

I will now leave the reader to draw his own conclusions. As I have said, the limits of a paper like this prevent me from going further into detail. But I think I have brought forward so much that we may fairly assume:—

1stly. That camphor in this form is a sure, safe, and applicable remedy for chordee.

2ndly. That it should be given in full doses, and persevered in till the chain of morbid actions is broken.

3rdly. That its use affords no guarantee against the reappearance of the symptom in cases of relapse of the gonorrhœa.

40, Jewin-street

ON APHTHA,

AND ITS IMPORTANT RELATIONS AS AN EPIDEMIC DISEASE.

By JOHN GROVE, M.R.C.S.L.

[Read before the South London Medical Society.]

ON EPIDEMIC APHTHA.

Nothing can contribute so much to the advancement of medicine as a definite knowledge of the causes of disease.

When we say that the paludal poison induces intermittents and yellow fevers, and the variolous poison induces small-pox, we do no more than speak of the effects of some unknown agents under the term poisons.

All men must willingly assent to the proposition, that to know the nature and properties of these poisons, and to which class of matter they belong, whether to that kingdom in which life is the indwelling force and power, or to that in which chemical laws alone are operative and potential, would be an attainment of no small practical value, nor less calculated to advance the position of our fraternity generally.

The subject now introduced to notice is one which appears

to offer much and varied opportunity for a solution of this very difficult and interesting problem.

Every practitioner is familiar with that disease of infancy denominated aphtha or thrush. Under ordinary circumstances it is a mild and simple affection, and more commonly comes under care of the nurse and the mother than under the management of the physician.

It is, however, to this simple form of the disease that I wish first to direct your attention, and from which I purpose drawing some practical conclusions. To describe the symptoms and course of an ordinary attack of aphtha, would be an unnecessary occupation of time. Cullen and Mason Good class aphtha with the exanthemata, and several authors have endeavoured to make many varieties of it, which may be very classical, but not useful. The most common feature of the disease is the presence of a peculiar vegetable growth, now a familiar object to all persons accustomed to the use of the microscope in the investigation of disease. It would appear, as far as my experience extends, that the filamentous productions are an advanced condition of the parasite, and that they are a more highly developed form of a simple cellular vegetable production. Dr. Berg, of Stockholm, who has paid much attention to this subject, by one of his experiments confirms this view; for he states, that out of the body, the development proceeds in two different forms, either in that of a great preponderance of sporules, when a white filmy membrane forms on the surface of the fluid, or again chiefly by stems ramifying through the fluid, or aggregated into a felt-like mass. It is quite certain, that before the filaments can make their appearance, they must have had an origin from germs or spores; yet, in the many instances in which I have examined these aphthous products, I have never been able to trace the germinating process, that is to say, the commencement of filamentous growth from one of the germs. The plant, as figured by Robin (a), exhibits characters which I have never been able to detect, but others may have been more fortunate. In his general description, however, can be discovered the fact, that the mode of multiplication or reproduction is not limited to one form. It must be mentioned, that the delineations of Robin are derived from an examination of the aphtha of a phthisical patient; we may consequently expect the variation in detail to be such as is invariably found, when the same sources are not used as the elementary steps of an investigation.

It is manifest from Berg, Gruby, and Robin, that the spores, or germs, of aphtha, form an infinitely larger proportion of the affection than the filaments, and that the early stages of the disease are due mainly to the extensive multiplication of these minute cells.

Robin says that the spores adhere firmly to the isolated or imbricated epithelial cells, and form circular groups on their surface. I have particularly noticed circular dark patches when examining portions of aphtha, and, though I believed them to be spores or clusters of germs, could never satisfy myself of the fact until examining a case recently I found many of these dark circular masses, presenting at their circumference an incalculable number of minute filamentous prolongations, which gave to these bodies a peculiar appearance, as if covered with bristles; and, though I could not trace, as before observed, each filament to its germinating cell, it was quite evident that these brown masses furnished, if they did not entirely constitute, the elements of the filamentous vegetation.

The contagious nature of aphtha was decided by Berg; he believes it to be communicated from one patient to another by means of liberated sporules floating in the atmosphere, and by contact, as when two infants are suckled by the same nurse, or are fed from the same bottle. He settled the question of communication by contact beyond dispute, for he applied the aphthous crusts to the mucous membrane of the mouths of perfectly healthy children, and in every instance thrush was rapidly produced.

We thus see that thrush, in its simplest form, is an affection of the mucous membrane of the mouth, having specific and peculiar characters, which are referable to the growth and development of a vegetable production.

The question as to the identity of muguet and aphtha is still under litigation; but it seems that those who have considered them as distinct diseases have done so on insufficient grounds, for it is quite certain that the white pultaceous matter of aphtha spoken of by authors as a secretion, con-

(a) Des Vegetaux qui Croissent sur l'Homme et sur les Animaux Vivants.

tains the same parasitic growth as that described in connexion with muguet. The difference which exists between these forms of disease is, unquestionably, no greater than that constantly observable in the eruptive fevers. But these diseases (speaking of them as distinct by courtesy) are both epidemic and endemic, under certain conditions. The laws which apply to epidemic diseases, as a class, are equally operative in regard to aphtha; so distinct and well marked are its epidemic and infectious characters, that it is remarkable so close and accurate an observer as Dr. Robert Williams should have omitted this subject in his work on the Morbid Poisons. Associated, too, with these is the diphtheritis of Brittonneau, the angina membranacea of this country, and which, remarkably enough, Dr. Williams places with influenza, as an epidemic catarrh. (a)

Let us trace the relations between muguet, aphtha, and diphtherite. They all correspond in having the mucous membrane of the mouth and fauces for their primary seat; they all agree in having various grades of intensity; they all, under these circumstances, are liable to be followed by ulcerations and consecutive disturbances of the chest or abdomen, depending on the direction taken by the newly-forming development upon the mucous surfaces. They all correspond in exhibiting a peculiar white or yellow encrusted condition of some portion or the whole of the mouth and fauces, and they are all epidemic at times. These points of association are, I imagine, sufficient without tediously pursuing many more intricate relations; for these are competent to render it manifest that if we separate these diseases generically, we must assume the existence of separate poisons; that is to say, there must be a poison for muguet when epidemic, a poison for aphtha, and a poison for diphtherite.

I will now relate to you a case of diphtherite which came under my notice in the month of November last. A girl, aged 18 years, residing in a damp locality, complained of uneasiness in the throat, loss of appetite, weariness of body, and some slight pyrexial symptoms, all of which made their appearance in the order I have mentioned them. The uneasiness in the throat commenced on the evening of one day, the other symptoms on the day following; but as the disease was considered to be an ordinary sore throat, with a little fever, (its usual accompaniment,) no advice was sought. In the evening of this, the second day, the girl experienced occasional attacks of suffocative sensations, and further exaggeration of the previous symptoms; the night, however, was passed without much inconvenience, though with general restlessness; and on the next day I was consulted.

On examining the mouth and throat, I was struck with the remarkable resemblance which this affection bore to that described as having occurred in 1517, and subsequently as an epidemic disease, the difference consisting only in amount of intensity. "The tongue and gullet were white, as if covered with mould," say Warstisen; "the patients could neither eat nor drink, but suffered from headache, together with a pestilential fever, which rendered them delirious. By this disease, 2,000 persons perished in Basle within the space of eight months." This quotation I take from Dr. Benjamin Babington's translation of Hecker's Epidemics of the Middle Ages. Hecker further says of this epidemic:—"The cleansing of the mouth was perceived to be an essential part of the treatment. The viscous white coating was removed every two hours, and the tongue and fauces were afterwards smeared with honey of roses, whereby patients were restored more easily than when this precaution was omitted." (b)

Not only in Switzerland, but in Holland, a similar practice was found to be an important part of the treatment. "The remedies employed," says Hecker, "show the circumspection and ability of the Dutch physicians." After mentioning venesection and purgatives, he proceeds:—"Moreover the employment of detergent gargles, whereby the extension of the affection to the lungs was prevented, as also of demulcent pectoral remedies, was decidedly beneficial; and it is affirmed, that all who were thus treated were easily restored." To return to the case. I removed a portion of crust from the mouth, and examined it by the microscope, when it became immediately evident, that the fungoid growth of ordinary muguet, or aphtha, was as much connected with this disease

as with them. I have the preparation made last November, and it still retains the characters of a filamentous vegetation.

The treatment consisted of a smart aperient; frequently gargling the throat and washing the mouth with a borax lotion, and the administration of quinine with sulphuric acid. After this case I had another, which presented all the essential characters of that which preceded it. The same treatment was adopted, and the same results obtained. Both patients were cured within a week.

The paper read by Dr. Bennett, at the London Medical Society, on Saturday, Oct. 12, contains several observations confirmatory of my view of this subject; and as they were made quite independently of my own, they may be the more worthy of consideration. The paper entitled "Angina Membranacea and its Treatment," contains a report of some cases of this disease which occurred during the present year, and at about the same period, though what time is not mentioned in the abstract contained in the *Lancet*, from which I extract the following:—

"Stomatitis prevailed at the same time, and my own observation would lead me to concur with most of the French pathologists in assigning a *close relationship* between this affection and diphtheritis, *if not an absolute identity*. "But it may be asked," continues Dr. Bennett, "does not the existence of ulceration in the one case, and its absence in the other, indicate an important pathological distinction?" For various reasons which he explains he thinks not. "The fact also of the two affections having very generally been found to prevail at the same time, renders it highly probable that they are the result of the same general cause."

It is the expressed opinion of all writers on these diseases, that the same social and physical conditions under which epidemic affections become propagated, and assume a malignant form, are exactly such as are applicable to them when they present these phenomena of infection and malignancy. Upon what reasonable grounds, then, can we consider these diseases as having a distinct or separate origin? They are unquestionably more closely allied than diphtheritis with influenza. If we are to separate diseases into different genera, and coin new names upon the slender distinctions which have guided pathologists in the enumeration of those disorders affecting the mouth, I see not why scarlatina and measles, and even small-pox, should be robbed of some additional titles. The most curious part of this inquiry is, that the more severe diphtherite, aphtha, and muguet are, the more nearly the constitutional and other symptoms become allied; whereas, in distinct diseases, the reverse obtains, for the more marked and characteristic symptoms of any specific affection are, as a rule, the more clearly defined in proportion to their severity.

Dr. Davis says of the more malignant form of thrush, "it appears most commonly in the winter season, and is endemic in moist situations and in humid countries; is most frequently to be met with in crowded families and among the poor, and is occasionally a visiter, under this more malignant type, epidemically, amongst the infants of lying-in hospitals." He further adds, "cases of the milder form of thrush, when surrounded by circumstances of filth and insalubrity, may be exasperated into forms of great danger and malignity."

Similar circumstances have been observed to convert a simple form of diphtherite into a severe affection. M. Bourgeois has noticed it in connexion with overcrowding children in a close habitation.

"The victims of malignant angina membranacea," says Dr. Symonds, "are persons living in humid districts, where the disease is occasionally epidemic, the inhabitants of crowded buildings, and the poor, ill-fed classes of the community." That this disease is infectious, appears to be admitted by those who have attentively studied it; in this country, fortunately, we have (from its comparative rarity) but little opportunity of offering any new or varied information regarding it. The infectious character of diphtherite, as of all other infectious diseases, becomes more decided from sporadic than epidemic cases. Guersent states, that a nun caught the disease from a little girl whom she had nursed, and he believes that practitioners are often attacked from inspecting the throats of their patients.

Of muguet, Robin says, "It is probable that we ought to consider the vegetable, found by some authors on the aphthæ, the same as that of the muguet, for they seem to have confounded with aphtha the white points by which the crusts of muguet commence."

This is, however, assuming an incapacity of the authors to

(a) Hecker, p. 218, gives a separate notice of influenza being epidemic in 1510. Seven years before the diphtherite, considering it properly a catarrhal fever, essentially distinct from the latter-named malady.

(b) The moderns, who prefer powerful remedies, employ for this purpose, without any better effect, the lunar caustic.

see a distinction between the diseases, whereas the fault appears to be rather in the diseases themselves. Muguet, however, is considered to be an infectious disease.

At the Medical Society of London, Dr. Willshire last year delivered his opinion on these affections of the mouth. He, again, differed from others, inasmuch as he considered the muguet, of the French writers, to be the exponent of *true thrush*; whereas, according to M. Robin, just quoted, this would not seem to be French opinion, to use his own words, "Ils semblent avoir confondu avec les aphthes les points blancs par lesquels commencement les plaques de Muguet."

Dr. Willshire would divide stomatitis into three species,—viz., erythematous, ulcerative, and follicular, or depositive stomatitis; the latter of which, he says, "is the muguet of Continental writers, and *true thrush*." He believes that the organic cells, exuded under the inflammatory action of the mucous surface, are capable of taking on a low form of vegetable growth. Now, this may be a very easy way of getting out of the difficulty as to how the disease originates; but does it explain infection and inoculation? The very fact of a product of disease being capable of inducing the same disease, is to my mind sufficiently convincing, that the fac simile of this product must have been the *fons et origo* of the primary affection.

One of the arguments against the origin of aphtha being due to the vegetable growth, is derived from the fact, that the same growths are found in the mouths of people dying of fever, malignant diseases, and other affections. This, however, is an absurd mode of reasoning; for, if we adopt such a course, we must deny to erysipelas the specific property of its poison. Erysipelas is frequently a concomitant of other diseases,—frequently also occurring towards the close of fevers, dropsy, and the exanthemata; we should, therefore, be justified, according to this line of argument, in excluding it from the list of specific diseases.

But that aphtha is equally due to a specific poison, as well as the other specific diseases, small-pox, scarlet fever, etc., is most satisfactorily illustrated in the following quotation from the Report of the General Board of Health on Cholera, p. 41:—"Immediately opposite Christchurch Workhouse, Spitalfields, belonging to the Whitechapel Union, and only separated from it by a narrow lane a few feet wide, there was, in 1848, a manufactory of artificial manure, in which bullock's-blood and night-soil were desiccated by a dry heat on a kiln, or sometimes by mere exposure of the compost to the action of the sun and air, causing a most powerful stench. The workhouse contained about 400 children and a few adult paupers. Whenever the works were actively carried on, particularly when the wind blew in the direction of the house, there were produced numerous cases of fever of an intractable and typhoid form, a typhoid tendency to measles, small-pox, and other infantile diseases, and, for some time, a most unmanageable and fatal form of aphtha of the mouth, ending in gangrene. From this cause alone, twelve deaths took place among the infants in one quarter."

In this case, the apthous disease is allied with measles and small-pox, and shows itself to be subject to the same influences, and to be governed by the same laws. Can we then, with this evidence, deny to aphtha a specific cause? In all reason, we cannot.

I have before said, that, if it can be proved to demonstration that one disease of a specific kind depends upon living vegetable germs,—and if it can be further shown that these germs are developed and multiply under such circumstances as are known to be operative in inducing epidemic disease, how can we avoid coming to the conclusion, when analogical argument leads us also to the same result, that all epidemic, endemic, and infectious diseases, are derived from the operation of similar agents?

Pursuing this subject, it is to be observed that Berg distinctly states, the more abundant the development of the apthous crusts, and the longer they persist, the more severe generally speaking is the constitutional disturbance. I had observed this before noticing Berg's remark, but the idea never struck me as being of practical importance until lately, when attending a case of malignant disease of the liver, and aphtha made its appearance. The diarrhoea which set in appeared to be connected with the apthous condition of the mouth, for up to the period of this affection an obstinate constipation had been one of the symptoms which required special treatment. Most persons will, I believe, be able to confirm my statement that the aphtha which occurs at the conclusion of fatal disorders is usually accompanied with

diarrhoea, and according to the extent of the aphtha so has been the severity of the diarrhoea. By this I do not mean to say that the latter cannot occur without the former, for many causes may be operative in inducing diarrhoea. All I contend for is the fact, that in some cases they are to be looked upon in the light of cause and effect.

It has been asked, how can such matters have any effect on the system? and, again, how can it be explained that in some conditions the filamentous growth is not to be detected?

To the first question I would answer, that if mouldy food can cause vomiting, diarrhoea, and many dangerous symptoms; if mildewed corn and ergoted rye, when made into bread, and after having been subjected to the heat of the oven in baking, can cause abortions and sphacelations, it requires but little imagination to conceive how a mouldy mouth may be the source of great disturbances and serious lesions in the body to which it belongs.

To the second question I would reply, that the filament is not an essential part of the plant, any more than to the *Uredo*, the *Protococcus*, and the *Torula*, and that the cellular mode of development is the chief and essential condition of this as of many other of the early forms of vegetation.

I have this morning examined an apthous mouth in its primary condition, and here the only form of growth to be detected is the cellular. Aggregated masses abound composed of individual cells; they assume the circular form and from closer contact appear to be darker at the centre than at the circumference. I have before alluded to these microscopic objects, but will now introduce the report of another observer, my friend Mr. Deane, who is well known for his care and accuracy in microscopic investigations.

The following is the result of Mr. Deane's independent examination of the specimens of aphtha, and in his own words, which by his permission are here introduced:—

"I have carefully examined the two specimens of aphtha you were so good as to bring me, and you will doubtless be pleased to find that my observations confirm your impressions of their true character.

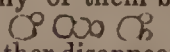
"Each specimen I divided into two portions, one of each of which has been mounted as a permanent microscopic object, in a little diluted spirit, precisely in the state you brought them.

"The other two portions before being mounted were macerated for a few hours in liquor potassæ, for the purpose of dissolving out the gummy (?) and albuminous matter that might be adherent to them.

"Under a power of 150 linear, the first specimen appears on a superficial examination to be composed chiefly of epithelium, cellular tissue, and some amorphous gummy-looking matter; but, on a closer inspection with the same power, certain parts through which the light is not so readily transmitted present an evidence of organic forms very different from those just mentioned. I then examined it with a power of 300 linear, and was surprised to find that these opaque portions consisted of, besides cellular tissue and the gummy (?) matter, a multitude of minute granular points, from which projected, or rather bristled, extremely slender, straight filaments; but in consequence of the density of the animal matter in which they are imbedded, it is not easy to determine their nature.

"On examining that portion treated with liquor potassæ, the true character of the minute bodies above mentioned is quite manifest, or at all events their position with respect to the cellular tissue among which they are dispersed is clearly discoverable. The granules are spread over the surface of, and among the cells of the epithelium and cellular tissue, and accompanying the granules wherever thus distributed is an over-spreading layer of delicate interlacing filaments, mostly simple, rarely branched; and from the circumstance of some of these filaments containing one or more granules in their interior, I infer they are tubular, and that the granules themselves are cells or sporules. They have decidedly a vegetable character, and I imagine the granules are sporules, and the filaments incipient mycelium of a fungus allied to *mucor*. The granules have a diameter of from $\frac{1}{1000}$ to $\frac{1}{500}$ of an inch, and the filaments $\frac{1}{1000}$ of an inch.

"The second specimen is essentially the same as the first; but being in a more advanced condition, the granular appearance has assumed most certainly the character of an aggregation of vegetable sporules. The filaments are no

longer bristling, but slightly tortuous, frequently branched, evidently tubular and cellular, even with a power of 150 Linear, frequently budding, and apparently having the power of either throwing off the buds to form new plants, or of continuing them as branches extending indefinitely. The granules or sporules are also proportionately larger, and they, too, apparently have a power of propagating themselves independently of the filaments, if I may judge from the fact of many of them being double or triple in their character, thus . The minute granules have by no means altogether disappeared; they exist abundantly, but the majority are more largely developed.

"These sporules measure from $\frac{1}{8000}$ to $\frac{1}{4000}$ of an inch in diameter, and the filaments from $\frac{1}{8000}$ to $\frac{1}{4000}$."

The conclusions I would draw from the foregoing remarks are—

1st. That aphtha is a disease depending upon and caused by vegetable germs.

2nd. That, in all probability, muguet aphtha and diphtherite are associated affections, depending on a common primary agent as a cause of disease.

3rd. That the same general laws are operative on aphtha, diphtherite, and muguet, in their endemic and epidemic forms as are known to apply to other endemic and epidemic affections.

4th. That, as analogical argument gives a preponderance in favour of living germs being the cause of epidemic disease, and that as such germs have been demonstrated to be the primary cause of aphtha, itself an epidemic affection, we may conclude that this is a type of all diseases which obey the same laws.

I have now intruded considerably on your time. My only apology rests on the extreme intricacy of the subject, and the difficulty of handling it with conciseness and perspicuity.

I will conclude by recalling to your minds a passage in Dr. Holland's "Medical Notes and Reflections," which bears intimately on the subject of this paper:—

"It will probably be one of the most certain results of future inquiry to associate together, by the connexion of causes of common kind, diseases now regarded as wholly distinct in their nature, and arranged as such in our systems of nosology."

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

SEAMEN'S HOSPITAL.

By H. L. T. ROOKE, M.D.,
Resident Medical Officer.

DEATH FROM CHLOROFORM.

THOMAS HUTTON, aged 45. Light-coloured mulatto, native of New York. Hair not crisp. Large and powerful frame. Was admitted into the Seamen's Hospital on the 28th of June, for disease of the left testis. The gland was in a state of suppuration, and apparently so completely disorganised, that its removal was deemed advisable. In other respects, the man appeared healthy, but, on inquiry, it was learned that about nine years ago he had spat blood, and suffered from cough and shortness of breath, but was not so ill as to render him unfit for duty. Since that period, he appeared to have had good health.

The operation was to be performed on the 8th of July. The man begged that he might be put under the influence of chloroform. This was administered in the same mode that has always been employed in this hospital, viz., by means of a piece of cloth, or a silk handkerchief, and in small quantities; the quantity poured upon the handkerchief not exceeding twenty or thirty minims at one time, on the exhaustion of which, the same quantity is repeated until some effect is produced, when, if more is required, ten minims only are employed. The patient is always placed in the recumbent posture on a table, and the windows of the room are thrown open. The handkerchief is held at some distance from the face, and the desired effect is sought to be obtained slowly, and the administration continued in the way above indicated until the convulsive stage is passed. It has also been customary usually to give the patient a glass of wine previous to the administration of the chloro-

form. The above procedure was in all respects followed in the present case. When the man entered the operating room, he was asked, whether he was subject to cough or shortness of breath, and his answer was in the negative. His chest had been carefully examined a few days previously, both by percussion and auscultation. No physical signs of disease were detected. His pulse was regular and feeble, about 70. He was rather nervous, and fearful of the pain of the operation. No arcus senilis. After taking a glass of wine, he commenced the inhalation, twenty minims of chloroform having been poured upon a piece of linen cloth. At the expiration of a few minutes, this had been dissipated, producing only very trifling excitement; a second dose of the same quantity was then administered in the same way; the man began to sing and shout, his expressions relating to the firing of guns. The second quantity having been exhausted, and the effects of the chloroform becoming more apparent, but sensibility being still perfect, and even intelligence almost unaffected, a third quantity of ten minims was poured out, and afterwards twenty more. Having passed through the usual convulsive stage, and insensibility being established, the further administration of chloroform was desisted from at the end of about seven minutes, though this time is merely guessed at; it might have been more, but was certainly not less. At this time, the respiration was unembarrassed, and the pulse regular and about 70, with as much volume as before the inhalation. The lips were florid—in fact, the chloroform appeared to have acted in the most benign way. Mr. Busk commenced the operation by an incision through the scrotum, which divided a small arterial branch, and some enlarged veins, from which blood flowed perfectly freely. The flow, however, almost instantaneously ceased, and Dr. Rooke, who kept his finger on the man's pulse, found that cease at the same moment. Respiration appeared to cease almost simultaneously with the cessation of the heart's action. Regular respiration at least did; for, while we were looking at the man's face, he fetched one or two deep sigh-like inspirations. The ribs and abdomen were compressed so as to induce inspiration and expiration, the lungs were inflated by blowing through the nostrils, the larynx being compressed against the spine, and for three or four minutes, upon our efforts being suspended, the man occasionally took in an inspiration, on one occasion, three or four in succession, so as to make us flatter ourselves that he might still come round; these flattering efforts, however, ceased; the trachea was now opened, and the lungs were completely inflated through a tube. All our efforts, however, which were continued for about half an hour, were fruitless. In addition to the artificial respiration, the chest and abdomen were dashed with cold water, and some aromatic spirits of ammonia was allowed to be inhaled. It is worthy of remark, that for a long time after spontaneous respiration had ceased, the lips retained a florid colour. The muscles were all relaxed, and the veins on the sides of the neck turgid.

The body was inspected twenty-four hours after death. The temperature of the dead-house at the time of the examination was 64°. The extremities of the body were cold; but in the interior of the abdomen, a thermometer rose to 76°. The body was very rigid. Dark purple sugillation posteriorly, in a good state of nutrition; but the limbs, though bulky, were rounded, and devoid of much muscular expression.

Head.—The vessels of the dura mater, and on the surface of the brain, gorged with fluid blood, but no air was observed in them. A considerable quantity of serous fluid in the cavity of the arachnoid, and a large quantity flowed also from the spinal sheath, when the cerebral mass was removed. The lateral sinuses also afforded a copious flow of dark blood. The substance of the brain was very soft, and the fornix and septum lucidum almost diffuent.

Chest.—The incision through the integuments on the front of the chest and abdomen, showed a layer of subcutaneous fat, nearly an inch and a half in thickness. The lungs were both free, of a dark purple colour posteriorly, and much loaded with fluid blood, and contained also a large quantity of serous infiltration, but were everywhere crepitant, and, except in the above respects, healthy.

Heart.—The external surface covered almost entirely with fat, the layer in some parts being of considerable thickness. A very large fibrinous spot on the anterior surface, and one somewhat smaller also on the posterior. No fluid in the pericardium. The venæ cavæ were full of fluid blood.

On removing the heart, a white fibrinous coagulum, about as big as a walnut, was found in the commencement of the pulmonary artery. The heart weighed 12½ ounces, (avoirdupois) and was remarkably flabby and soft, falling almost flat when laid on the table. It was quite uncontracted, and the cavities contained a very small quantity of dark fluid blood. The valves and endocardium were healthy; the latter membrane in the right ventricle being slightly stained of a venous colour. The walls of the left ventricle were, on the average, about half an inch thick; those of the right in no place, except in the septum, more than an eighth, and some not more than a tenth. The walls of the *left* auricle were remarkably thin, almost diaphanous. The muscular substance of the walls of the right ventricle, and of the septum on the side towards that ventricle especially, was paler than elsewhere, and the same paler colour was evident in small spaces in the substance of the walls of the left ventricle, but not so much so as, perhaps, under other circumstances, to have attracted notice. In these paler portions of the muscular substance, the fibres had, for the most part, lost their striated aspect, and had become converted into a fine granular material contained in the sarcolemma. Here and there a minute oil-globule could be observed in the muscular fibrillæ, but no where did this amount to fatty degeneration. The muscular fibres in the muscoli pectinati of the right auricle, though very pale and apparently scanty, presented no morbid change; they were well-defined and distinctly striated. The coronary vessels were healthy. There was a small pouch-like dilatation of the aorta, in front, just above the valves.

Abdomen.—Beside the thick layer of subcutaneous fat above mentioned, it was observed that the abdominal muscles were remarkably thin and feeble. The omentum and large intestine were loaded with a large quantity of fat, and there were several ounces of serous fluid in the cavity of the peritoneum. The stomach, which was contracted, and the intestines generally, appeared externally quite healthy. They were not opened. The liver weighed 5lb. 13oz., was extensively adherent to the diaphragm. Its surface was rough; and in many places puckered. Colour natural. In its interior were numerous rounded encysted masses, about the size of hazel-nuts, consisting of a putty-like substance, undoubtedly inspissated puss of old abscesses. The spleen was large, soft, almost fluid internally, of a purple creamy aspect. The kidneys weighed fourteen ounces, of a dark purple colour from congestion, but quite healthy, embedded in large masses of fat. Pancreas much congested. Bladder empty, closely contracted.

THE MEDICAL TIMES.

SATURDAY, JULY 26.

SMALL-POX IN HINDOSTAN.

THE Commissioners appointed by the Indian Government, on the 12th March, 1850, to inquire "by what means the extension of small-pox in India can be prevented or rendered less destructive, submitted, in their Report, a series of suggestions, which, in their opinion, were calculated to meet the evils which had been experienced. Those evils we have already pointed out. Our object now is to detail the suggested remedies, and to offer such criticisms on them as the evidence, constituting the bulky Appendix to the Report, appears to warrant.

They are as follow :—1. The prohibition of small-pox inoculation under penalties. 2. The appointment of a Vaccine Board, and the substitution of professional for unprofessional vaccinators. 3. The discontinuance of vaccination during the six hot months of the year, viz., from the 1st of April to the 31st of September. 4. The appointment of supervising medical officers, travelling through the country during the other six months of the year, visiting vaccine dépôts, encouraging and practising vaccination themselves, while examining and reporting on the practice of all other Go-

vernment vaccinators. 5. The vaccination of all recruits in the army and navy. 6. Compensation to the native ticcadars, or inoculators, for the loss of their livelihood. From this statement it will be seen that the plan hinges on the abolition of inoculation, and an improvement of the existing system of Government vaccination. Of the propriety and even necessity of the suggestions 2, 3, 4, and 5, which embody the plan for improving the national system of vaccination, no possible doubt can be entertained. It is only astonishing that, with the experience of forty-seven years before them, the necessity of some supervision of the native vaccinators throughout Bengal had never previously forced itself on the attention of Government. Equally surprising is it, that it was reserved to the year 1850 to suggest the propriety of vaccinating the recruits of the Indian army, and of requiring "vaccination returns" from the surgeons of the Bengal army.

We may, therefore, here confine ourselves to the simple question, whether it be judicious to abolish inoculation *in toto*, under the present circumstances of British India. The Report informs us that, "with scarce one exception, the Government medical officers are all in favour of the abolition of inoculation, as an essential pre-requisite to the general and permanent diffusion of vaccination." It is *believed*, also, says the Report, that "all the magistracy of Bengal are decidedly in favour of the proposed measure, anticipating neither great difficulty nor opposition in carrying it out." Let us now inquire how far the documents, forming the Appendix to the Report, bear out the Commissioners in this strong recommendation.

We will begin with Mr. Apothecary George, of the Park-street Dispensary, whose name was before us in a former Number of this Journal. His words are these :—"I hear that a large portion of the *European* community desire that inoculation should be put down at once by legislative enactment, and think that the present calamity affords a reasonable *pretext* for doing so. I think the proper time for such interference on the part of Government *has not arrived*. The people must first be convinced of the superior advantages of Vaccination; and, unless such conviction become general, any prohibitory order will be evaded." Let us hear what Baboo Ramchurn Mullick says :—"There will always be a strong prejudice against vaccination, because it affords no *sure* protection against small-pox. The belief which universally prevails among us is, that once being affected by that disease the person is *safe for ever*, and with this view inoculation is resorted to." Let us next see what Dr. Wilson, Civil Assistant-Surgeon of Beaulah, says as touching this matter :—"The best informed natives here have now little or no confidence in vaccination." "This belief has arisen, in part, from cases of small-pox after vaccination, reported among Europeans in Calcutta during the last epidemic (1850), and not a little from statements said to emanate from the Calcutta medical *élèves*, that the protective influence of vaccination is only temporary, and requires to be repeated at certain intervals." "The *unanimous* opinion of the natives I have conversed with is, that the suppression of inoculation would be a *harsh* measure." "The spirit of the Bengalee here is *altogether* adverse to any such forcible change." "The reply was unequivocal and unanimous against legislative interference." "Inoculation," he adds, "is extensively and skilfully practised. It protects nearly 90 per cent. of the population. I am almost persuaded that the mortality, by inoculation, does not exceed 3 or 4 per 1000." Dr. Wilson's letter is so convincing, that we are tempted to extract a few more sentences. "Let it not be supposed that

I plead in favour of inoculation. I wish merely to have kept in view the difficulty of generally enforcing vaccination, without the risk of producing greater evils than now exist." "The most that can be done is *to make it incumbent on every individual to bear the mark either of inoculation or vaccination. This much might be easily enforced.*" Inoculation is not a curse, it is a blessing, and was so considered in England till vaccination superseded it. Let the school-master go abroad a little longer, and when the spirit of the age calls for a change, when we have convinced the people generally that what we recommend will *indeed* secure them from small-pox, then we may carry vaccination on the rising tide of popular belief; but to begin thus, with any chance of success, is impossible.

Dr. Chevers, Civil Assistant-Surgeon, Chittagong, says:—"The abolition of inoculation would be the removal of the only essential safeguard against small-pox which the great mass of the native inhabitants possess. Would the great mass of the population consent to receive vaccination in the place of inoculation? I believe not."

We cannot understand how such arguments, strengthened as those of Dr. Wilson and Dr. Chevers are, by a very large induction of facts, should have been overlooked so completely at head-quarters. It seems to us, that if it could be made to appear, that of the 38,221 children vaccinated at Calcutta in the years 1842, 1843, and 1844, (who must now constitute the bulk of the population between the ages of 7 and 11,) none, or next to none, were attacked by the late epidemic, the prejudices even of the most bigoted Hindoos would be speedily overcome. It will not do, however, to escape this net by averring, that those 38,000 children were carelessly and imperfectly vaccinated by dishonest, ignorant, and incompetent vaccinators, and that no reliance can be placed on the process as conducted at that time. This is tantamount to surrendering the question at issue. Inoculation, though often a severe measure, is, at least, a *certain* one. There is no mistake about it; and, if vaccination is a process admitting of easy but gross deception, it is obviously unfitted for such a state of society as that which exists in India.

The impression left upon our minds by perusing the volume before us is, that to abolish inoculation in India now, *without, at the same time, rendering vaccination compulsory*, (which is not contemplated,) would be, in fact, abandoning all protective process whatever. The Commissioners quote, in their favour, the practice of England, where the population is, by the provisions of the Vaccination Act, *virtually* driven to adopt vaccination; and they believe that the same thing would take place in India; but, in the first place, vaccination is practicable and effective in England at all seasons of the year; secondly, the practice of inoculation never was either universal or popular in England; thirdly, the medical superintendence of the lower orders in England is far superior to that which exists in India. On the score of superior intelligence, on the part of the natives of England, as compared with those of India, we are not disposed to lay the smallest stress; but the three reasons now given show, we apprehend decisively, that what is practicable here is not necessarily practicable, nor, if practicable, suitable in India.

We have reason to know, that the Court of Directors were not, up to a very late period, in possession of the resolution adopted by the Bengal Government with respect to the proposed abolition of inoculation; but we entertain very little doubt that the Government of India will throw overboard this grand suggestion of the Commissioners, and limit itself to the improvement of the Indian system of

vaccination, where reform appears to be most urgently required.

It may be interesting to our readers to know, (with reference to a suggestion which has been made by Dr. George Gregory as to permitting the inoculation of vaccinated persons,) that the Report specifies several instances in which that practice has been pursued in India. All the recorded cases, however, are of children, and the result is not stated with the accuracy that is desirable, nor is any proof adduced that the primary process was successful. We have looked in vain for a single instance of a vaccinated *adult* being inoculated.

After carefully considering the opinions given by the most intelligent natives, as well as those of many shrewd European surgeons, whose opportunities of observation are undoubted, we cannot avoid expressing our belief, that the Indian Government, instead of putting down inoculation forcibly, would better consult the good of the people by placing inoculation under *proper professional surveillance*, until such time as the natives themselves shall become convinced of the superior advantages of vaccination in their own climate,—a point which hitherto, we think, has not been satisfactorily established.

Everything that we read in this volume convinces us that serious injury was done to the cause of vaccination in India by the announcement, that re-vaccination was a proper and praiseworthy process. Dr. D. O'Callaghan says, "The natives firmly believe that vaccination is a feeble shield, weak in its hold of the human constitution, uncertain, and *requiring frequent renewal.*" "Convince them," he adds, "that this is an error, and they will relinquish inoculation." But how can the authorities do this, when every year brings fresh accounts of the wholesale re-vaccinations in Prussia. We have long been of opinion, that those national re-vaccinations were a "heavy blow and great discouragement" to the good cause in every country; and we see no reason to change our mind from the disclosures made in the very interesting Volume, an abstract of which we have now submitted to our readers.

THE PREVENTION OF CHOLERA : A GOVERNMENTAL DUTY.

WE lately observed that the prevention of Cholera, that is, its annihilation, can never be effected by measures directed to the countries it *occasionally visits*. The only effective mode of dealing with the evil is to attack it in the places in which it *always dwells*. Adopting, as we safely may adopt, the opinion, that cholera springs from a specific material poison, it is obvious that, if the reproduction of this poison is not invariably connected with the human frame, if, in other words, cholera is not solely propagated by contagion—and we believe that it is not solely so propagated,—then we must look for some specific congeries of terrestrial conditions, to which the origin and reproduction of the poison must be attributed. The germ,—if we may use an expressive phrase without committing ourselves to animalcular or fungoid theory,—the seeds of Cholera must arise somewhere, must grow somewhere; and, as they do not arise, and do not generally grow in the human body, it is obviously fundamental and necessary, in working out any scheme of prevention, to determine where they do arise, and how they do grow.

It is now well known, that in this country certain deleterious hygienic conditions are instrumental to the spread of Cholera, or, to commute the terms, tend to the reproduction of its germ. We are at present most usefully employed in

removing these unfavourable conditions, and, by so doing, we shall doubtless *prevent* in great measure the spread of Cholera in England.

But this is only part, and the minor part of the problem. We can provide to a certain extent against the *growth*, but, if we desire complete prevention, we must not neglect the *origin*.

The conditions under which Cholera arises in India, in China, and possibly in certain districts throughout the whole of Asia, are so fine and subtle as to have hitherto altogether escaped detection. The utmost that has been done in this direction in India, as in England, has been the recognition of the conditions favourable to the spread of the disease, after it has been generated. In Jameson's Report, published in 1824, and compiled from the record of the Medical Officers of the Bengal Army, the effect of marshy soils, unwholesome water, corrupted air, etc., in favouring the transmission of Cholera, was fully elucidated. When Cholera entered an Indian town, it might have been foretold, on the doctrines of Jameson, in what part it would most severely rage; and, if the Indian Government had applied in India the sanitary measures which were deducible from Jameson's facts, the fate of thousands, or it may be of millions, of victims who have died from Cholera during the last thirty years might have been averted.

But Jameson, and the many able men who have subsequently watched this disease, have not succeeded in penetrating beyond the surface of the problem. They have left unknown and inscrutable the primary formation and the transmission of Cholera. When it comes, they say, here it will rage, or in this place be most virulent; but, *whence* it came, and *how* it came,—what called it into being, and what forced it into progress, are points which they vainly attempted to solve. Nor, indeed, is this to be wondered at. The periodical return of Cholera in cycles of years, the way in which ever and anon it encircles the globe, and then seems to return, as if exhausted, to the place whence it arose, are phenomena allied in all probability to some obscure or at present entirely unknown periodical changes in the material world, which the narrow gaze of a single enquirer could not be expected to recognize in his local and restricted sphere.

If the phenomena presented by this disease are, from their kind and their magnitude, probably allied to some vast periodical changes in the physical universe, the inquiries which can determine these phenomena must be commensurately extensive. To solve comparatively simple problems in astronomy or terrestrial magnetism, we have established observatories and observers over the face of the globe. Each patient watcher has his determined work, and communicates his isolated facts, which by themselves were worthless, to the general mass. Then gradually the innumerable facts cohere into shape, and the so-called laws of astronomy or of magnetism declare themselves. It must be an inquiry not less systematic, not less extensive, and not less prolonged than this, which shall lead us to the recognition of the conditions of origin of Cholera. But such an inquiry is not within the power of a single individual, and can in fact be successful only if it be supported by the power and resources of the State. It is indeed singular to observe the labour and money which this country cheerfully bestows on researches whose great practical use is to make safer the art of navigation and so to preserve a few hundreds of lives, while the pestilences, which mow down their victims by myriads are endured as if their existence was inevitable, and human inquiry were unavailing and unnecessary.

It would not be possible, however, at the present moment,

to trace the outline of a systematic investigation of the origin of Cholera. Our knowledge, great as it is in some parts of this subject, is not sufficiently extensive and exact to enable us to devise a plan, by observing which we can hope to include all the phenomena connected with the subject. We require first to know how and in what direction we are to investigate. A preliminary inquiry is essential to enable us to fix a starting point, and to seize a clue. We would advise, therefore, that the Government should undertake at once an inquiry of the following kind. Let a certain number of competent medical men be sent to India, whose sole duties shall be restricted to the observance of Cholera and other epidemics. Let one or more of these gentlemen be sent to every place in which Cholera appears. Then let them note down *every fact* connected with the origin of the disease in that locality, and let them transmit their reports to the Board of Health in this country. Gradually, as the inquiry goes on, the analysis of the reports from this "Society of Observation" will lead the eminent men connected with the Board of Health to some conclusions. Meteorological facts or geological facts will appear, demanding further scrutiny. Then geologists, or chemists, or other scientific men, should be sent out, as the progress of inquiry might demand, to investigate those points which lie without the province of medical men. In ten years' time, we do not hesitate to say, if Cholera continues to prevail in India, a full corps of physicians, geologists, meteorologists, and chemists, will be in full operation, and the ground will begin to be cleared for a thorough examination; or possibly, although we dare not anticipate this, the origin of Cholera may have been actually discovered.

The advantage of this plan is, that, by beginning with a small medical staff, the expense would at first be trifling, and the sphere of observation would be enlarged as occasion justified it; or, if it should appear that nothing came of the first part of the inquiry, it might be abandoned.

Whatever might be the result of this plan, it cannot but be admitted, that a Government which can spend a treasure, and can risk valuable lives, in such a fruitless search as that for a north-west passage through continents of ice, is really bound to attempt something to ward off from its subjects in India, in England, or in Jamaica, a real and great misfortune. If the search for a doubtful benefit is worth thousands of pounds, the inquiry into an acknowledged evil cannot be held to be of less utility.

THE HUNTERIAN MUSEUM.

We have much satisfaction in being able to state that the House of Commons has granted 15,000*l.* towards the enlargement of the Museum of the Royal College of Surgeons. Public money cannot be better spent than in the advancement of science; and it is with peculiar pleasure that we see the claims of our own Profession listened to with approbation by the Legislature. The Hunterian Museum is the noblest monument of physiological science in the world, and the Government only pays becoming homage to the memory of a great man and to the usefulness of our Profession in proposing the grant for the sanction of the Legislature. We append the report of the short Debate that took place on this subject in the House of Commons:—

"On the vote for 15,000*l.*, for 1851, towards the erection of an additional Museum, and for enlarging the Theatre of the Royal College of Surgeons for the delivery of the Hunterian lectures, the Chancellor of the Exchequer said, many years ago Mr. John Hunter, the most celebrated surgeon, perhaps, which this country ever produced, accumulated a collection of anatomical specimens

of great value, which eventually became so extensive and valuable that they were bought by the country, and ultimately committed to the care of the College of Surgeons. Since that museum had been committed to their care, the College of Surgeons had most faithfully discharged the trust reposed in them. They had themselves greatly added to the museum at a cost of no less than 189,000*l.*, and thrown it open to the public. Having spent that very large sum of money, which they were not bound to do, they found themselves without adequate funds to enlarge the Museum and Theatre, as was their wish. Under these circumstances they had applied to the Government for assistance, and the Government proposed to grant them 15,000*l.* with that view, to which he trusted the Committee would give its assent. (Hear, hear.)—Colonel Dunne and Sir R. Inglis each supported the vote, which was agreed to without a division."

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF
MEDICINE AND SURGERY.

[TENTH NOTICE.]

PURSuing our course from west to east along the north gallery of the British department, after passing the microscopes and microscopical specimens which were noticed in our last article, we find numerous specimens of that novel and beautiful application of the action of light on certain chemical compounds to artistic purposes, the Daguerreotype, so named in honour of its inventor, or rather, perfecter, Daguerre. The action of light in changing the colour of numerous chemical compounds, had been long known, and some attempts had been made many years ago to produce sun-pictures, but these were made by men engaged in other pursuits, and, not succeeding after a few trials, the thing was abandoned, until Daguerre, by his numerous and persevering trials, succeeded in astonishing the scientific world by beautiful portraits, whose only defects have arisen from the preternatural enlargement of the most prominent features, owing to the impossibility of bringing all the parts of the face into focus at the same time, and a peculiar constrained expression of the eyes, produced by the influence of a strong light. These defects have been since in great measure obviated, but there is still room for great improvement. Great praise is due to M. Claudet and other artists, both for the portraits exhibited, and for some improvements in the process that they have introduced. We are well aware that we are travelling somewhat out of our province in noticing these artistic productions; but, as they are the result of the study of the chemical relations of certain substances to light, and as chemistry has owed its origin and progress chiefly to members of our Profession, we conceive that all subjects connected with that beautiful science will be interesting to the medical reader. We have not space to allude to the specimens of Talbotype, Cyanotype, and other processes for obtaining pictures by the action of light.

Beyond these are placed the numerous and varied forms of the electric telegraph, that astonishing, although now familiar means of instantaneous communication between distant towns, which would have appeared incredible to our forefathers, whose most rapid means of communication was the old unwieldy telegraph. The ingenuity displayed, and the amount of scientific and mechanical science brought to bear on this important invention within the last few years, is greater perhaps than that bestowed on any subject within so short a space of time.

Connected with the electric telegraph, and following it in the series, is a considerable quantity of electro-magnetic and magneto-electric apparatus adapted to a variety of purposes. Among these will be seen electro-magnets of a variety of forms and power; permanent magnets also of great power; magneto-electric machines, in which the rotation of the magnet or its keeper produces an electric current applicable either to the electric telegraph, to electro-metallurgy, or other purposes; and, finally, electro-magnetic machines for medical purposes.

The electro-magnetic machine for the application of medical galvanism differs both in its form and nature from the ordinary galvanic battery which has been long employed with variable success as a remedial agent in some forms of disease. We say that it differs both in form and nature, because, by the ordinary battery a simple and continuous electric current is passed through the part, while the effect produced by the electro-magnetic apparatus is that of a series

of small shocks repeated with almost inconceivable rapidity.

The electro-magnetic apparatus consists of two coils of wire covered with silk or cotton so as to isolate each coil wound in opposite directions around a hollow wooden reel, the ends of the one being connected with the poles of a galvanic battery, consisting of one or more pairs of plates while the ends of the opposite coil are furnished with insulated handles or directors for the application of the series of shocks. When the connexion is made with the battery the current of electricity passing the one coil, induces a similar current in the opposite direction in the other coil. The effect produced on the limb or part is then weak; but if such an arrangement be made as to break and renew the circuit at extremely short intervals, the electricity is as it were accumulated in the interval, and a small shock is produced at each renewal of the connexion. When a bundle of iron wires is introduced into the hollow of the reel, the power of the apparatus is vastly increased, for the bundle instantly becomes a powerful magnet, which, in its turn, reacts by induction on the current in the second coil, increases the force of the current, and, consequently, of the series of shocks, which then produce an intensely disagreeable sensation. The breaking and renewal of the contact may be produced in several ways; sometimes a fine steel spring is employed, which vibrates rapidly, and alternately breaks and renews the contact; in other forms of apparatus, a small electro-magnet is employed with a rotating keeper, which dips, in its rotation, into a globule of mercury, and thus renews the contact. Messrs. Horne and Thornthwaite exhibit one of the most manageable of these forms of apparatus, furnished with certain contrivances by which the operator can regulate the quantity or intensity of the current at will. This is effected by employing one or more coils, and, more especially, by a very ingenious regulator, invented by the Rev. F. Lockey, which consists of a tube filled with spring water, into which a brass rod slides, so connected with the coil that when raised or depressed the galvanic current is compelled to pass through a longer or shorter column of water, which, being a comparatively bad conductor diminishes the force of the current. When the rod is completely depressed, so as to come in contact with the wires at the bottom of the tube, metallic contact is established, and the machine has its maximum power.

The subject of medical galvanism, like that of medical electricity, or of dynamic and static electricity, seems to be imperfectly investigated and understood at the present moment. When the electrical machine was first brought into active operation static electricity was applied to a large number of cases, and many wonderful narrations are to be found in the old works of Priestly, Cavallo, and others, of cures performed by this agent. But further and more careful examination, by competent medical observers, dispelled many of those illusions, and static electricity fell into almost complete disuse. Galvanism, or dynamic electricity, has shared the same fate; it was years ago, when the application was new, extravagantly lauded as a remedial agent; but as disappointment often followed its employment, it, like static electricity, gradually fell into disuse. The subject has been, however, again taken up by Dr. Golding Bird, who has embodied in his lectures on Medical Electricity all that is known with certainty of its application. We shall resume this subject in our next Number.

THE FELLOWSHIP.

THE following questions were submitted to the candidates who presented themselves for examination in Classics, Mathematics, and French, preparatory to the professional examinations for the Fellowship at the Royal College of Surgeons:—

JULY 7, 1851.—CLASSICS.

Translate into English:—

Præterea fuit in tectis de marmore templum
Conjugis antiqui, miro quod honore colebat,
Velleribus niveis et festa fronde revinctum.
Hinc exaudiri voces et verba vocantis
Visa viri, nox cum terras obscura teneret;
Solaque culminibus ferali carmine bubo
Sæpe queri et longas in fletum ducere voces.
Multaque præterea vaturn prædicta priorum

Terribili monitu horrificant. Agit ipse furentem
In somnis ferus Æneas; semperque relinqui
Sola sibi, semper longam incomitata videtur
Ire viam et Tyrios desertâ quærere terrâ.—*Virgil, Æn. iv.*

Ὁ μὲν ταῦτα εἶπας τε καὶ ἐπισχὼν χρόνον, ὥς οἱ οὐδείς
οὐδὲν ὑπεκρίνετο, ἀπαλλάσσετο ὀπίσω, ἀπελθὼν δὲ ἐσήμαινε
Μαρδονίῳ τὰ καταλαβόντα. ὁ δὲ περιχαρὴς γενόμενος καὶ
ἐπαρθεὶς ψυχρῇ νίκῃ ἐπῆκε τὴν ἵππον ἐπὶ τοῦς Ἕλληνας. ὥς
δὲ ἐπήλασαν οἱ ἱππῶται, εἰσίνοντο πᾶσαν τὴν στρατιὴν τὴν
Ἑλληνικὴν ἱσακοντίζοντές τε καὶ ἐστοξεύοντες ὥστε ἱππο-
τοξόται τε ἔοντες καὶ προσφέρεσθαι ἀποροί· τὴν τε κρήνην
τὴν Γαργαφίην, ἀπ' ἧς ὑδρεύετο πᾶν τὸ στράτευμα τὸ Ἑλλη-
νικόν, συνετάραξαν καὶ συνέχωσαν. ἦσαν μὲν ὧν κατὰ τὴν
κρήνην Λακεδαιμόνιοι μῦθοι τεταγμένοι· τοῖσι δὲ ἄλλοισι
Ἕλλησι ἡ μὲν κρήνη πρόσω ἐγίνετο, ὥς ἕκαστοι ἔτυχον τε-
ταγμένοι, ὁ δὲ Ἀσωπὸς ἀγχοῦ· ἐνυκόμενοι δὲ ἀπὸ τοῦ Ἀσώπου
οὕτω δὴ ἐπὶ τὴν κρήνην ἐφοίτεον· ἀπὸ τοῦ ποταμοῦ γάρ σφι
οὐκ ἐξῆν ὕδωρ φορέεσθαι ὑπὸ τῶν ἱππέων καὶ τοξενμάτων.
—*Herod. Bk. ix.*

1. Mention briefly the chief peculiarities, moral and intellectual, of the Greeks and Romans.
2. Give an account of Pausanias, Brasidas, Lysander, Philopomen.
3. Mention the chief steps by which democracy was introduced at Athens.
4. The Constitution of Sparta.
5. Give an account of the Prætors, the Ædiles, the Prætorian Guard.
6. What were the reforms proposed by the Gracchi?
7. The character of Tiberius.
8. What occurred at Mycale, Mantinea, Chæronea, Mons Sacer, Trebia, the Rubicon?

Translate into Latin:—

Thus armed they made towards Tiberius, knocking down such as stood before him. These being killed or dispersed, Tiberius likewise fled. One of his enemies laid hold on his gown; but he let it go and continued his flight in his under garment. He happened, however, to stumble and fall upon some of the killed. As he was recovering himself, Publius Sateneius, one of his colleagues, came up openly, and struck him on the head with a stool. The second blow was given him by Lucius Rufus, who afterwards valued himself upon it as a glorious exploit. Above three hundred more lost their lives by clubs and stones, but not a man by the sword.

JULY 8TH, 1851.—MATHEMATICS.

1. If a stock of provisions would last 100 men 80 days at full allowance, how many men can be supported by it for 150 days if the allowance be reduced by one-third?
2. What rate of compound interest, when the interest becomes due every half-year, is equivalent to 4 per cent. per annum?
3. Solve the following equations:—

$$(1.) \sqrt{x+2} - \sqrt{x-1} = 1;$$

$$(2.) x^3 - 1 = (x^2 - 1)(x + 1).$$

4. If n be a positive integer, prove that $x^n - y^n$ will be divisible by $x - y$. Hence find in what cases $x^n - y^n$ is divisible by $x + y$.
5. The opposite sides of a parallelogram are equal to one another, as are also the opposite angles, and the parallelogram itself is bisected by its diagonal.

It is required to bisect a parallelogram by a straight line passing through a given point.

6. Required to construct a square equal to a given rectangle.

If the sides of the rectangle be respectively equal to three inches and one foot, what will be the length of a side of the square?

7. The angles in the same segment of a circle are equal to one another.

If three rigidly connected straight lines meet in a point, and two of them pass through fixed points, prove that the third will also pass through a fixed point.

8. A body appears to weigh 11oz. or 14 oz., according as it is weighed in one scale of a balance in or the other; find the true weight of the body, and the ratio of the arms of the balance.

9. Find the relation between the power and the weight in the inclined plane, the power acting in a direction parallel to the plane; and show that as much as is gained in power is lost in the space through which the weight is lifted.

10. When a body floats in equilibrium, the weight of the body is equal to the weight of the fluid displaced, and the centres of gravity of the body and of the displaced fluid are situated in the same vertical line.

Prove that the same is true of a body floating in a vessel which contains several fluids superposed.

A vessel containing water in which there floats a piece of wood, is placed under the receiver of an air-pump: will the wood rise or sink when the air is exhausted?

11. Show how to find the specific gravity of a solid which is lighter than water, illustrating the method by a numerical example.

12. Explain the operation of a common opera-glass, illustrating by a figure the course of an oblique pencil through the instrument.

JULY 9th, 1851.—FRENCH.

1. Reading.

2. Grammatical Exercise:—

The general-in-chief was wounded; two other generals were killed. —Health, honours, fortune, cannot always satisfy the heart of man. —He has good books, but he reads none. —Here are your pens and paper, write. —I know it from his father, not from yours. —Add these papers to his and to mine. —Of these two watches which do you choose? This or that? —Bring me that. —I will bring it to you. —Let us divide the shares; take this one, that one is for me. —The man you see there is a great physician. —Tell me what you think of the book you read. —You should not neglect your duty. —He should answer his brother's letter. —You should have obliged the bearer to wait. —They ought to have said it. —Dress yourself. —Do not burn yourself. —He had not yet dressed himself. —There has been a battle. —Is there room? —You must set off. —You are the man I want. —There are three Pretenders to the crown of France.

3. Translate into English:—

Les plus vaillants hommes de l'antiquité songèrent-ils jamais à venger leurs injures personnelles par des combats particuliers? César envoya-t-il un cartel à Caton, ou Pompée à César pour tant d'affronts réciproques? Et le plus grand capitaine de la Grèce fut-il deshonoré pour s'être laissé menacer du bâton? D'autres temps, d'autres mœurs, je le sais; mais n'y en a-t-il que de bonnes? et n'oserait-on s'enquérir si les mœurs d'un temps sont celles qu'exige le solide honneur! Non, cet honneur n'est point variable; il ne dépend ni des temps, ni des lieux, ni des préjugés; il a sa source éternelle dans le cœur de l'homme juste et dans la règle inaltérable de ses devoirs. Si les peuples les plus éclairés, les plus braves, les plus vertueux de l'antiquité n'ont point connu le duel, je dis qu'il n'est point une institution de l'honneur, mais une mode affreuse et barbare, digne de sa féroce origine.—*J. J. Rousseau.*

REVIEWS.

A Practical Compendium of the recent Statutes, Cases, and Decisions affecting the Office of Coroner, &c. By WILLIAM BAKER, Esq., one of the Coroners for Middlesex. London.

This book contains much that has been wanted, and much more that we do not want. Half at least of the volume is cast into the form of an appendix, containing epitomes and excerpts from the various Acts of Parliament relating to the duties of Coroners, as well as the various orders and instructions issued by the Board of Health and other public bodies during the period of the epidemic cholera. The matter in the Appendix might have been curtailed with great advantage. The documents issued by the Board of Health, especially, occupy too much space, as they have only a remote reference to a Coroner's duties. Authors rarely care to exercise the same critical discernment in their appendices that they endeavour to show in their original matter, and readers, perhaps, would be equally indifferent, if they had not to pay for the increased bulk which heterogeneous compilation necessitates. This is a part of the art of book-making; but authors and publishers will eventually find out, that a big book, so stitched together, is a great evil.

To turn from the Appendix to the book itself, we find in it much useful matter, and as medical men are continually liable to be called upon to give evidence in a Coroner's Court, it would be as well for them to make themselves acquainted with its legal technicalities. This volume will afford them the means. It contains nothing of a strictly medical or medico-legal character—nothing of the diagnosis of wounds or bruises,—nothing relating to the processes for analysing suspected fluids, or to other subjects in which the science of the medical practitioner is especially called into practice; but it cites the cases in which death has occurred under remarkable or novel circumstances, and in which peculiar difficulty was experienced in arriving at a

verdict. On all subjects, then, relating immediately to medical science it is superficial, and contains nothing that is not more fully expounded in the ordinary treatises on medical jurisprudence. Still the book is valuable to the Coroner, and hardly less so to the medical man, for we apprehend that there are few surgeons who have not, at some period or other, desired to have a knowledge of what is called Coroner's Law.

The Coroner's Court is one of our most ancient institutions, and was established by the wisdom of our Saxon forefathers, to insure the security of property and life against the aggressions of a turbulent and lawless community. Edward I., called the English Justinian, first enacted statutes in affirmance of the Common Law relating to these Courts; and, in virtue of these statutes, the Coroner is required to hold inquisitions in the following cases:—"All violent deaths, all casualties, by which death ensues, all sudden deaths, persons found dead, *persons dying in prisons, lunatics who die by suicide, and felons of themselves.*"

It also appears, that Coroners are empowered by statute to hold inquests on fires,—a practice that has been recently revived by Mr. Payne, the Coroner for the City, with great advantage. It is highly desirable that all other Coroners should imitate his example, and institute a searching investigation in all cases of arson, as the only efficient means of detecting guilt when no direct and positive charge can be proved against a particular offender. The Corporation of London have objected to this assumption of power, but their resistance must speedily be overcome, as the wishes of the citizens are decidedly in favour of these inquisitions. On the occasion of the last fire in Southwark, the proprietors of the buildings so destroyed earnestly solicited Mr. Payne to hold an inquest, and although that gentleman in the first instance declined, in consequence of the opposition that had been offered to his proceedings in other cases by the Corporation, yet he eventually waived his objections and held an inquisition at his own expense. Nothing can demonstrate more strongly the importance of holding these inquests.

It would be an unnecessary occupation of space for us to enter at great length upon the legal duties of the Coroner; but there is one portion of this treatise on which we deem it right to comment. In treating of hydropathy, in relation to the Coroner's duties, the Author writes thus:—"From the increase of maladies, with the simultaneous increase of these violent, various, and uncertain remedies (unaccompanied, too often, by that science, tact, and management which so peculiar and extensive a range of study must render necessary to the due application of them,) results have been found deficient and inadequate," etc. This is a brief philippic, delivered in bad grammar, against the allopathic or regular practitioners of medicine, at whose qualifications this learned lawyer does not hesitate to sneer. We shall have more confidence in his judgment if he will favour us with the sense of his parenthesis; which, as it now stands, means that certain violent, various, and uncertain remedies are not endowed with science, tact, and management, (we should have been moved with special wonder if they had been,) and that an extensive range of study renders necessary science, tact, and management to the due appreciation of them, (that is to say, science, tact, and management.) Clever creature! We are not obliged to find sense for our Author's words, and we shall leave him to the bathos of his bad grammar, with this hint, that when he next ventures to libel a learned profession, he will at least show equal learning, and especially avoid a gross misuse of his mother tongue. The chapter from which this quotation is abstracted is, in reality, an eulogy on hydropathic practice. The names of its practitioners and expounders are ostentatiously given, and their several establishments indicated. This is the chief blot in the volume, but, with this exception, we think the treatise is calculated to be useful as a hand-book to Coroners, and to all others who take an interest in medico-legal and sanitary science.

The Laws of Health, in Relation to Mind and Body: A Series of Letters from an Old Practitioner to a Patient. By LIONEL JOHN BEALE. London. 1851.

The Philosophy of Living. By HERBERT MAYO, M.D. Third Edition. London. 1851.

Dr. James Johnson, Dr. Andrew Combe, and Dr. Southwood Smith, have already laid down, in a popular form, the

laws which should be observed for the maintenance of health; but, such is the obstinate epicurism of mankind, that aldermen, will still revel over turtle, ladies luxuriate upon dishes "tortured from their native taste" by the devices of French cookery, and members of fashionable clubs continue to eat lampreys and truffles, despite the fate of Henry I. and Louis XVIII. Children are still pampered, ladies persist in wearing French stays too tightly laced, and young and old persevere in going to operas, theatres, and balls, and keeping the most unseasonably late hours. Talk, indeed, of the laws of health and the philosophy of life! we wonder there is any health left in us. We glory in eating, drinking, and feasting; we crowd round the festive table, caring neither for the sword of Damocles, nor the mysterious handwriting on the wall. We eschew asceticism, and after visiting the Crystal Palace, regale ourselves in a symposium of our own, thinking as little of the organisation of our bodies as of the architecture of the house we live in. All the world is now in motion; the star of pleasure is in the ascendant, and we fear, therefore, it is an inopportune moment to sound the tocsin of alarm, and bid us study "The laws of health." Nevertheless, the two volumes before us are entitled to consideration; they are both well written, instructive, and interesting, and contain much good advice which, if followed, would extend many a life to the age of Cornaro. Of the two, Mr. Beale's work is the more ambitious. He aims at developing the laws which connect the mind with the body, and at tracing their mutual relation from childhood to maturity, and from maturity to extreme old age. In considering the physiology of the brain in relation to the mental faculties, Mr. Beale avows himself a *quasi-phrenologist*. This is to be regretted, as it hurries him, *malgré* an avowed horror of materialism, to materialistic conclusions from which we emphatically dissent. Despite all that has been written by Locke, Reid, Dugald Stewart, and others, Mr. Beale goes back to the doctrine of innate faculties existing as part and parcel of the cerebral substance; "the faculties, though latent at birth, exist in the brain," he observes, and "are destined to be called into action by circumstances." "The brain contains the rudiments of the faculties, which are to be brought into life and action." Thus, all mental operations are referred to organic rudiments, folded up and existing in the new-born brain; and when the inevitable result of this theory forces itself, as it necessarily must do, upon the author, how does he defend himself from the charge of materialism? "You say," he observes, "that viewing the mind as the effect of organisation, leads to materialism,—a term too often used without any precise meaning, and therefore we will endeavour to see how it ought to be applied. In our investigations let us never be frightened at any legitimate result of thought." So argue "Miss Martineau and her Master" Mr. Atkinson, and hereupon Mr. Beale loses himself in a mystification worthy of Jacob Behmen. "The mind of man," he remarks, "is the gift of God; and faith in God should teach us, that any inquiry, if it be a true-hearted inquiry, can never lead us wrong; on the contrary, the grand result of experience is, that the more searching the inquiry after truth, the more are the mental powers increased, the more closely do we see in every step the hand and the intelligence of an Almighty Creator, and the greater is the happiness consequent on such employment of the human mind. If God is a spirit, so is all mind; and we may, therefore, rest satisfied, that if in this world the soul of man is mysteriously associated with the organisation of material particles, its rapid progress to the termination of its earthly career will soon dissolve the union." We know not, whether Mr. Beale adopts the doctrines of Spinoza or of Malebranche; but all this is only illustrating the *obscurum per obscurius*; and we leave such misty metaphysical speculations with pleasure for the more practical portions of his work, which we cheerfully recommend. The "Laws of Health," in relation to mind and body, is a book which will convey much instruction to non-professional readers; they may, from these letters, glean the principles upon which young persons should be educated, and derive much useful information, which will apply to the preservation of health at all ages.

Dr. Herbert Mayo's "Philosophy of Living" belongs to the same class of works as Mr. Beale's "Laws of Health;" having reached a third edition, it has already been stamped with public recommendation. We have in this little volume less metaphysical speculation; it is more practical in its details; and the precepts inculcated respecting diet,

exercise, bathing, clothing, air, climate, and habits of mind and body are sound, and deserve to be inscribed in letters of gold in the Temple of Hygeia. If mankind would only listen and follow good advice, how healthy and happy should we all be! But our best resolutions, we fear, are frail in the sight of those temptations which have, from the beginning of the world, imposed upon the weaknesses of the sons and daughters of Adam.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

PROFESSOR PORTA ON THE TREATMENT OF BRONCHOCELE.

As to the results of his experience on the use of iodine in bronchocele, Dr. Porta concludes: 1. That the results of the application of iodine to the entire skin, or after the removal of the epidermis, are very similar, so that the former plan is to be preferred as equally efficacious, and more agreeable and simple. 2. Employed externally, the tincture possesses much the same resolvent powers as the other preparations of iodine. The ointments of the protoiodide of mercury and the iodide of potassium are most active. 3. The tincture may be safely given internally, in spite of the fears of some practitioners, but a solution of the iodide of potassium is preferable. 4. Iodine may be introduced into the system by inhalation. 5. However administered, it is very rapidly absorbed, and is quickly found in the various humours and excretions. 6. Introduced by the natural passages, iodine manifests its presence in morbid cavities, and *vice versa*. 7. If iodine is to prove efficacious, it begins to be so within the first ten or fifteen days, and, if no change is then produced, such will be achieved with difficulty even by large and frequent doses. 8. The resolvent effects may be complete, partial, or nil; while in some persons, and under special circumstances, the drug, even in small doses, may act as a poison, *i. e.*, by the production of general emaciation, or the atrophy of the testes or mammæ, wakefulness, voracity or anorexia, convulsions, anæsthesia, paralysis, tabes, or death itself.

In respect to the surgical treatment, in case of the bronchocele becoming dangerous or inconvenient from its size, after passing over cauterization as abandoned, and the seton as insufficient, usually leaving deep cicatrices, and sometimes causing hæmorrhages, the author alludes to ligature of the superior thyroid arteries. This operation, first performed by Blizard, has since been repeated by the author and others; perhaps, in all, in twenty-five cases. It is, however, found insufficient, if one or even both the superior thyroids be only tied, and the securing the inferior is a serious and difficult operation. As a means of curing the deformity, the ligature is therefore useless; but, if we have only in view the relieving the patient from an obstructed state of the respiration or deglutition, then the ligature of the superior thyroids, and, better still, of the inferior, may be of service, by inducing a slight diminution of the tumour.

Extirpation is no new operation, being mentioned by most of the older writers since the time of Celsus; while since its performance by Gooch, eighteen or twenty cases have been operated upon, in about half of which the issue has been favourable. Most surgeons, however, consider it as a dangerous and unnecessary one, and Dr. Porta here describes a modification of it, which, he thinks, renders it more safe and simple. It is based on these considerations: 1. The thyroid arteries are inserted at the extremities of each lobe, and the large trunks, before they penetrate the parenchyma, subdivide into a digitation of smaller branches; so that, although they are considerable vessels externally to the gland, within its substance they present branches and anastomoses only of a small calibre; and, if the external boundary of the tumour be avoided in the incision, serious hæmorrhage scarcely can happen. 2. Bronchocele does not usually arise from a degeneration of the tissue of the gland, but from the production, within the substance of its parenchyma, of one or more non-malignant tumours, and it is the extirpation of these the operation has in view. The incision is to be so directed as not to meddle with the peripheric cellular tissue, and the larger arterial branches are thus avoided. The author relates six cases in proof of the eligi-

bility of his procedure.—*Omedei Annali Universali*, Vol. CXXX. p. 194.

CASE OF PROLONGED MUTITAS.

By Dr. WEGELER.

A young man having married one of two sisters, the other, who had acquired an affection for him, became from that day obstinately silent, not a word being obtainable from her though treated with the greatest kindness. Gradually she lost all self-consciousness, and became utterly unmindful of her natural wants. Twenty-four years after this obstinate dumbness, the nurse was surprised to find her sitting up in her bed and crying bitterly, and, on being questioned, she uttered repeatedly complaints of being left, guilt, &c., the purport of which could not be understood. She now recovered her reason, and continued able though unwilling to speak. Her answers respecting her late condition was short and insufficient, but she remembered the circumstance which had led to her insanity. She lived, well in mind and body, for seven years after. A still more remarkable case of prolonged mutitas is quoted in the *British and Foreign Medical and Chirurgical Review*, October, 1850.—*Med. Zeitung*, 1850, No. XXII.

ON THE EFFECTS OF TEMPERATURE ON THE COMMUNICABILITY OF SYPHILITIC POISON.

By Dr. ROSENBERGER.

From a great number of experiments made with pus taken from chancres, hermetically sealed, and then exposed to different temperatures before employing it in inoculation, Dr. Rosenberger draws the following conclusions:—

1. High degrees of temperature destroy the contagious power of the pus, but the exact limits beyond which the contagious property is lost are not as yet accurately defined. 2. Pus may continue frozen for a week without becoming enfeebled, and a temperature of 21 Reaumur has as little influence. 3. It has been several times frozen and thawed again during forty-eight hours. 4. It retains its power when exposed from twenty-four to forty-eight hours in the ordinary temperature of a room, (+ 12 – 16 Reaumur.) 5. Long exposure to this (seven days) enfeebles the contagious power remarkably. The inoculations succeeded more rarely, and the ulcers took on a less decided form. 6. Exposed to the same temperature a yet longer time, no result was produced. 7. Exposure for five hours to a temperature of from + 35 to + 40 Reaumur, does not destroy the contagion. 8. This apparently happens after exposure to the same temperature for twelve hours, and for ten hours to one of from + 40 to 50. 9. A temperature of from + 50 to 55 Reaumur destroys the contagion in five hours, and one from + 55 to 60 Reaumur in half an hour.—*Canstatt's Jahresbericht*, 1850, Vol. II., 121.

ON HYPOCHONDRIASIS TREMULANS SENILIS.

By Professor ALBERS, of Bonn.

Besides paralysis agitans, there is observed in persons advanced in life a tremulous state, which is not only accompanied by considerable weakness of the limbs, but also with disorder of the intellectual functions. These patients have a correct knowledge of the relations of the external world, and reason justly, and, therefore, are not the subjects of mental alienation; but as they are melancholy, suffer from constant *malaise*, and are always fearing the influence of external agents, their condition bears a great resemblance to that of hypochondriasis.

In paralysis agitans the incomplete paralysis appears all at once, and continues in the same degree as at first; but, in this affection, the paralysis comes on very gradually, and increases in the same degree with the tremor. In paralysis agitans the trembling comes on without disorder of the cerebral functions, which usually are not interfered with during the whole course of the affection; but, in hypochondriasis tremulans, it commences with confusion of the head, and often with a well-marked attack of apoplexy. Not unfrequently, too, there is great collapse, with loss of consciousness, which is only recovered gradually, anxiety and fear of the result, impairment of memory, absence of calm sleep, and periodical confusion of the head. After the first attack, weakness of the limbs, and, by degrees, trembling are developed, the accidents increasing in tenacity and violence with the duration of the disease. In paralysis agitans all the limbs, as well as the head, are agitated, all portions of

the muscular system suffering from debility; but, in hypochondriasis tremulans, only one side or a portion of the body is affected, and it is only towards the last period of life it extends to the tongue, and induces stammering. The paralysis always occupies one side, resembling hemiplegia from cerebral lesion, and it is in the condition of the brain we must seek for its source, while the symptoms of paralysis agitans more resemble those arising from the affection of the spinal marrow. After death, a peculiar form of atrophy of the brain, or an incompletely absorbed sanguineous effusion is found in hypochondriasis tremulans, while in paralysis agitans, the chief alterations have hitherto been found in the spinal marrow. In hypochondriasis tremulans, therapeutic agents acting on the brain are alone efficacious. Opium seems to act as a tonic, regularises sleep, and diminishes agitation; and even when given for several years, in small doses, does not appear to exert any injurious effect upon the cerebral and intellectual functions.—*Archives Generales*, Tom. XXIII., p. 329, from the *Jenaische Annalen*.

GENERAL CORRESPONDENCE.

MR. BELL'S PHARMACY BILL.

[To the Editor of the Medical Times.]

SIR,—Every General Practitioner will thank you for your article of last week concerning Mr. Jacob Bell's Bill for giving the druggists everything. Not contented with the very professional dodge of houcussing the Commons, Mr. Bell now seems bent upon doing the apothecaries, at whose cost, his class—the druggists—are to become “pharmaceutical chemists,” and under the protection and excuse of a diploma, naturally interfere, even to a greater extent than at present, with my class, the General Practitioners. Let me ask you, Sir, if the druggists' profits are not already sufficient? Is it not true, that they buy Epsom salts for one penny a pound, and sell them for twopence an ounce? Are not pills three-halfpence a dozen in the market, and do they not dispense them at three-halfpence a piece in their shops? And what drug do they vend without an enormous profit? True, their expenses are heavy; for their blue bottles and shop-fronts cost money, and the young gentlemen who “dispense” in white ties must pay their washerwomen. But, still, their gains are enormous. Let them be contented with that which they already enjoy, and not seek entirely to possess themselves of our lands, upon which they have already, to our great detriment, materially encroached.

Depend upon it, Sir, if Mr. Bell's Bill becomes law, the General Practitioner may at once give up dispensing medicine and content himself, as in France and Germany, with a small fee for his visit. I will not now argue if it be better for his own respectability, and for the community, that it should be so; but, in common fairness, let there be some restrictive clause, and pharmaceutical chemists punished, both by fine and imprisonment, who venture to give the slightest advice with the drugs they sell. This is the case upon the continent—but they manage these things better abroad; and if we are to have one part of the system, let us have all. Let the medical man, if so decided, confine himself to his advice and his fee, and the druggist to his counter and his charge; but do not let the latter, upon any pretence, prescribe as well as dispense, as, under Mr. Bell's Bill, diplomatised gentlemen most undoubtedly will.

There are two points in your excellent Article on which I join issue. I believe that the preparation of prescriptions constitutes but a small branch of the trade in drugs, and that it is already sufficiently protected by the circumstances generally regulating such commercial transactions. The ordinary rule of “*caveat emptor*” suffices, not only to show general accuracy, but even to indicate the gradations of pharmaceutical ability; to say nothing of medical skill being generally superadded, to assist that buyer in his choice of a chemist to prepare a prescription. If neglect be culpable, and carelessness or ignorance result in illness or death, there are the ordinary legal remedies, which would equally suffice to punish an engineer or a builder. And let me add, that to talk of mistakes in dispensing as resulting from scientific ignorance, and therefore demanding a higher standard of education, is simply absurd. Six weeks spent in a druggist's shop by an adult of average ability, would amply suffice to teach him which substance was oxalic acid and which was Epsom salts. And, even were as many years necessary, if a master chooses to employ an incompetent child in place of a competent person, he is the responsible and culpable party. In

short, whether the functions of the druggist be to buy drugs in hundred-weights and sell in ounces, or to weigh out smaller quantities of several drugs, and pour the medley into a bottle, I cannot see the necessity of creating a monopoly, to secure a more correct performance of what an education like that of any mechanic would amply suffice to teach.

But, Sir, we are safe in your hands. Your conduct as regards nostrum-vendors and nostrum-prescribers has shown your independence, and proved you to be the true friend of the Profession; among whom I am a humble LONDON APOTHECARY.

[To the Editor of the Medical Times.]

SIR,—I am glad to perceive that you at least, of all the medical journalists, are alive to the danger about to be incurred by the Medical Profession, if Mr. Jacob Bell's Pharmacy Bill should become the law of the land. In the name of my professional brethren, I thank you for the spirited article you have published on the subject, and trust that your exertions will not cease until the Bill is either altogether abandoned, or greatly modified in principle. At present, it is neither more nor less than “a mockery, a delusion, and a snare.” By it tradesmen, doubtlessly respectable enough in their way, will be elevated in rank, and their trade converted into a profession; indeed, Mr. J. Bell already speaks of it as such. To this, perhaps, there would not be so much objection; but the possession of a legal diploma would place them, in the eyes of the great majority of the public, on a level with the legally-qualified medical practitioner, as it is very certain that the laity do not and cannot distinguish between the medical man and the mere compounder of drugs. The mischief and loss of life that have already resulted from this anomalous and disgraceful state of things can be attested by every medical man who has been a year in practice. What, then, will it be, when these intruders are invested with a legalised diploma, and take their stand as members or licentiates of a chartered corporation? It will necessarily involve the Profession in ruin, and will cause a fearful destruction of life among those who, from ignorance, or to save a few shillings, may place themselves in their hands. Mr. Wakley spoke of the Bill as the first brick in the fabric of medical reform. Surely he does not mean to imply, that sanctioning druggists in Counter practice and visiting the sick, is a measure in favour of medical reform? The proposition is most monstrous!

If this Bill is to pass, there is but one way in which it can be prevented from being destructive to the Profession and to the public; that is, by the insertion of a clause strictly forbidding counter practice as it is called, and visiting and prescribing for the sick, unless under the sanction of a legal medical diploma, under the penalty of forfeiture of the diploma or license to act as a druggist,—the document also to contain a clause to the same effect, so that it may be fully understood by every one that the diploma of the Pharmaceutical Society is a proof of the non-possession of medical knowledge and of a medical qualification. Fines will be of no use; the druggist knows medical practice to be so profitable, that, like smugglers or slavers, one successful run in four will pay them well. The act should be made penal, and the punishment such as will fully prevent its recurrence. Trusting these views will meet your concurrence, I am, &c.

A GENERAL PRACTITIONER OF
TWENTY YEARS' STANDING.

London.

P.S. Will you allow me a little more space while I flatly contradict the statement made by Mr. Wakley in the House of Commons, when he sought to renew the debate on this matter, that the Pharmaceutical Society has existed twenty-seven years. It was founded in 1841, and has dragged on a sickly existence for only ten years, instead of twenty-seven, as he erroneously stated. The complaints against it have been most numerous, and not a few published in his journal, *notamment* by Mr. Lloyd Bullock, of Conduit-street, who delivered, and subsequently published a lecture upon the errors and tyranny of its managers. How can the editor of the *Lancet* assert that he “has not heard any complaints against it?”

STREET ORDERLIES.

[To the Editor of the Medical Times.]

SIR,—The favourable comments which you have been pleased to make on the present effort to cause the City of London to be cleansed by means of street orderlies, induces me to request a small space in your valuable columns. It appears to me that the attention of public authorities, as well as of the Medical Profession, has not been sufficiently drawn to the evils which arise from the enormous quantities of animal and vegetable matter now allowed to decompose and putrify in dust-bins, for several days

together. This on a moderate computation daily amounts, within the city of London, to from 150 to 200 cart loads, and to 1000 in the whole of the Metropolis. It is well known that all the refuse of the scullery is regularly thrown into the dust-bin; and this including fish entrails, drawings of poultry, hares, and rabbits, cabbage leaves, turnips, and potato peelings; indeed, putrid fish, and meat, and garbage of every description. During the hot summer season, decomposition takes place rapidly, and it must be open to the commonest understanding, that offensive and poisonous emanations must arise and circulate throughout the dwellings, creating sickness and disease of a malignant character. Mr. Simon, the City medical officer of health, recently reported to the Commissioners of Sewers, that many persons were daily in the habit of throwing the garbage referred to into the public streets; and that the same cannot fail to prove seriously prejudicial to the public health.

If, therefore, we consider such decomposed and decomposing animal and vegetable matter to be so injurious, when exposed to the open air, to the very winds of heaven, what must be its character, when the poisonous effluvia are confined within the house, and the inhabitants are daily and hourly conveying them, with the air they breathe, into their lungs, and thence to the blood, and finally throughout the whole system. For this truly frightful, because extensively acting evil, there is a very simple remedy. Instructions are now given to the street orderlies, to remove in their wheel-barrows, at all hours of the day, the offensive matter referred to. It need, therefore, no longer be placed in the dust-bins, but if committed to the orderly's care, will be devoted to the purpose of fertilising the land, and again producing food and sustenance for human beings. I regret much that this regulation is not carried out more extensively, as I cannot help thinking, that typhus, cholera, and other endemic and epidemic diseases, owe their origin as much to the materials in dust-bins as to any other cause.

I crave permission to draw attention to another circumstance deeply affecting the public health. It will be found, that in all the Mews throughout the Metropolis, the manure produced from each stable is packed up in a separate stack, until there is sufficient for a load for some market-gardener or farmer to remove. The groom or stable-man makes an arrangement, or agreement as it is called, with the market-gardener, to remove it at his convenience, and a gratuity of 1s. or 1s. 6d. per load is usually presented to the stable-man. In some places there are dung-pits containing the collectings of a fortnight's dung, which, when disturbed for removal, casts out an offensive effluvia, as sickening as it is disgusting to the whole neighbourhood. In consequence of the arrangement in question, if a third party wished to buy some of this manure, he could not get it; and if he wished to get rid of any, by giving it away, the stable-man would not receive it, as it would not be removed sufficiently quick by the farmer. The result is, that whilst the air is rendered offensive and insalubrious, manure becomes difficult to be removed or disposed of, and frequently is washed away into the sewers.

Of this manure there are always (at a moderate computation) remaining daily, in the mews and stable-yards of the Metropolis, at least 2000 cart-loads.

To remedy these evils, I would suggest that a brief Act of Parliament should be passed, giving municipal and parochial authorities the same complete control over the manure as they have over the "ashes," with the provision, that owners should have the right of removing it themselves for their own use; but, if they did not do so daily, then the control to return to the above authorities, who should have the right of selling it, and placing the proceeds in the parish funds. By this simple means immense quantities of valuable manure would be saved for the purposes of agriculture,—food would be rendered cheaper and more abundant,—more people would be employed,—whilst the Metropolis would be rendered clean, sweet, and healthy.—I am, &c.

CHARLES COCHRANE.

National Philanthropic Association, 40, Leicester-square.

[If it were not a matter of notoriety, that the organization which Mr. Cochrane, after great labour, has succeeded in establishing, enabled him to obtain an accurate knowledge of the sanitary condition of the Metropolis, we should have been disposed to doubt the exactness of the calculations contained in the foregoing letter. A little consideration, however, suffices to convince us that the statements come within the limits of truth. The back streets of this city seem to be, on many days of the week, and particularly on Mondays, little better than a farm-yard, so large is the quantity of manure, garbage, and offal that collects after the culinary opera-

tions of the Sunday. Notwithstanding the persevering exertions made by Mr. Cochrane, he evidently begins to despair of that measure of success which he has forecast as the standard of his desires, and regards an Act of Parliament as the only means of accomplishing his laudable purpose. We regret to admit, that scarcely any improvement, even within the scope of the powers exercised by local boards, can be efficiently carried out in this country unless under the coercion of a formal Act of the Legislature. Such is the obstinacy, the pride, and perversity of parish vestries, that even powers which they avowedly possess are allowed to lie dormant, or to be exercised inefficiently, rather than yield to the suggestions of common sense, and own the just influence of superior knowledge or experience. We cordially desire that Mr. Cochrane may succeed in cleansing the Augean stable,—a labour which, it appears, he has already found to be truly Herculean; but which, when achieved, will entitle him to the gratitude of his fellow-citizens.—*Ed. Med. Times.*]

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. HODGSON, Esq., F.R.S., President, in the Chair.

A CASE OF OBSTRUCTION OF THE COLON RELIEVED BY AN OPERATION PERFORMED AT THE GROIN.

By JAMES LUKE, Esq., Senior Surgeon to the London and St. Luke's Hospitals, &c.

(Communicated by JAMES MONCRIEFF ARNOTT, Esq., F.R.S.)¹

The subject of this report was a man aged 60, who, on Dec. 16, 1850, first complained to the author of feeling generally unwell. He had no pain; but his countenance was depressed, his eyes sallow, and his tongue coated. The bowels were confined, and lately medicines had acted with difficulty on them. An aperient was ordered, and on the following day he passed a small lumpy motion, but without relief to the symptoms: castor-oil was ordered, but, after a time, was rejected by vomiting. On the 18th there was no relief from the bowels, and he vomited everything he took. From this time he progressively got worse in spite of all the means resorted to for his relief. He complained of pain chiefly about the region of the cœcum. The transverse arch of the colon could be felt distended and tympanitic. A careful observation of the case led the author to believe that there was obstruction in the bowel about the sigmoid flexure of the colon, and it was resolved, as a last resource, to operate upon the patient. The operation was performed on the 23rd. Not thinking it prudent to assume that the conclusion respecting the seat of the obstruction was certainly correct, the author determined to adopt that operation which would give him some opportunity of extending his search, provided he did not find the obstruction at the point where it was supposed to be. He therefore opened the abdominal parietes near the groin, by an incision four inches in length, a little to the outside of the course of the epigastric artery, the lower extremity of which incision terminated a little above Poupart's ligament. The peritoneum was opened to the extent of about two inches. On passing the finger down to the surface of the intestine, which protruded, a diseased mass could be felt, which appeared to encircle the intestines. The bowel was then opened above this part; a large quantity of fœculent matter came away, and the patient expressed himself as relieved. On passing the finger into the bowel, it was found to be impervious about two inches below the aperture. After the operation the recovery of the patient was rapid. On the second day fœces passed per anum, and continued to do for more than a month, when their passage through the natural opening ceased; it was again partially restored, but from this time the greater part of the fœces passed by the wound. This is closed by a well-filled pad, and he has been enabled since to pursue his ordinary occupation almost without interruption. The author then proceeds to remark on the danger of protracted delay in attempting to relieve such cases, a delay which is, however, to a great extent rendered necessary by the difficulties of diagnosis. The distension of the colon, and the evidence afforded by the proper introduc-

tion of the long tube, are pointed out as the two means of diagnosis on which reliance may be generally placed for the purpose of determining the seat of obstruction, when it is situated at the lower part of the colon. The advantages of the operations of Amussat and Littre are then compared, and the author, while admitting the advantage gained by operating in the loins, as proposed by the former—that of not opening the peritonæal cavity—yet thinks that the operation in the groin offers certain advantages which render it in many cases preferable. By the operation in the loins nothing more could be done than opening the intestine; but this might in some cases be improper—as where obstructions were produced by fibrous bands overlying the intestine, or by strangulations, the result of causes acting exteriorly to its tunics. In these cases, the proper treatment is to divide the bands, to relieve the cause of strangulation. In the event, too, of an error of diagnosis, the opening in the loins does not provide any facilities for correcting the error. The danger of total failure of affording relief consequent upon this state of things, must therefore be attributable as a demerit to the operation in the loins. There are, besides, the minor evils in this operation, that the opening cannot be conveniently be attended to by the patient himself, and that there exists frequently a great disposition to contraction, arising from the great depth of the wound, which requires renewed surgical interference. In all these particulars, with the exception of the necessary attendant of peritonæal section, the operation of opening the abdominal parietes at the groin, in all cases of obstruction, or suspected obstruction in the lower part of the colon, appears to the author to be the operation which should be preferred. It affords facilities for modifying the treatment, either by opening the intestine, when incapable of relief by other means, or by dividing or removing any existing cause of strangulation. It enables the surgeon to extend his search within a limited range, in the event of the diagnosis proving incorrect; it allows him to open the bowel as close as possible to the seat of obstruction; and it secures to the patient the facilities for attending to his own comfort, which appear almost a necessary condition to make life endurable under such circumstances.

ABSTRACT OF A PAPER ON THE VARIATIONS OF THE SULPHATES AND PHOSPHATES EXCRETED IN ACUTE CHOREA, DELIRIUM TREMENS, AND INFLAMMATION OF THE BRAIN.

By H. BENICE JONES, M.D.

Having determined the variation of the sulphates in the states of health when different diets, amount of exercise, and medicines were taken, the variations of the sulphates in disease were examined. At the same time the total amount of alkaline and earthy phosphates was determined, partly in order to see whether the amount of sulphates and of phosphates bore any relation to one another, and partly to test the conclusions which were drawn in the Author's previous paper on the Variations of the Phosphates in Disease. The cases were thus classified:—1st. Acute and chronic diseases, in which the muscular structures were chiefly affected, as chorea. 2nd. Functional diseases of the brain, as delirium tremens. 3rd. Acute inflammatory diseases of the nervous structures, as inflammation of the brain. 4th. Chronic diseases of the nervous structures. 5th. Acute diseases, in which neither the nervous nor the muscular structures were chiefly affected. 6th. Chronic diseases, in which neither the muscular nor the nervous structures were chiefly affected. The three last classes gave only negative results. In illustration of the first class, three cases of most intense chorea are detailed. The urine was examined frequently from the third to the eleventh day. The phosphates were found to be diminished. The sulphates were present in very great excess. The urine was found to be so loaded with urea, that nitrate of urea crystallized out before the urine was concentrated. The specific gravity of the urine was as high as 1036 in one case, 1035 in another, and in the third 1031. In illustration of the second class, three cases of delirium tremens are given. The urine was examined from the fifth to the fourteenth day of the disease. The phosphates were not found to be so remarkably diminished as in the cases reported in the previous paper. The sulphates were found to be exceedingly increased. The amount of urea was so great, that nitric acid caused an instantaneous crystallization. The specific gravity also was in one case, 1041; in another, 1037; and in the third, 1027. In other words, there was the most remarkable correspondence between the state of the urine in acute chorea and in delirium tremens. In illustration of the third class, four cases of acute inflammation of the brain are given. The urine was examined from the fourth to the twenty-sixth day. Though the inflammation in these cases was not so intense as in those which were recorded in the Author's previous paper, yet they confirm the statement

that, in inflammation of the brain, the phosphates in the urine are increased; they also lead to the conclusion that the sulphates are at the same time increased in the same degree. In conclusion, the Author states, the phenomenon common to acute chorea and to intense delirium tremens, is increased and unceasing muscular action. The muscles are highly complex organic compounds, in which sulphur exists in an unoxidized state, and the muscular action is accompanied, if not caused, by an action of oxygen, which, among other results, gives rise to the formation of sulphuric acid and urea, the amount of oxidation being proportioned to the intensity of the muscular action. The result produced is an increase of the sulphates and of the urea in the urine, just as in health they would be increased if continued strong exercise was taken. The increased amount of urea does not constitute a disease resembling diabetes, but is only an evidence of the changes which are taking place within. The increase of sulphates and phosphates in inflammation of the brain is also an evidence of increased oxidation of the nervous structures. These simultaneous variations depend on the fact, that the amount of sulphur in the brain is nearly the same as the amount of phosphorus. Thus at one time we have evidence of increased oxidation of the elements of the nervous structures, and at another time increased oxidation of the elements of the muscular structures; and we may thus arrive at the conclusion, that at one time the function of the nerves, and at another that of the muscles, is inordinately increased.

CASE OF OVARIOTOMY SUCCESSFULLY PERFORMED.

By JOHN BEALE, Esq., M.R.C.S.,

(Communicated by John Dalrymple, Esq., F.R.S.)

In the early part of September, 1850, the Author was consulted by a woman, aged 30, unmarried, for an enlargement of the abdomen, which she first noticed on the left side in the previous December. Latterly she suffered from loss of appetite, and of strength, and wasting of the legs and arms. The author found an ovarian tumour, hard to the touch, in the left iliac region and left hypochondrium, but soft and fluctuating on the opposite side, evidently in two distinct sacs, moveable and free from tenderness; he was induced to recommend its removal. The operation was performed on the 4th of December, the patient being under the influence of chloroform. The incision was ten inches in length, extending from the scrobiculus cordis to the pubes. Two cysts were punctured, and their contents drawn off, before the tumour could be removed from its cavity; the pedicle was tied by means of a double ligature passed through its base, and the tumour was then separated as near as possible to it. The uterus and right ovary were healthy. Everything went on favourably after the operation. On the 15th she was able to walk about the room, and on the 25th the ligature came away. The tumour was three feet two inches in its larger circumference, and two feet one and a half inch in its smaller; it weighed twenty-five pounds; it was multilocular, marked on the surface by bands of white fibrous tissue corresponding with the septa of the cysts. The Author then gave a description of the walls of the cysts. The cysts varied very much in size, and in the density and tenacity of their contents; in the smaller ones the fluid was clearer and thinner. The average specific gravity was 1010, but the fluid contained a large quantity of albumen. The total quantity was from twenty-one to twenty-three pints.

ACCOUNT OF A CASE IN WHICH A LARGE CYST, CONTAINING HYDATIDS, WAS DEVELOPED AT THE ROOT OF THE NECK; DEATH ENSUING FROM RUPTURE OF THE LEFT SUBCLAVIAN ARTERY.

By JAMES DIXON, Esq., Surgeon to the Royal London Ophthalmic Hospital, and Assistant-Surgeon to St. Thomas' Hospital.

John M—, aged 24, a waterman, was admitted into St. Thomas' Hospital, Jan. 14th, 1851. Nine years previously a swelling formed above the left clavicle, which slowly increased, accompanied with occasional numbness in the left arm. At a later period there was total cessation of the pulse at the left wrist. The swelling was fixed, and seemed to rise up from about the situation of the first rib, having in front the sterno-mastoid muscle and the carotid sheath. The larynx was pushed a little towards the right side, and the patient's voice had latterly become hoarse and weak. No bellows sound or aneurismal impulse could be detected in the swelling, nor was there any abnormal sound of the heart. A very indistinct fluctuation was to be felt in the swelling, about an inch above the top of the sternum, between the inner edge of the sterno-cleido-mastoid muscle and the common carotid artery, which had been thrust inwards, so as to lie on the median plane. A fine trocar was passed in at this fluctuating spot, directly backwards, but only about a drachm of clear colourless fluid evacuated.

Some weeks later, an incision was made on a line nearly corresponding to the interval between the sternal and clavicular portions of the sterno-cleido-mastoid muscle, commencing an inch above the top of the sternum. The fibres of the above-named muscle having been carefully separated, and afterwards those of the sterno-thyroideus, a fascia-like membrane was exposed. A trocar, passed through this, let out a few drops of clear fluid, such as had formerly been found. The opening in the sac was then enlarged in a direction towards the angle of the jaw, and a small collapsed hydatid immediately escaped. The finger being passed into the opening, entered a large sac crowded with hydatids of various sizes; several as big as hens' eggs were broken by pressing them against the edge of the first rib, the empty skins escaping by the wound. The wound was enlarged a few lines in an upward direction, and in doing this a slight amount of arterial bleeding occurred, which was arrested by pressure at the upper angle of the wound, and a compress was afterwards applied for some hours. The pulsation of the left radial artery was distinctly to be felt as soon as the patient had rallied from the faintness induced by the operation. The next day a poultice was applied to the wound, and the day following several whole hydatids, and many fragments of broken ones, passed out; others continued to escape from time to time, together with copious fetid discharge. The opening made in the sac was kept from closing by passing the tip of the finger into the orifice every second or third day; when the aperture had contracted so much as barely to allow of this being done, one hydatid, the size of a hen's egg, passed out entire. The patient went on well, the discharge diminishing, and no hydatids having appeared for several days, up to the 27th, (the nineteenth day after the operation,) when profuse bleeding suddenly occurred from the wound, preceded by a peculiar sense of weight, which the patient referred to the left side of the sternum. Pressure was applied, and afterwards a bladder of ice laid on the part, the patient being constantly watched. A second jet of blood took place fourteen hours after the occurrence of the first, a large hydatid having been voided in the interval without any hæmorrhage occurring at the time. A broad strip of sloughy, fascia-like membrane came away when the blood escaped from the sac. On the 28th, bleeding came on again; and as it seemed just possible that it might be owing to some partially divided artery near to the opening in the sac, an exploration was made by enlarging the wound in the skin, and dividing the whole of the sterno-mastoid muscle. To lay open the sac, which was filled with blood, seemed out of the question. The patient died on the morning of the 29th. A careful dissection was made of the morbid parts; (they were exhibited to the Society.) The sac in which the hydatids had been developed, when cleared of clots, was found to be of a fascia-like texture, and lined with shreds of sloughy fibrin. It reached, vertically, from the left side of the third cervical vertebra to the convexity of the aortic arch and apex of the left lung; and, sideways, from the middle line of the vertebral column to the scaleni muscles. Nearly the left half of the bodies of the fifth, sixth, and seventh cervical vertebræ, and of the second dorsal, had been absorbed, as also the head and neck of the first and second ribs. On examining the interior of the sac, the source of the hæmorrhage was discovered. The left subclavian artery was laid bare at about three quarters of an inch from its origin, and at this spot presented a rent in its coats rather more than half an inch in length. The long-continued pressure to which the artery had been subjected between the hydatid sac and the border of the first rib, had caused total obliteration of the calibre of the vessel to the extent of about half an inch: external to the scaleni it regained its natural dimensions. The left lung was crepitant throughout. There was a small patch of recent fibrin on the outer side of the middle lobe, and a few slender bands of the deposit passed from the lung to the adjacent costal pleura; but there were no traces of old pleuritis. The head and abdomen could not be inspected. A single collapsed hydatid was found remaining in the sac. Those hydatids which, during the progress of the case, had escaped entire, were carefully examined with the microscope. In several of the size of pigeons' eggs, clusters of echinococcus were found in various stages of development; but neither in the largest, which was equal in bulk to a hen's egg, nor in those about the size of peas, could any of these bodies be discovered.

A STATISTICAL REPORT ON DISEASE OF THE HEART, DERIVED FROM A CONSIDERATION OF ALL THE CASES ADMITTED INTO ST. GEORGE'S HOSPITAL DURING THE LAST TWO YEARS AND A HALF.

By Dr. BARCLAY.

Rheumatism is first considered as one of the causes. Divided into two nearly equal classes—those really inflammatory or acute,

and those less so, or sub-acute,—the former class is found to contain sixty-seven cases with cardiac lesion, sixty-four without, and twenty-one doubtful. Endocardial murmur is found not to be certain evidence of disease, even in the most acute cases. Females are slightly more liable to acute rheumatism than males, but less liable to a recurrence of the disease. Females are more decidedly liable in a larger proportion to cardiac complication, and this is especially proved by the existence of friction-sound in the proportion of three females to two males. Cardiac complication exists eighteen or twenty per cent. more frequently in subsequent attacks than in primary ones. It is in the proportion of three to two of all the cases up to the age of twenty-five, and falls very rapidly after that age. The cases of sub-acute and chronic rheumatism furnish no example of recent inflammation of the heart, but a considerable number of cases of old disease. So far as could be ascertained, these were almost all traceable to previous acute attacks, and were only about one-third of the cases which had previously suffered from acute rheumatism. The *post-mortem* appearances of recent inflammation are found associated with acute rheumatism, with disease of the kidney, with inflammation of the peritoneum and pleura, and with old disease of the heart, especially when hypertrophy existed, and with turbulent action during life. The cases of old disease of the heart are divided into sixty-one rheumatic, seventy non-rheumatic, and sixty-nine doubtful. They show a very considerable preponderance of males, especially among fatal cases. Up to the age of twenty, almost the whole, and even as far as thirty, more than half the cases are associated with acute rheumatism. In the next twenty years, the non-rheumatic almost double the rheumatic cases, and after fifty, there are scarcely any derivable from rheumatism at all. The duration of rheumatic cases, dating from the first attack of acute rheumatism to death, is generally much longer for females than for males, varying in the latter from four to six years; in the former, from twelve to sixteen years. Four out of seven fatal cases of acute rheumatism, and twelve out of eighteen of older standing, are associated with pericarditis, which is always severe and extensive; but universal adhesion is neither the constant nor even the common result of rheumatic pericarditis, and it exists in cases where the previous existence of rheumatism is altogether denied. In valvular disease there are eighteen rheumatic cases, twenty-three non-rheumatic, and twelve doubtful. The recent cases are all examples of inflammation of the mitral. When old and recent cases exist together, and when old disease is seen in different stages, the mitral valve generally appears to have been first attacked, and the aortic secondarily; and hence the preponderance of double valvular lesion in rheumatic cases seems to be due to renewed inflammations at distinct periods. Inflammatory thickening occurs also in several cases in which there had been no rheumatism. Disease of the kidney is associated with two cases of simple recent fibrinous deposit on the valves, and three of recent pericarditis, in which no other cause was known to have been in operation. It seems questionable how far this can be taken as a cause of great thickening of the valves, or of an adherent pericardium. Disease of each set of valves seems to produce, in nearly equal proportions, hypertrophy and dilatation, but aortic regurgitation especially the latter; atheroma of the aorta, more commonly hypertrophy; adhesion of the pericardium, chiefly dilatation. Disease of the kidney is associated with an immense majority of the cases of hypertrophy, and similarly of all the cases of disease of the kidney, more than a third presented on *post mortem* examination more or less hypertrophy of the heart. A table is appended, in which the *post-mortem* appearances are arranged, of all the cases in which clinical history threw any light on the disease of the heart found after death.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 18th inst. :—

BRERETON, CHARLES LE GAY, Beverley, Yorkshire.
COOPER, JOHN PAGE, Coborn-road, Bow, Middlesex.
DAVIES, JOHN EDWARD, Stones-end, Southwark.
GRABHAM, JOHN, Rochford, Essex.
LIGERTWOOD, THOMAS, Toveran, Aberdeenshire.
MUDGE, JAMES, Bodmin, Cornwall.
SKINNER, ROBERT VAILE, Headcorn, Kent.
TOVEY, CHARLES HENRY, Bermondsey-street, Southwark.
TURNELL, MICHAEL CUDMORE, Pelham-place, North Brompton.
WHEATLEY, THOMAS DELAMAIN, Carlisle, Cumberland.
At the same meeting of the Court, Mr. WILLIAM HENRY CLARKE

passed his examination as Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date December 11, 1846.

OBITUARY.—On the 11th inst., in Glasgow, Charles Hugh James, Esq., surgeon, late of the 39th Regt. On the 17th inst., at his residence, 1, Princes-street, Stamford-street, Edward Pape, Esq., surgeon, aged 57. On the 10th inst., at Whitley, John Ripley, Esq., surgeon, aged 54.

NAVAL APPOINTMENTS.—Surgeon William M'K. Saunders, M.D., (1850) to the *Styx* steam-sloop at Devonport. Assistant-Surgeon William Smith, M.D. (1843), from the *Saturn*, flag-ship at Pembroke, to the *Ajax*, 58, screw steam-ship at Cork.

MILITARY APPOINTMENTS.—31st Regt. of Foot, staff-surgeon of the 2nd class, John Burton St. Croix Crosse, to be surgeon, vice Millengen, who exchanges; hospital staff-surgeon John Crespigny Millengen, from the 31st Foot, to be staff-surgeon of the 2nd class, vice Crosse, who exchanges.

MEDICAL APPOINTMENTS AND VACANCIES.—The office of medical attendant on the fourth or Bowling district of the Bradford Union is vacant. The pay is at the rate of 5s. 6d. per medical case; 9d. each successful case of vaccination; 10s. for each case of midwifery, and extra fees for surgical operations, except where the patients are taken into the infirmary. The medical officer is expected to reside in or near the district, and, as an inducement to accept such handsome remuneration(!) it is stated that there is not at present any medical man residing within its limits. The population is 13,542. Election on the 1st of August. The Board of Guardians of this Union offer a rate of pay to gentlemen, that their household drudges would scorn to accept. 9d. each for every successful case of vaccination!! An operation successfully performed, and the patient seen three times to make sure of its having succeeded, and all for 9d.,—three pence a visit, and the operation thrown into the bargain, and the same principle running through the whole of the dirty proposal. We hope no medical man will degrade the Profession by applying for the office; if he does, he will deserve to be a slave for life. In the Edmonton Union, the Hornsey and Highgate districts want a medical officer; salary after the rate of 35*l.* a year, with the extra fees allowed by the Poor-law Board. Area of sub-district about 1500 acres; population, 3000. Certificates on or before the 30th inst. A physician is wanted for the Loughborough Dispensary; election on the 6th of next month. Dr. Brent has been elected the medical officer of the Colaton district, St. Thomas' Union, Exeter.

THE DUBLIN HOSPITALS.—The following sums have been voted by the House of Commons for the benefit of the Dublin Hospitals:—9889*l.* 10s. $\frac{1}{2}$ d. for the House of Industry; 1750*l.* for the Westmoreland Lock Hospital; 600*l.* for the Lying-in Hospital; 1200*l.* for Dr. Steeven's Hospital; 3040*l.* for the Fever Hospital; and 400*l.* for the Hospital for Incurables, making a total of 16,879*l.* 10s. $\frac{1}{2}$ d. The National Vaccine Establishment is, we believe, the only medical institution in this Metropolis aided by Government Funds. It is rather hard that the hospitals, dispensaries, and medical and scientific societies of this great Metropolis, the inhabitants of which render such large payments towards the Government funds, receive no pecuniary assistance, and that some are allowed to sink unaided, while so large an amount is contributed for the benefit of the hospitals and societies of the sister metropolis. We do not complain of the donation, but we do regret that those in England are unaided.

QUEEN'S HOSPITAL, BIRMINGHAM.—An anonymous donor, signing himself E.P.H., has presented, by the hands of Mr. T. E. Lee, the large sum of 800*l.* to this Institution. Mr. Lee consequently had conferred on him the privileges of an annual subscriber of 10*l.*

CITY ORTHOPÆDIC HOSPITAL.—Our readers have, doubtless, observed, from an advertisement on our cover, that an Institution for the Treatment of Club-foot, Spinal Curvatures, etc., has been established in Hatton-garden; the principal and praiseworthy feature of which is, that no letters of recommendation are required. From the Prospectus we have seen, it appears that the building is capable of accommodating nearly a hundred in-patients. The chief surgeon, Mr. Chance, is well known in the Profession, and it is evident, from his position in another hospital, that he only cultivates this branch of practice as a part of general surgery. From the list of vice-presidents attached, it appears to be founded under the auspices of the *élite* of the Profession.

THE BRITISH LYING-IN HOSPITAL, near Long-acre, has had a bequest by the late John Clancy, Esq., of Reading, to the amount of 100*l.*, 3*l.* per cents., payable six months after the decease, and a similar amount of stock, payable after the death of his widow.

BROMPTON HOSPITAL.—The military musical festival for the benefit of this Institution, which, when held a few weeks ago in the grounds of Chelsea Hospital, attracted so much notice, was repeated last week. The locality selected for the assembly on this occasion, was the picturesque *parterre* of Mulgrave House, Fulham. The music, consisting of overtures, marches, &c., chosen from the works of the most esteemed composers, was played by a band comprising more than three hundred and fifty performers from the Household regiments, the Royal Artillery, and Marines. The extraordinary volume of sound, the remarkable precision of the performers in the concerted pieces, and the beautiful execution of the solos, produced a striking and most gratifying impression on the audience. The fineness of the weather, the sylvan beauty of the scene, and the elegant costumes of the assembled company, produced a general effect which will not be readily forgotten by those who enjoyed the pleasure of beholding it. From a document placed in our hands, we make the following extract, which will not be without interest to the Professional reader:—"Whilst the Committee regard with feelings of the utmost satisfaction, the fact that, although the population of the Metropolis has increased about 20 per cent., or nearly 400,000 in the decennial period from 1840 to 1850, the deaths from consumption, which in the first of these years numbered 7236, have fallen in 1850 to 6137; and further, that the mortality from the disease has steadily and progressively diminished during the last four years; the deaths from consumption having been during the years 1847-48-49-50, respectively, 7010, 6556, 6317, and 6137. To whatever influence this most gratifying result may be referred, it must be received as a source of the greatest encouragement to the friends of this good work to proceed, and it must afford the strongest inducement to all to aid in the further development of the objects which this Institution has so far successfully carried out." The festival, we are given to understand, will be repeated next year on the same scale of magnificence. We are glad to be able to add that the funds now in the hands of the Committee are such as to induce them to commence immediately the completion of the building, for which the contracts have been already taken. It is also proposed to establish a Sanatorium on the southern coast, to which patients may, under favourable circumstances, be sent.

NATIONAL VACCINE ESTABLISHMENT.—The sum of 2000*l.* has been voted by the House of Commons for the use of the National Vaccine Establishment.

7000*l.* have been awarded by Parliament to defray the expenses on account of the cholera in Jamaica.

THE GENERAL BOARD OF HEALTH.—The sum voted for the expenses of the Board for the ensuing year is 9969*l.* Bitter complaints were made in the House of Commons at the same time, that the provisions of the Extramural Interments Act had not been carried out; the excuses offered were of the most futile description. The fact is, we want a dreadful epidemic every now and then to stimulate our inactive Government into operation. The General Board of Health have shown that they are unable to carry out the Interments Act, and yet they are demanding that an Act should be passed, placing the entire arrangement and management of the water supply for the Metropolis under their control. It would be indeed absurd to give them more work to do, solely that they may have more patronage, when they cannot carry out what they have now. It is just as important to preserve the Metropolis from the poisonous emanations from the dead, as to supply it with purer water than it has at present.

THE CORONERS' BILL.—This important measure, securing the payment of coroners by salary, and not by fees, thus taking away any inducement to hold inquests unnecessarily, has been shelved for the present Session, its second reading being postponed for three months. The Houses of Parliament are very unwilling to deal with long enduring monopolies; they plead a distaste to meddle with what they term vested rights, but which the better informed public more appropriately term "*vested wrongs*."

LAW OF EVIDENCE AMENDMENT BILL.—In this valuable Bill, now before the House of Commons, there is a clause by which the difficulties attending the proof of medical and surgical diplomas are to be done away. The production of the document is to be held sufficient proof in law, without proving the seal.

THE LAW OF LUNACY.—On Thursday, the 17th inst., a meeting of the Association of Medical Officers of Hospitals for the Insane was held by appointment, at twelve o'clock, at the Freemasons' Tavern. Dr. Conolly, being the senior member of the Association, was voted in the chair. The following members, with others, were present Dr. Bucknel, of the Devon Asylum; Dr. Huxley, Kent Asylum; Dr. Stuart, Belfast Asylum; Dr. Winter, Asylum, Oxford; Dr. Kirkman, Suffolk Asylum; Mr. Diamond, Surrey Asy-

lum; Dr. Boyd, Somerset Asylum; Mr. Prosser, Asylum, Leicester; Dr. Fox, of Northwoods; Dr. Munro, of Bethlem; Dr. Lloyd Williams, Dr. F. Winslow; Dr. Nesbitt, of the Northampton Asylum; Mr. Mallam, of the Hook Norton Asylum, &c. The Association has been in operation several years. The meetings have hitherto been held in the provinces, at or in the neighbourhood of the various county asylums. It was, however, determined this year to summon a meeting of the Association in London, in order to afford the members living in the Metropolis an opportunity of discussing with their provincial friends some important matters of business. As a preliminary matter, the question arose as to the organisation of the Society. The Association has always met annually in the provinces, and has been confined to medical gentlemen officially connected with county or public lunatic asylums. It was proposed and carried, that medical proprietors of private asylums should be eligible as members, and a number of gentlemen were immediately elected. It was also resolved, that for the future the annual meetings should take place in London, the second week in July, and that the members of the Association resident in or near London, should hold quarterly meetings in the Metropolis for the despatch of business. The condition of the criminal lunatics was then brought under the notice of the Society by Dr. Conolly; and, after a long discussion, in which Drs. Bagot, Nesbit, and Winslow took a part, it was agreed to present a petition to Government for the establishment of an Institution apart from Bethlem, exclusively for the reception of persons acquitted of crime on the plea of insanity. The unfortunate, desolate, and unhappy condition of the criminal lunatics was feelingly dwelt upon by all the speakers, and it appeared to be the unanimous opinion of the Association, that sufficient attention had not been paid to their state. It was suggested that great good would result from the separation of the criminal from the other lunatics confined in Bethlem and in other public asylums. The state of the laws relating to the insane was then fully discussed. It appeared to be the opinion of the Association, that the Lunacy Acts were greatly defective, and that the whole of them required careful revision. Nearly all the speakers pointed out most glaring errors in the construction of the Act of Parliament, bearing upon the management of public and private asylums, and the care of the insane. It was proposed, that a Committee of five members of the Association be formed to consider the subject. The following gentlemen were nominated:—Dr. Corsellis, Dr. Conolly, Dr. Forbes Winslow, Dr. Boyd, and Dr. Nesbit. It was also proposed and carried, that Dr. Winslow should be appointed Honorary Secretary to the Committee; that he should communicate with the various members of the Association, and obtain from them suggestions as to the amendment of the law, and embody them, with his own views, in an official shape for the consideration of the Government, and the Commissioners in Lunacy. The inquiry which Dr. Winslow was authorised by the Association to make was to extend to all the Lunacy Acts, embracing also the enactment relating to the administration of the property of lunatics, which was considered unjust and defective in its operation. After the dispatch of other business the Association agreed in a body to visit Colney Hatch, and the Surrey County Asylum, with the view of inspecting their arrangements. The first quarterly meeting of the Association is to be held in London early in September, when important matters of business will be considered.

SEA-BATHING INFIRMARY, MARGATE.—At the anniversary festival of this Institution, it was stated that the annual subscriptions amount to only 175*l.*, the principal support being derived from the payments made by patients, which, during the last year, amounted to the sum of 1300*l.* The poorer classes are consequently excluded from its benefits. 1700*l.* were subscribed among the company in the course of the evening.

THE LAST WEST INDIA MAIL, the Thames, has brought over 538 serons of cochineal, 114 serons of indigo, 27 casks of ginger, etc. The Ganges brings from India 48 bags of aniseed and 18 cases of opium.

THE INFLUENZA, or the "grippe," is very prevalent at the Havannah, where a large portion of the population is suffering from it. The results are not fatal. A great deal of rain has fallen. Cholera is still lingering in Jamaica, and has shown itself in additional districts.

NEW YORK.—A proposal was lately before the New York Legislature, for a donation of 2500 dollars, to the University of New York, but it was negatived, the previous question being carried. Our transatlantic brethren know the value of dollars too well to give them to an university.

CÆSARIAN SECTION.—The *Times* lately recorded a successful operation for the removal of a child through the abdominal parietes,

performed at Guy's Hospital, under the auspices of Dr. Oldham; and a letter was subsequently published in the columns of the same newspaper, claiming the merit of the executive department for Mr. A. Poland, one of the assistant-surgeons of that hospital. With every deference for Dr. Oldham's obstetrical skill and professional standing, and for Mr. A. Poland's surgical acumen, we must enter our protest against their being made known in the columns of a newspaper; nor can any complaint be justly urged against those less blessed with worldly wealth, when they seek for the advantages of newspaper puffs, if those who are falsely called *pures* may have recourse to them with impunity. We earnestly hope that both Dr. Oldham and Mr. Poland will repudiate this unprofessional mode of gaining notoriety.

AMORPHOUS PHOSPHORUS.—It is reported in the *Times*, that M. Schrotter has discovered a new preparation of phosphorus, which he calls "amorphous phosphorus," by which all the difficulties met with in the conveyance and use of the article for commercial purposes are overcome. It is obtained by heating phosphorus without the access of air at the temperature of an oil-bath. It then becomes of a scarlet colour, and can be carried about or packed in barrels, or even taken into the system, it is said, without any injurious effects. Mixed with any oxidising substance, it recovers its inflammable properties.

DEATHS in the Metropolis for the week ending Saturday, July 19, 1851.

CAUSES OF DEATH.	July 19.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	430	271	172	873	9750
SPECIFIED CAUSES	430	270	172	872	2706
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	161	27	21	209	2332
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	9	19	21	49	442
3. Tubercular Diseases	61	20	5	137	1980
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses, ...	39	22	24	85	1093
5. Diseases of the Heart and Blood- vessels	1	20	19	42	282
6. Diseases of the Lungs, and of the other Organs of Respiration ...	65	26	21	112	613
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	21	22	8	51	715
8. Diseases of the Kidneys, &c. ...	1	7	6	14	95
9. Childbirth, Diseases of the Uterus ... ..	...	13	2	15	105
10. Rheumatism, Diseases of the Bones, Joints, &c.	2	5	3	11	67
11. Diseases of the Skin, Cellular Tis- sue, &c.	2	2	1	5	9
12. Malformations	2	...	...	2	30
13. Premature Birth and Debility ...	23	2	...	25	236
14. Atrophy	28	...	2	30	213
15. Age ... ..	...	...	35	35	413
16. Sudden	1	2	1	4	86
17. Violence, Privation, Cold, and In- temperance	12	12	2	26	240
Causes not Specified ... ..	...	1	...	1	44

TO CORRESPONDENTS.

THE Editor is reluctantly compelled to intimate, that for the future no communication intended for this Journal, whatever may be its description, or from whomsoever it may proceed, will be noticed, unless addressed to "The Editor, at the Office, 46, Princes-street, Soho." Gentlemen, therefore, who address the Editor either at his private residence or at the Printer's, Bolt-court, must not be surprised if their communications are unnoticed.

A. B., of Huddersfield, will find Dr. John Taylor's papers on Cholera in that city, at pages 256, 340, and 399, of our lately-completed volume. A few copies were printed, we believe, for private circulation.

An Exhibitor at the Great Exhibition.—It is quite impossible to satisfy all the world. The gentleman who reports the contents of the Exhibition so far as they relate to medical science, does so with the greatest impartiality.

A Druggist's Assistant.—Such is the formula of the College of Physicians. Dublanc, however, recommends for the preparation of the iodide of mercury, to cover 100 grs. of mercury with 1 kilogrm. of alcohol—to add 124 grs. of iodine gradually, in portions of 10 grs.—agitating, between each addition, till the alcohol becomes colourless. After the addition of the last 4 grs. the alcohol remains coloured, the whole of the mercury having been converted into iodide.

A Constant Reader must not for a moment listen to so monstrous a proposal. He would most certainly be indicted at the Old Bailey, and most justly. The father seems as great a brute as the son.

We cannot decipher the signature of the gentleman who writes from Rich-

mond (July 19.) We privately inform authors of rejected papers that their papers will not suit the journal; as, then, our unknown Correspondent has not been so informed, he may rest assured that his communication will appear in its turn.

Physicist.—Matteucci published a paper (Ann. Ch. Phys., xxvii. 133,) on the diffusion of electricity in solid non-conductors. He seems, however, to be uninformed of what others have done before him, and the treatise is imperfect. Our Correspondent, however, will there find a description of his torsion balance.

P. C. complains that the house he has just gone into, which he built and finished several months ago, but did not inhabit, is damp from moisture on the walls: he asks the reason. The reason is, that the hydrate of lime in the mortar, coming for the first time in contact with the carbonic acid supplied by the lungs of P. C. and his family, gives out water, which without the acid it would not do. By and by the lime will thus have given out all its moisture,—its place will be supplied by the carbonic acid, and damp will cease to appear upon the walls.

STREET ORDERLIES.

[To the Editor of the Medical Times.]

SIR,—In a struggle between parishioners and corporate bodies, odd things sometimes come to light.

I saw the other day, by a notice sent to me as householder in my parish, that a meeting was to be convened under a well-known Alderman, to secure if possible the better cleansing of our streets by means of orderlies. The claims of this plan, the best of all, being based on a leader of the "Medical Times," copies of which were printed and distributed on the occasion, as you will see by the enclosed sheet.

This is as it ought to be. There is some chance of progress when men cling to the real sanitary reformer—the medical man,—without whose services London might have surpassed Paris in filth.

I am, &c.

CIVIS.

Dr. Ramsay is thanked. He will observe that another friend had anticipated his kind attention.

J. W.—We are astonished at the strange impertinence of our Correspondent. Does he suppose that an Editor is responsible for all the vagaries of his contributors? Having addressed our Contemporary in such terms, we cannot undertake to exonerate him from the chastisement he has himself invoked.

York.—Hydrocyanic acid was never given by any experienced physician, as far as we know, for the purpose of arresting the sickness attending exhaustion. This is precisely the class of cases where this medicine is worse than useless.

Civis.—To be enabled to send out medicines as well as to prescribe them, it is absolutely necessary that you pass the Hall; but to prescribe, only the diploma of the College is sufficient. It is usual to submit to both examinations in cases where, as in yours, it is probable you must practise as a General Practitioner.

Cantab.—An Oxford licentiate or M.B. cannot practise legally in London any more than yourself, without first becoming a Member of the London College of Physicians; but in the country both of you may do so.

Medicus (Bath.)—No calculation can be made of the amount of credulity which the English people may exhibit in relation to quackery. Unfortunately there is most quackery among the most educated classes. The whole tribe of homœopaths, hydropaths, isopaths, etc., are supported almost entirely by the wealthier portions of the community. The poor spend their pence at a druggist's shop, where poison is sold cheap, and ignorance is not expected to be paid for, except by the life of the purchaser. We believe there are nearly a hundred homœopaths in and about the metropolis, and of course a proportionate number of dupes. We need not say that homœopathy is a patent absurdity, but we suspect that its practitioners are wiser than they profess.

G. S. L.—Mr. Acton was, we believe, the pupil of Ricord, whose practice he had constant opportunities of witnessing. It is a useful book. We think that the disease is not nearly so prevalent as formerly.

[To the Editor of the Medical Times.]

SIR,—I should be glad to have the benefit of your opinion on the following case. Some time ago I was sent for in haste by a policeman, to see a person found dead. As there was no evidence of the cause of death in the room, I examined the body, and not finding sufficient mischief to account for death in the state of the vital organs, I conducted a further inquiry into the character of the fluids contained in the stomach. Arsenic was found in sufficient quantity to enable me to pronounce an opinion before the Coroner, which was supported also by collateral evidence. When the examination was concluded, the Coroner paid me two guineas only for my trouble, at which I demurred, as, I believe, a medical witness is by Act of Parliament allowed one guinea for attendance to give evidence; one guinea for a post-mortem examination; and one guinea for an analysis of the contents of the stomach. If you will favour me with your opinion before I take further steps, I shall feel obliged.

I am, &c.

A SUBSCRIBER OF SEVEN YEARS' STANDING.

[Our Correspondent is entitled to two guineas only. The claim is not legal unless the surgeon have received a formal order from the Coroner to make a post-mortem examination. The fees are one guinea for giving evidence without a post-mortem examination, and two guineas for giving evidence after a post-mortem examination, with or without an analysis of the contents of the stomach. This is important to be remembered.]

G. B.—If you will send the particulars they shall receive attention.

R. J. (Liverpool.)—We will endeavour to find room in our next for your remarks on a Court of Honour. It is a most important subject, and well deserving the consideration of the Profession. Such a Court would soon put an end to disreputable practices.

Student of Medicine, Edinburgh.—We are aware of no such monograph. Our Correspondent however may refer to almost any system of medicine for the information he requires.

The Water Supply for the Metropolis.—We promised to renew this important subject in our present Number. A table, however, illustrative of the comparative chemical qualities of the various sources of supply, not being prepared, we must reserve our promised notice until next week.

One about to recommend a Patient to insure his Life.—We believe the following to be an accurate list of offices which pay medical referees. Several of them, although pledged in their prospectuses or by the letters of their agents to pay the fee, have from time to time neglected or refused to do so. The only security a medical man has when consulted by a Life Assurance Office is, to obtain a written promise to pay the fee before he replies to their questions, otherwise he may be jockeyed out of it. A recent decision in the Shoreditch County Court, Hooper v. the Gresham Life Assurance Office, shows the necessity for this arrangement to be made previously. If the Offices wished to act honestly and honourably towards the Profession, they would send the fee when the letter with the questions were forwarded.

Architects—69, Lombard-street, London.

Britannia—1, Princes-street, Bank, London.

British Mutual—17, New Bridge-street, Blackfriars.

Church of England—Lothbury.

Commercial—112, Cheapside, London.

East of Scotland—1, Bank-street, Dundee.

East of England Mutual—Cheapside.

Engineers', Masonic, and Universal—345, Strand.

English and Scottish Law—12, Waterloo-place, London.

English Widows' Fund—67, Fleet-street.

European Life Insurance and Annuity Company—10, Chatham-place, Blackfriars.

General and Mining—4, Bridge-street, Blackfriars.

General Benefit—4, Farringdon-street.

Great Britain—Waterloo-place, and King William-street.

Indian and London—King William-street, and 14, Waterloo-place.

Industrial and General—2, Waterloo-place, Pall-Mall.

Kent Mutual—High-street, Rochester.

Kent Mutual Life Assurance Society—6, Old Jewry, London.

Leeds and Yorkshire—Commercial-buildings, Leeds.

Legal and Commercial—73, Cheapside.

London Indisputable—31, Lombard-street.

London Mutual Life—63, Moorgate-street, City.

London and Provincial—39, Nicholas-lane.

Medical, Legal, and General—126, Strand.

Medical, Invalid, and General—25, Pall-Mall.

Mentor—2, Old Broad-street.

Metropolitan and General—27, Regent-street, Waterloo-place.

Mitre—23, Pall-Mall.

National Loan Fund and Life Assurance—26, Cornhill.

National Mercantile—Poultry, Mansion-house.

New Equitable Assurance Company—450, West Strand.

North of England—11, Cheapside, London; and Old Haymarket, Sheffield.

Northern Assurance—1, Moorgate-street.

Norwich Union—Crescent, New Bridge-street.

Professional—76, Cheapside.

Prudential—14, Chatham-place.

Royal—Royal Insurance-buildings, Liverpool.

Royal Exchange—Royal Exchange.

Royal Farmers' and General—346, Strand.

Scottish Equitable—26, St. Andrew's-square, Edinburgh.

Solicitors' and General—57, Chancery-lane.

Sovereign—5, St. James's-street.

Star—44, Moorgate-street.

Westminster and General—27, King-street, Covent-garden.

Yorkshire—York.

COMMUNICATIONS have been received from—

P. C.; A GENERAL PRACTITIONER OF TWENTY YEARS' STANDING; Professor QUAIN, of University College and Cavendish-square; A CONSTANT READER; CIVIS; A LONDON APOTHECARY; Professor LIZARS, of Edinburgh; Dr. RAMSKILL, of the Metropolitan Free Hospital, and St Helen's-place; Mr. R. WARD, of the London Hospital, and Broad-street-buildings; Dr. DILLON, of Bath; Dr. BASCOMBE, of Wyke-house, Brentford; Mr. HOLMES COOTE, of St. Bartholomew's Hospital; Dr. TUTHILL MASSY, of St. John's-wood; PHYSICIST; Mr. CHARLES COCHRANE, of the National Philanthropic Society, Leicester-square; AN EXHIBITOR at the GREAT EXHIBITION; A DRUGGIST'S ASSISTANT; A SHADE UP HOME; Mr. GROVE, of Wandsworth; Mr. BROWN, of Callington, Cornwall; Mr. FROGGART, of Coleford, Yorkshire; Mr. BENJAMIN PHILLIPS, of Wimpole-street, and the Charing-cross Hospital; Dr. AYRES, of the Wandsworth-road; Mr. BLACKLOCK, of Dumfries; Dr. RAMSAY, of Gloucester; STUDENT OF MEDICINE, Edinburgh.

ORIGINAL LECTURES.

LECTURES

ON

DIGESTION, RESPIRATION, AND
SECRETION.GIVEN AT THE ROYAL INSTITUTION,
TO THE MEMBERS, AND TO THE PUPILS OF
ST. GEORGE'S HOSPITAL.

By H. BENCE JONES, M.D., F.R.S.,

Physician to St. George's Hospital.

[Continued from page 60.]

ON THE BLOOD; IN ITS RELATION TO THE
FOOD AND THE EXCRETIONS.

My lecture to-day, gentlemen, is upon the blood. On this subject I could give you very many lectures, but it does not agree with my plan to do so in the present course. I intend simply to give you such an idea of the blood as will enable you to understand some part of its relation to the food and to those excretions which will form the subject of my future lectures.

First, then, of what does the blood consist? I may say that it contains the four different classes of substances which I have so often had occasion to bring before you. It is fluid of specific gravity, 1045 to 1075, varying, that is, in the quantity of water present in it. If I evaporate it to dryness I get a mass of solid matter such as you see here; and if I burn it, an ash is produced, of which also I have a specimen. By burning the blood you cannot get a colourless ash, for the blood never can be made so, in consequence of one of the ingredients of the ash; but you may entirely destroy the organic substances which it contains. In addition to the water and salts, two other classes of substances may also be found in the blood; one, the non-nitrogenous substances, as fats and certain acids, as lactic acid, and even sugar, which is said to be present in healthy blood. Fat may be obtained from it by evaporating it to dryness and treating it with ether, which dissolves out the fatty matter. Sometimes the fat is present to such an amount, that it renders the blood perfectly white. I have myself seen it come out from the vessels more like milk than blood, in consequence of the presence of much fatty matter. This blood, of course, was in a state of disease. The other class is the albuminous, and not only one, but three substances at least, all of which have nearly the same composition, are present. One of these is albumen, which forms the chief constituent of the serum; another is the fibrin of the blood, which causes it to coagulate; the last exists in the blood-globules. All these are invariably present in the blood. The following analysis was made many years since:—

Analysis of Blood by Lecanu.

Water	780 145 ..	785 590
Fibrin	2 100 ..	3 565
Hematosin	133 000 ..	119 326
Albumen	65 090 ..	69 415
Fat and oil	3 740 ..	6 570
Extractive	1 790 ..	1 920
Albuminate of soda ..	1 265 ..	2 010
Chlorides of sodium and potassium		
Carbonates } of potassa and	8 370 ..	7 304
Phosphates } soda.		
Sulphates }		
Carbonate of lime and magnesia		
Phosphate of lime, magnesia,	2 100 ..	1 414
and iron		
Peroxide of iron		
Loss	2 400 ..	2 586
	1000 000	1000 000

but it is sufficient for my purpose, because it shows you the amount of water, salts, and organic substances which the blood contains. The variations which take place in the proportions of these constituents are very great indeed. You are not to regard this as the standard of healthy blood, and

[No. 618.—VOL. III., NEW SERIES.]

suppose that all other blood that does not come up to it is unhealthy; but it is to be regarded as an ordinary and average analysis. I may refer you to this Table for the

Blood.	Average of Health.	Variation in Disease.	Rheumatism.	Fever.	Anæmia.	Cerebral Congestion.	Bright's Disease.
Fibrin	117	10½ to 1	10	9	3.5	2.7	3.2
Globules	117	185 to 21	101	93.1	38.5	152.3	82.0
Solids of Serum ...	117	114 to 57	90	86.0	89.0	105.4	74.8
Water	800	915 to 725	799	820.0	869.0	740.0	850.0
	1000		1000	1000	1000	1000	1000

variations in disease, and for the comparison with the state of health. Here also is a diagram which professes to give the difference between the blood of men and of women:—

	Men.	Women.
Water	789	804
Albumen	67	69
Salts	10	9
Globules	134	118
	1000	1000

Possibly it may do so, but we must remember, that at each moment the blood is undergoing a change in our bodies, and that an analysis which may be true at one moment may not be so at the next. Lastly, I have one more analysis of the ashes of the blood, and

In 10,000 parts of Ash of Flesh.	Blood.	Milk.
Chloride Potassium ..	—	1418
Chloride Sodium	147	474
Soda	486	696
Potassa	3995	2346
Lime	180	1734
Magnesia	388	220
Oxide of Iron	100	47
Phosp. Acid	4674	2804
Sulph. Acid	30	5
Carb. acid	—	250
Silica	—	6
	10,000	10,000

the comparison of these with the ashes of flesh and milk; it was made at the direction of M. Mitscherlich, of Berlin, and represents the composition of 10,000 parts of the ashes of these substances. It is, probably, the most accurate analysis which has been made of the ashes of the blood. You must not suppose that any of these numbers are absolutely invariable; they are as accurate as our present mode of analysis admits them to be. Moreover, it is not possible, as I have said, for the blood to retain the same composition for a single moment. If you remember that substances are constantly going into the blood by the process of digestion, and at each moment substances are passing out by the lungs, the skin, and the kidneys, you will see at once that the constitution of the blood must be constantly changing. The natural processes which occur in the body keep the composition of the blood from varying beyond certain limits, whilst they render it impossible that the numbers obtained on analysis should be always precisely the same. The quantity of water, for instance, is always changing, frequently considerably so, from fresh supplies of water being taken into the system, or from evaporation or excretion. The quantity of saline substances changes also, the urine always carrying off these substances in considerable quantities, and the food restoring them to the system. A certain quantity of albuminous substance is always required to nourish the muscles, and something is needed to supply the constant loss which they undergo by perpetual change. There are changes; moreover, in the non-nitrogenous substances, the fatty matter, the lactates, and salts, which are present. These are always changing from the action of the oxygen of the air upon them, while the blood circulates in the body. Nutrition, secretion, the motion of a

muscle, cannot take place; indeed, there can be no action, or even thought, without a change being effected in the constitution of the blood.

Having said thus much on the general view of the composition of the blood, we will go a little more minutely into the chemistry of these substances separately. If blood is drawn out of the body, and is allowed to flow into a vessel, change speedily ensues. The blood is fluid at first, but it very soon ceases to be so; it coagulates more or less rapidly, and gradually separates into blood-water and blood-clot. The coagulation begins in from three to five minutes; is much more decided in from seven to ten minutes. The water at the top is easily poured off, and a solid mass remains almost like a mass of flesh, which cannot be poured out. The first and most characteristic property of the blood is, perhaps, its red colour, and the second is its power of coagulating. What are the causes, then, of these two peculiarities, the colour, and the coagulation of the blood? The colour depends not on the serum, but on one of the ingredients of the clot. If I wash the clot thoroughly, you will see that a perfectly colourless adhesive body remains. The colouring matter consists of inadhesive globules, which, in the circulation, float about in a colourless fluid. The fibrin or colourless adhesive substance is dissolved in the colourless liquid, and does not coagulate while the blood is circulating through the system. In the blood liquid, which consists of blood-water, and the fibrin which is held in some peculiar state of solution, these blood-globules are so well mixed, that the whole of the blood appears to be of a red colour. The cause of the coagulation is the fibrin which exists in a far smaller quantity than the globules. The proportion in healthy blood being about one of fibrin to forty parts of blood-globules. The blood-globules may be obtained by washing the coagulum thoroughly in water, or by letting the blood flow into a saline solution, which hinders the fibrin from coagulating, when the blood-globules fall to the bottom of the vessel. Here is an instance before you. The blood-globules may thus be obtained separate from the fibrine, which is prevented from coagulating by the sulphate of soda which was dissolved in water, and was mixed with the fresh drawn blood.

The greatest peculiarity of these globules is, that they contain iron. If I take some of the ashes of the blood, or better still, if I take the ashes of the blood-globules, and treat them with a little pure hydrochloric acid, which contains no iron, you will see that I shall have a solution containing a considerable quantity of iron. On the addition of ferro-cyanide of potassium, I shall have Prussian blue produced; or if I test the solution of the ashes with sulphocyanide of potassium, you will see an intense red solution, proving that a persalt of iron is present. (Experiments.) The iron may actually be obtained from the blood; and it has been even proposed to extract the whole of it from the blood of a human being, and to make out of his blood a small iron statue of the man. That the quantity is by no means inconsiderable, you may conclude from this specimen of oxide of iron which has thence been obtained.

The albumen which is present in the blood-water in solution is a substance which can be detected by the easiest re-agents. A moderate heat, or a little nitric acid, will immediately cause the blood-water to form a coagulum similar to that which forms when the white of an egg is heated or tested with nitric acid. (Experiment.)

The fibrin of the blood, which holds the blood globules in the coagulum, is present in comparatively small quantity. I have already mentioned to you that the venous fibrin is soluble in a solution of nitrate of potash. This you saw clearly in one of my former lectures; and when so dissolved it will give a precipitate with acids, and with heat, somewhat similar to albumen. But the peculiar property of the fibrin is, that it coagulates spontaneously when it passes out of the body. When in the body, the fibrin, as I have said, is in solution, for the blood comes out tolerably limpid, there being no distinct appearance of solid matter in it; but it becomes so firm as sometimes to require considerable force to separate it. The coagulation of the fibrin has been compared to the contraction which takes place in the muscles after death. Though this is a very beautiful analogy, and appears to be a very striking one—that, as the fibrin of the blood coagulates when it passes out of the living body, so when the life passes from the body the fibre of the muscles becomes rigid; yet it is only an analogy, and no proof of this identity of the fibrin of the blood and the fibre of the

muscle, nor of the actions which occur in them. The coagulation of the fibrin can by no means be considered as a sign of the death of the blood; it would be much nearer the truth to compare it to the process of crystallisation—the deposition of a substance which has been in solution, after the circumstances which caused it to remain dissolved are changed. Moreover, I cannot admit that the composition of the fibrin of the blood and the fibre of the muscle are the same. I have already given you some reasons for believing them to be very different bodies; and I do not think you will gain anything by comparing coagulation to the rigor mortis. The coagulation sometimes takes place during life in the large vessels of the body. The mass of almost colourless fibrin which forms in aneurisms is the most remarkable example of this occurrence. But, you will say, why does the blood out of the body coagulate? On this point I cannot satisfy myself or you; I can only tell you that it is the property of the fibrin to exist in solution in the serum when the blood is in motion; but when it is taken out of the body, or when it is in a state of rest, even in the body, it then adheres and coagulates. It was said at one time that the formation of the clot was caused by the adherence of the blood-globules; that these blood-globules, when fixed together, formed the coagulation. But in frog's blood we are enabled, before coagulation, to separate the fibrin from the blood-globules; such blood contains globules which are very large, and cannot easily pass through a filter. By simply taking the fresh blood of a frog, and putting it on a filter before it is coagulated, the blood-globules are caught and separated from the clear liquid which passes through, and on standing, will give a colourless coagulum. In this way it is shown that the blood-globules are not the cause of the formation of the clot. The fibrin is said to contain a small quantity of iron, but of this there is much doubt. It is very difficult, indeed, to free fibrin altogether from the colouring-matter. It may be washed a very long time, and yet a small quantity of the blood-globules will probably remain; and it is these, perhaps, which give rise to the iron found in fibrin. Much discussion has arisen regarding the state in which the iron exists in the colouring-matter; but whether it exists in combination with oxygen, as oxide of iron, or whether the organic compound consists of carbon, hydrogen, oxygen, and oxide of iron, is a matter of comparatively very small importance, and one which can never be ultimately settled. It is certain that the iron is so closely combined with the other ingredients that you cannot separate it without destroying so far the constitution of the body. It is sufficient to know that iron is one of the ingredients of the colouring-matter just as much so as carbon. It is impossible to determine the actual state in which the elements exist. It is sufficient that, with the greatest ease, the presence of the iron can be determined. Here are specimens of pure hematin, for which I am indebted to Professor Liebig and Dr. Garrod, containing 6·6 per cent. of iron.

The blood-globules are considered not to be composed of hematin alone, but of another albuminous substance, named *globulin*, which is mixed with the hematin, and both are enveloped in the proper membrane of the globule. The globulin is not identical with albumen or with casein, though it is closely related in composition. It has also been called crystallin, because it exists in the cells of the crystalline lens in a very concentrated solution. Berzelius states that the crystalline lens contains nearly 36 per cent. of dry globulin.

The albumen of the blood exists in solution in the serum; it is not soluble in pure water, but is very easily dissolved by the salts which the blood-water contains. The salts consist, as you see, of carbonates, phosphates, and sulphates. If I examine the reaction of the blood, you see that it is quite alkaline. This arises partly from the carbonate present, and in great part from the presence of alkaline phosphate of soda, which has as strong an alkaline reaction as the carbonate alkalies. From the experiments of others, and from my own experiments also, I have no doubt that carbonated alkalies exist, at least occasionally, in the blood, though they may not be found when the ashes of the blood have been so fully burned that a total change in the composition of the salts has taken place. It is almost certain, that in the blood-water alkaline carbonates as well as alkaline phosphates exist; and it is to these salts that the alkaline reaction of the blood is owing. This reaction is of very great importance. Without it the processes of the body could not take place as they do. The albumen, for instance, could not be held in

which form the peculiar characteristic constituents of the urine. These can be found in small quantities in healthy blood. I have here a beautiful specimen in long crystals of urea obtained from the healthy blood of an ox, for which I am indebted to M. Verdeil. It is obtained by drying the serum of the blood, reducing it to the finest powder, mixing it with alcohol, and then pouring off the alcoholic solution, which, in health, always contains small quantities of urea. In some diseases the quantity of urea in the blood is considerable—as for instance in Bright's disease. In this disease the blood-globules are exceedingly diminished—the albumen is constantly passing out in the urine; and it is always found that urea is one of the constituents of the serum. It may be obtained thus:—Here is the serum of a patient who was bled in St. George's Hospital. Here is a portion evaporated to dryness; a part of this dry residue is treated with absolute alcohol, the alcoholic solution is evaporated in vacuo to dryness; and the dry residue is dissolved in a little water; on the addition of nitric acid nitrate of urea as you see immediately crystallises.

Uric acid is also found in the blood in health and in disease, combined with soda. It was discovered by Dr. Garrod, of University College; he states that it exists in increased quantity in the blood of gouty subjects; and, from my own experiments, I can confirm the truth of his statement. Dr. Garrod also says, that he found in Bright's disease urate of soda in excess in the blood. In that disease the kidney is prevented from performing its proper functions; the ingredients of the urine are not separated as they should be, and thus urea and uric acid accumulate in the blood. Uric acid, like urea, can be easily detected, by taking the serum, or the blood as a whole, evaporating it to dryness, reducing it to the finest powder, and treating it with boiling water; urate of soda will thus be obtained in solution. The liquid is filtered off from the insoluble albumen, and the clear fluid is mixed with strong acetic acid, and set aside to crystallise. The uric acid adheres to the sides and bottom of the glass. It may be collected, and will give the characteristic reactions with nitric acid and ammonia.

Kreatin, which I formerly mentioned as one of the constituents of the flesh, probably exists in the blood. It exists certainly in the urine, as I shall have to show you. Hippuric acid, also which exists in the urine, especially in granivorous animals, has been found in the blood. It was detected in the blood of an ox, by M. Verdeil. Lastly, Dr. Garrod also considers that he has found oxalic acid in the blood of a patient in University College Hospital.

Thus, then, there exist in the blood, not only the substances which pass into the body as food, but the substances which pass out in the excretions. I have said that the great peculiarity of the blood is, that it contains fibrin and the red globules; these substances cause the blood to differ from all other fluids. The spontaneous coagulation and the red colour are caused by the globules and the fibrin; neither of which exists ready formed in the food, nor are they ever found in the healthy excretions. If it were not for these substances, it might almost be said that the blood was nothing but a solution of food passing in, and of substances passing out of the body: it is then by the formation of the fibrin and blood-globules that the blood is made a peculiar substance,—an organised liquid, which may live and die like the more solid organs of which we are composed.

I cannot conclude this lecture, without apologising for attempting to give you a sketch in one lecture of that knowledge which I could scarcely comprise in the twenty-one lectures of which this course will consist. In my next lecture I must pass on to the subject of Respiration.

CLINICAL LECTURES,

AT

UNIVERSITY COLLEGE HOSPITAL.

By R. QUAIN, Esq., F.R.S.

ON STRANGULATED INGUINAL HERNIA.

You witnessed, Gentlemen, two operations for strangulated inguinal hernia upon the same afternoon a few days ago. These cases will serve us to illustrate several points of interest in a subject, every example of which has a degree

of practical value. The history of each of the cases is as follows:—

George Fife, a horse-keeper, aged 43, married; is of rather small stature and slight conformation; has usually been healthy, but says he has never been a strong man.

About five years ago, immediately after falling down a step, he felt what he terms "a weakness" in the right groin. This, he says, passed off gradually. According to his statement, he has never since felt anything wrong in the part. But, upon strict interrogation at a subsequent period, he admitted that there had long been a fulness in the groin. That there must have been some enlargement here was fully proved during the operation by the condition of the omentum found in the scrotum. Discrepancies of this kind between the report of the patients and the facts are so common, that I habitually place but little reliance upon their statements in reference to the previous history of the hernia; and I have long noticed, that in order to extract anything useful in the way of information, there is need of a good deal of patience and some management. It may be, that the general discomfort produced by the disease is in a measure the cause of many patients being unable to give any satisfactory account of their previous state. The report continues thus:—

On the morning before his admission to the hospital, the patient, while walking, fell upon his nates, and he immediately felt "a lump" in his right groin. He soon became sick, and vomited; he began to feel "dreadful pain" in his belly about the navel; and he found lying upon his back less easy than sitting up. The swelling in his groin became hard; he squeezed it tightly, in order to lessen it, but ineffectually.

On admission:—a swelling is found upon the right side, extending from Poupart's ligament to within half an inch of the testis, at the lower end of the scrotum. The tumour starts into considerable size suddenly from the wall of the abdomen. There is a degree of fulness in the inguinal canal, and here there is tenderness on pressure likewise. On its inner side the tumour reaches to the middle line, pressing aside the penis. The wall of the abdomen is not tense, but it is tender to the touch, and the tenderness extends over towards the left side. The tumour is very tense, and sensitive to the touch, the greatest sensibility being at its upper end. The patient's tongue is slightly furred, brownish in the middle, and white at the edges. He was put into a warm bath for half an hour; and the effort then made for a short time to reduce the hernia being ineffectual, the operation was performed, the patient being under the influence of chloroform.

In the first incision, which was made over the inguinal canal and the upper end of the tumour to the length of about two inches, two veins of larger size than usual were laid bare and divided. To these ligatures were loosely applied, to prevent inconvenience from the flow of blood during the operation. (The ligatures were removed after the reduction of the hernia). As it was now ascertained that the external abdominal ring did not oppose the reduction of the hernia, the tendon of the external oblique muscle was divided to the extent of about an inch and a half in the course of the canal. Then the deep muscles were cut across, all the fibres being completely divided. Pressure was now made upon the hernia, and it was found not to swell upwards in the course of the inguinal canal. The deep cellular investment of the sac was, therefore, cut through. The sac, thus laid bare, appeared very thin and diaphanous, except at one point situated about half an inch above the external inguinal ring. Here there was found a deep narrow transverse depression, by which the hernia was stopped from moving higher when pressure was made upon it with the hand. The sac above and below this constriction being now pressed inwards with the fingers, the thickened structure was divided gradually with the point of the knife, and when it was cut through the sac was open for the length of about a quarter of an inch. A knuckle of intestine was now easily replaced with slight pressure, and a considerable piece of omentum was brought into view. This, at the lower end, was found to be thickened and extensively adherent to the sac; but the remainder was nearly natural. It was left in the sac. The bowel was discoloured, but not deeply so. During the latter steps of the operation a large quantity of serum, not very deeply tinged in colour, escaped from the abdomen, and a good deal of the same kind of fluid escaped from the sac when it was pressed upon. In fact, the lower part of the tumour had been formed

of this fluid. The history of the second case runs as follows:—

Henry Wood, a shoemaker, aged 40: Many years ago had syphilis, and he has since suffered from various forms of the secondary affections of that disease, particularly sore throat and caries of the bones of the nose. His complexion is sallow, his nose is flattened, and his breath is very offensive; altogether he presents an unhealthy appearance. Twenty years since had a swelling in the groin, (a hernia, doubtless,) on the left side, which he attributes to a fall down the hold of a ship, though the swelling did not occur for some time afterwards. In about a year after this he first wore a Truss, and he continued to wear it till within the last two or three weeks, during which time he has omitted to wear one, the Truss he had being worn out. The hernia has not been down during the last eight or nine years until yesterday. Before that time it occasionally descended, and he used to reduce it by his own exertion. About a year ago he first observed a rupture on the right side likewise; he cannot in any way account for its occurrence. Yesterday he was engaged in working in his garden, but without making any strong exertion, when he felt "a sharp cutting pain" in the lower part of the abdomen, and he then discovered a swelling in the left groin, which he tried to reduce as he had done formerly, but without success. About two hours after he first observed the swelling in the groin vomiting occurred, and since then everything he has taken in the way of food has returned, as well as two doses of sulphate of magnesia which he took to open his bowels.

When brought to the hospital, there is found occupying the inguinal region and the scrotum a large pyriform swelling, four and a-half inches long by three inches transversely. The testicle is felt at the lower end of the swelling. This is very tense and tender to the touch, and the tenderness is most marked towards its upper end. The abdominal parietes are not tense, but there is some general tenderness over the belly, and this is particularly marked near the inguinal canal. The patient feels, occasionally, paroxysms of severe pain, and this is most intense about the umbilicus. He lies with his legs drawn up, and says this relieves the pain. On the right side there is a small reducible hernia. Pulse 92, sharp and small; tongue dry and slightly furred. He was placed in a warm bath for an hour, but this had no effect in aiding the reduction of the hernia, though it rendered pressure over it more bearable.

Operation.—The patient was placed under the influence of chloroform in the ward, and was then removed to the theatre. The integuments over the inguinal canal and the upper end of the tumour were in this case raised into a fold, and then divided from within outwards, to the extent of about two inches. A few touches with the scalpel now laid the external oblique tendon completely bare. The external ring being found not to obstruct the ascent of the hernia, the tendon of the muscle just named, and the two deeper muscles, were divided. When the latter were brought into view, a pellet of fat projected at the lower end of the wound; it was taken away. After the muscular structure of the two deep muscles had been completely divided, an attempt was made to replace the herniary tumour, but without avail. There was plainly in view at this period a narrow, elongated tube of membrane, above which the tumour could not be forced by pressure upon the scrotum. This structure was carefully divided, and it proved to be the sac amalgamated with its cellular investment. An opening of half an inch in length being made (the constriction being so long), the omentum was seen; and now the bowel was returned into the abdomen under the influence of slight pressure over the swelling. The intestine was not seen, being concealed behind the omentum. This structure was in small quantity, and was unaltered; it was left in the sac. When the gut was returned to the abdomen, some reddish-coloured serum escaped from that cavity.

I did not, you will observe, make any prolonged attempt to replace the hernia in either of the foregoing cases. I abstained from doing so, because the patients had, each of them, tenderness of the abdomen, most severe in the neighbourhood of the rupture, and gradually decreasing in intensity towards the opposite side of the belly. In each, too, the tumour was very tense as well as tender to the touch, and there was considerable pain on pressure being made over the inguinal canal outside the prominent part of the swelling. Moreover, one of the patients, who had himself repeatedly reduced the hernia several years previously, and

who, therefore, had acquired some skill in the mode of manipulating with the view of effecting this object, was obliged, upon making trial on this occasion, speedily to desist on account of the pain he suffered.

Respecting the tension of the tumour, from the importance of this condition in assisting the surgeon to decide upon the probability of the hernia being returned to the abdomen, a few more remarks are necessary. It has frequently happened, that, when a patient has been brought to the hospital, the feel of the hernia has at once decided me whether I should continue at the hospital or commit the case to the house-surgeon. Some time since, a man was admitted (Gilbert, "Case-book" XIV., p. 184) for a scrotal hernia, upon whom the late Mr. Morton had previously operated, for strangulated hernia, at the same place. This patient was at times afflicted with an almost incessant cough, and the efforts of the cough brought down the hernia during the night. The hernia was not tense, and from this fact I concluded that, in all probability, it would be reduced without operation. Notwithstanding several and varied expedients, the reduction was not effected till after the lapse of several days.

The same point is still further illustrated by a case of strangulated inguinal hernia (in a large and aged man, a tradesman) to which I was called in consultation with Mr. William Arrowsmith. An operation having become necessary, I made a short incision through the integuments from a little below the external ring upwards, and divided the tendon of the external oblique muscle, as well as the margin of the deeper muscles. With the aid of pressure upon the swelling, the bowel was now emptied of flatus, and it became flaccid; but I found it impossible to complete the operation by restoring the intestine to the abdomen. Still, as I regarded it of especial importance to avoid opening the sac, the efforts to replace the bowel with the hand were for the time discontinued, in the confident expectation that, with some aid from other means, the bowel would ultimately be restored to its natural position without further interference in the way of operation. The patient, it is to be understood, had been freed from all distress by the operation. The strangulation being at an end, he might indeed be said to have been brought into the condition of a person suffering from irreducible non-strangulated hernia which had not been operated on. On the following day, the bowel slipped back after an enema, under the careful management of my friend Mr. Arrowsmith.

But to return to the caution necessary in using the taxis, as it is named. It is certain that from injudicious pressure, (*i. e.*, pressure too forcible or too long continued) upon the bowel, with the view of unloading it of flatus and restoring it to the abdomen, very serious consequences have from time to time arisen. The most marked illustration of the evil which has fallen under my own notice, occurred in this hospital. The circumstances were briefly these:—A female (Williams, in *Female Case-book* No. VII., p. 142) was admitted with a large femoral hernia, one of the very largest that I have seen of this kind of hernia. It covered, literally, the fore part of the thigh, reaching outwards, close to the anterior spine of the iliac bone. My efforts to reduce the hernia having failed, I left the patient while preparations were being made for the operation. On my return in half an hour, the large thin covering of the hernia (the skin and the sac) alone remained, and it was hanging in loose folds. The patient had emptied the sac of its contents. But symptoms of abdominal disease supervened—indeed they scarcely remitted for a moment—and the patient died. Upon examination, *post-mortem*, in addition to the usual evidences of active peritonitis, about four feet in length of the small intestine (the part doubtless which had been strangulated) were found studded over at intervals with patches of ecchymosis,—the result, it must have been, of excessive pressure upon the congested vessels. Even a greater amount of injury than this has been inflicted under like circumstances, for the bowel has been actually burst by the pressure of the patient's own hands. An instance is recorded by Mr. Travers, (*Med. Chirurg. Trans.*, Vol. XXIII.) In such cases as these, the evil effect of the compression is obvious, but the amount of injury produced by pressure as it is commonly used, for the replacement of a hernia, is not ascertainable; for, in lesser degrees of injury than those above cited (supposing some to have been inflicted) it is not possible to assign to the pressure, apart from the strangulation, its appropriate share in the evil result. Nevertheless, there cannot be a doubt that the compression of the bowel, if there

be any tendency to inflammation, is calculated to do mischief. In the cases now under our observation, the presence of tenderness was taken as the contra-indication to the continued use of the taxis. It was not, I may add, expected that any material benefit would follow the use of the warm bath, which was resorted to in both cases; but apart from other considerations it is not unimportant to show patients that there is a strong desire on the part of the surgeon to avoid resorting to the operation. In this, as in other diseases where an operation becomes necessary, it is well that the patient should be led to form for himself a conviction of its necessity.

THE OPERATION AND THE STRICTURE.

And now as regards the operations. To my mind, the evidence in favour of conducting the operation so as to avoid opening the herniary sac is conclusive. When performed upon that plan, the operation might be considered as undertaken in aid of the taxis, and objections to the one would apply with nearly equal force to the other. The first incision was made differently in each of the cases. This circumstance will show sufficiently, that I regard the mere mode of effecting this step of the process as a matter of indifference. The integument was divided over the point at which the stricture was expected to be found. It is worthy of remark, that in both cases, the obstruction to the return of the hernia was in nearly the same place, and that in both it was caused by an adventitious structure,—a deposit in the sac, or upon it. The narrow circular constriction in the first case resembles that which I now show you (presenting a preparation.) This condition probably arises from increased action in and around the neck of the sac, while it is compressed at the internal ring, or in the inguinal canal, under the fibres of the deeper muscles. More than one, even several such constrictions, have been formed in the same sac, all doubtless being produced by the same cause and in the same place. The number and the position they occupy are sufficiently accounted for by the successive forcing downwards of the sac as the hernia enlarges. The more extensive thickening of the sac in the second case is attributable, most probably, to the pressure of the truss during a series of years. In recent hernia, "the stricture" is not of the same kind as in either of these cases, for the peritonæum when first protruded, being very thin and extensible, the obstruction is commonly owing to the abdominal muscles or tendons.

Perhaps the chief point of interest in the cases above narrated is this, namely, that they afford a good illustration of a condition which renders it impossible to replace the hernia without opening the sac, for, you will observe, when "the stricture" was fully divided, the sac actually lay open. And here I may remind you, that a little time ago, another and very different source of obstruction, which likewise rendered it necessary to open the sac in order to replace the bowel, was presented in an operation which you saw me perform. In this instance, (the case of Frederick Roberts), even after the sac had been opened and its neck was found to be sufficiently widened, the operation was not completed till the bowel had been freed from a strip of omentum, which was in some sort coiled about it. The obstacle here was the less easy of discovery from being of an unusual kind and slender, as well as placed deeply in the inguinal canal,—a very narrow passage.

But, although the opening of the sac was unavoidable in the cases at present in the hospital, it is to be remembered that the extent of the aperture was as small as was possible, consistently with the object of the operation.

The further history of the cases will form the subject of another lecture.

ORIGINAL COMMUNICATIONS.

CASES OF INTESTINAL OBSTRUCTION.

By BENJAMIN PHILLIPS, Esq., F.R.S.,

Surgeon to the Westminster Hospital.

THE following cases of Intestinal Obstruction are recorded for the purpose of illustrating the difficulties of diagnosis. Before long, I propose still further to illustrate the subject,

and to make some suggestions, which I would fain hope may be useful to those who have the charge of such cases.

I. PURE ILEUS. — OPERATION. — DEATH. — POST-MORTEM EXAMINATION.

A. W., a cabinet-maker, aged 50, rather a gross feeder, but a perfectly sober man, applied to me under the following circumstances. He stated that he had had a sense of pain and tightness around the lower part of the chest, with some nausea, for several days. The tongue was pretty clean, the pulse quiet, the bowels somewhat irregular in their action.

I ordered for him Hydrarg. chloridi. gr. iv., ext. Coloc. comp. gr. v.

Two days afterwards I saw him again, he was somewhat relieved. The medicine had produced three small stools on the morning after it was taken; still there remained the nausea, and some sense of oppression about the chest. I directed him to repeat the dose of calomel and colocynth, and to take a castor-oil draught in the morning.

In two days afterwards, I saw him again. He expressed himself as somewhat relieved; but his discomfort was not got rid of; the nausea persisted; he had had two scanty stools from the medicine. The tongue was clean, and the pulse was quiet. On this occasion, I examined the surface of the abdomen; upon carefully exploring the epigastrium, the hand came in contact with a small umbilical tumour, which he said had existed long, and was unheeded. There was no tenderness upon pressure of this tumour, neither was there impulse communicated by coughing. The abdomen in other respects was natural. In this state the patient continued for ten days, the bowels acting scantily when medicines were administered by the mouth; but otherwise constipated. There was no abdominal tension or tenderness.

On the afternoon of the twelfth day from my first seeing him, I was sent for in haste. I found that he had had a violent "convulsive attack," from which he continued to suffer for an hour, and that a large stool had been passed involuntarily during this time. He was quite recovered from the attack when I saw him. He still complained of sickness, and the tongue was slightly coated; but the abdomen was perfectly free from tympanitis or tenderness.

I now felt it my duty to ascertain whether there was any mischief at the umbilicus. I cut down upon it, and I found that the tumour was formed by a small pellet of omentum, tightly bound, and adherent, but exhibiting no signs of damage from constriction. With some difficulty, I enlarged the umbilical opening, and passed my finger into the abdomen, to satisfy myself that all was free; but I could not without more dissection than I thought prudent return the omentum into the abdomen.

I saw him again in the evening. The sickness still persisted; the abdomen was still flat, and free from tenderness. I ordered that he should have a castor-oil enema early next morning.

When I saw him the next day, I found that the injection had brought nothing away with it; that the sickness still persisted; that there was a good deal of borborygmus; that the abdomen was still flat and painless; that the pulse was 80; and that a great deal of water had been passed.

I ordered Hydrarg. chloridi gr. x.; Opii gr. ij. statim; olei ricini, sp. tereb. aa. ʒj., pro enema post horas quatuor.

The next morning I found he had had some sleep, but the sickness and borborygmus persisted; the abdomen was still soft and flat, and not tender; but there had been no stool.

I ordered that the calomel and opium should be repeated.

It now became a question, whether any further exploratory operation should be performed; and on this subject I had the advantage of a consultation with Mr. Arnott, who came to the conclusion, that there was no clear indication for such a proceeding. We agreed to continue the calomel, omitting the opium.

Ordered to have hydrarg. chlor. gr. ij. 3tiis. horis.

He died the next day.

The body was examined twelve hours after death. Mr. Arnott was present. The abdomen was by no means tumid; the parietes were very flat. A conical incision was made, and when the flaps were laid aside, the contents of the cavity were found well covered by omentum, in which there was much fat. The mesentery was edged, as it were, by something which bore a considerable resemblance in colour and size to a large earth-worm. We found this to be the small

intestine, shrunk up to the size of narrow tape, and it had a pink colour. It was carefully followed until we arrived in the left hypochondrium, when the shrunken character ceased, and was immediately succeeded by a brown dilated portion of the same tube. The point where this sudden change took place was three feet nine inches from the duodenum. The appearance there was not unlike that of the appendix vermiformis and the cæcum.

A portion of intestine, including some inches above and some inches below the shrunken portion, was removed from the cavity, examined carefully externally, and no pathological structural change was apparent. Some water was poured into it, and the whole shrunken portion at once resumed its ordinary diameter. The other portions of the canal, as well as the other abdominal organs were in a healthy state.

II. OBSTRUCTION, DEPENDING MAINLY ON AN ABNORMAL DIRECTION OF THE INTESTINAL CANAL.

E. N., aged 22, was in his usual health on Thursday. About twelve o'clock, as was his custom, he took some bread and cheese, of which, particularly of the latter, he ate heartily. Not long afterwards, he began to complain of a griping pain in the stomach and bowels, of which, however, he made light. He attributed it to the cheese he had eaten. Though it recurred at short intervals, he did not suffer it to interfere with his duties.

At five o'clock—his dinner time—he did not appear at table; he remained in his bed-room, lying down, and complaining of a great deal of pain, which he referred to the stomach. He still said it must be the cheese which distressed him. The medical man who saw him prescribed an emetic; but before it could be procured he made himself sick by irritating the fauces with his finger. He took the emetic, however, and brought up from the stomach a very large quantity of what seemed in great part undigested cheese. He was relieved, and it was hoped that the cause of his trouble was removed. In half an hour, however, he complained that the pain had become much more violent in the same spot, and it was accompanied by violent though ineffectual efforts to vomit. The pain occurred in paroxysms, which were succeeded by periods of perfect ease.

There was no tenderness on pressure anywhere. He could not be made to swallow anything because of the great irritability of his stomach. A few grains of calomel were laid upon his tongue, but it excited new efforts to vomit, and the stomach could not be quieted. Meanwhile, the intensity of the abdominal pains increased. He was continually turning from side to side, occasionally writhing with agony, much in the way of a man having violent colic. Warm fomentations, and subsequently a warm bath, were tried, but without benefit. In an hour or two the pain became more extended; it seemed to take the course of the descending colon, and to lessen at the point it first occupied, as if it were occasioned by an irritant which was passing along the large intestine. At length the pain became more fixed and continuous in the left iliac fossa, and it continued there through the remaining course of the affection.

A dozen leeches were applied at this point, and an injection of forty drops of liquor opii. sedat. was thrown into the rectum. Shortly afterwards he obtained ease, the vomiting ceased, the paroxysms of pain abated, and he fell into a quiet sleep.

On the following morning (Friday) he looked and thought himself better. The whole abdomen was not altogether free from pain, and there was a very slight amount of tenderness. The patient was very anxious that the bowels should be evacuated, as he thought that then all would be right. The stomach was still somewhat irritable, but he thought he could keep down some medicine. A saline purgative draught was given and immediately rejected. Soon after, upon the patient expressing his belief that he could retain pills, ten grains of compound extract of colocynth and a drop of croton oil were given to him, but were not long retained. By two o'clock he had become much worse, and it was at this time I saw him. He had been vomiting very recently, and there was increased abdominal pain. I found, distinctly marked, upon the surface of the abdomen, below the umbilicus, the course of a coil of intestine across the abdomen, together with general and considerable tension. The tongue

was covered with a buff, shiny coat; the pulse was frequent, but compressible.

It was determined to let the stomach get quiet, and to assist in this object a little hydrocyanic acid was exhibited. Emollient injections were thrown into the intestine. In the evening the pain was more severe; the skin was hot; the pulse was 112, and wiry; the tenderness in the left iliac fossa was more acute. Blood was taken from the arm to the extent of eighteen ounces, with some relief. It had a tolerably thick, buffy coat. Calomel two grains, Opium half a grain, to be taken every three hours.

Saturday morning early, the pain became more severe, and it was aggravated by pressure. There was also more general distress; thirty leeches were applied to the abdomen, and with much, though not lasting, relief. In addition to the pills it was now determined that mercurial ointment thickly spread on lint should be laid over the abdomen. The distension and pain increased, no sleep was obtained, and there was no evacuation from the bowels.

The right side and upper region of the abdomen were now most distended. The left iliac fossa was the seat of most pain. There being no appearance of mercurial action in the system, the calomel was increased to three grains every three hours. Towards evening he suddenly complained of more violent pain than he had yet felt. The breathing was irregular, the heart's action flagged, the pulse was extremely feeble, the temperature of the surface fell, and it was covered with cold sweat, and the patient thought himself dying. Stimulants were cautiously given, and he gradually rallied, but the restlessness increased.

An injection was administered, and brought away only some small pellets of hardened fecal matter.

The night was passed with more restlessness and urgent distress. In the morning there was a slight remission in the distress for awhile, but there was more abdominal tension; the pulse was very feeble, and often very rapid; the tongue was dry and slightly brown, and there was no mercurial action. The day was passed much in the same state, and the night was unpromising.

On the morning of Monday there was not much change. The day passed much as the last, but in the evening he was much excited. There was some delirious dreamy excitement, and the opium was suppressed, under the idea that it might be probably the cause of it.

Tuesday morning, at five o'clock, a considerable quantity of fecal matter was evacuated. It contained two or three hard pellets, which resembled plum stones, and there were a lump or two of excessive hardness. Soon afterwards there was another small evacuation. There was a temporary mitigation of the symptoms. The prostration, however, was very great. The abdomen for awhile was less tumid; there was less tenderness, but there was a failing, irregular pulse. Instead of sleep there was soon more agitation, there was more abdominal distention, the breathing was occasionally laboured, any portion of the surface when exposed became quickly cold. Towards night the exhaustion increased, a blackish fluid was vomited. He died at half-past two o'clock on Wednesday morning.

Post-mortem.—The abdominal cavity alone was examined. On exposing the contained viscera the small intestines were observed to be distended to nearly twice their natural diameter, throughout their entire length, with the exception of the last inch or two of the ileum. They were universally inflamed and glued together by recent lymph. The omentum was spread out as usual over the small intestines; but, at its lower part, it was drawn into a band of about two inches in width. This band of omentum passed down in front, then under and behind the ileum, close to its termination in the large intestine. The band then became adherent to the posterior layer of the mesentery, and to the posterior abdominal wall. Thus, a partial stricture was formed on the ileum, within an inch of its termination. On one side of the constricting band the intestine was distended, on the other it was of its natural size. The constricted portion of the intestine was neither thickened nor sloughy. It was inflamed, and adhered to the band of omentum by recent lymph, and would readily have admitted of the passage of the finger. The appendix cæci vermiformis was larger than natural, about five inches in length, and one-third of an inch in diameter. When laid open and spread out it measured an inch in width. The first three inches of this large appendix formed several doublings or convolutions, which were connected to each

other and to the coats of the cœcum by firm old adhesions; the last two inches of the appendix being alone free. This free portion was situated just below the constricted ileum. It was sphacelated, and contained two little oval bodies, resembling in colour and form small cherry-stones, but which, on being broken up, proved to be calcareous concretions. Below the constricted ileum and loose sphacelated appendix was situated another fold of intestine adherent to the cœcum. This was found to be the sigmoid flexure of the colon, which was traced from the left side, across the upper part of the sacrum, to the right iliac fossa. Here, attaching itself to the cœcum, it was reflected upon itself to the centre of the sacrum, the two folds being adherent. From thence it passed downwards to form the rectum.

III. PARTIAL OBSTRUCTION, DEPENDENT PROBABLY ON ADHESION.

Augusta Barrett, aged 50, was admitted into Sanctuary Ward suffering from abdominal pain. She stated, that, five days before, while reaching for something from a clothes-line, she felt something give way in the groin, and she found a swelling there. A year before, a somewhat similar tumour was observed there, but after a time, and the use of frictions, it subsided. At that time the bowels were, for two or three days, obstinately confined, and since that time they have been occasionally troublesome. At the latter end of December they were confined, but they were made to act on the 29th; they were not again opened until the 1st of January, the day on which she "overreached" herself. From that time until the time of her admission her bowels had not been relieved.

She was admitted at 11 o'clock a.m. Her countenance was anxious, pale, and dejected; her tongue was dry and brown; her skin hot and parched; respiration hurried; pulse 90. There was a prostrating pain in the abdomen, increased by pressure, and there was frequent vomiting of a green bilious matter. There was an oblong, irregular tumour in the right groin, which felt like an omental hernia. It could not be reduced upon pressure, nor was any impulse communicated to it by coughing.

The taxis was carefully applied, but it was not reduced. Her condition did not admit of delay. A consultation was held, and, although there was some difference about the seat of protrusion, there was none as to the necessity of immediate operation.

I commenced the operation by making a longitudinal incision over the tumour, but the integument could not be conveniently pinched up for the purpose; it was somewhat thickened, and adhered to subjacent parts. The operation was cautiously proceeded with, because there was a peculiarity in the condition of the part. Under the integument I quickly penetrated into a hardened gland-like mass. In the centre of this mass I got into a purulent collection of a very fetid dark-brown colour; probably over an ounce of this fluid escaped. I passed my finger into the cavity, and found that it had a smooth lining membrane. The tumour had by this time much lessened in bulk. After a careful search, I could find no indication of any abdominal protrusion; the operation was therefore not carried further. She was a good deal relieved by the operation. She was ordered, calomel gr. v.; opium, gr. ss.; to be followed after four hours by magnes. sulph., ʒj.; aq. menthæ, ʒj., every two hours. Between nine and ten o'clock, p.m., she had two good stools, and another during the night, and in the morning was in every way much more comfortable; her countenance was more cheerful, there was no sickness, little abdominal tenderness, and the tongue was improved. The improvement proceeded steadily from this time. The bowels required very little assistance; the abdomen felt natural; her wound was granulating healthily; her appetite was good; her countenance was cheerful. On the fourteenth day after admission a feeling of sickness returned, with shivering; the bowels did not act as usual, and the countenance assumed an anxious appearance. The pulse was only 76, but the tongue had a yellowish slimy coat upon it. The abdomen was not swelled nor tender.

Ordered Hydr. chlor., gr. iv. statim; Magnesia sulph., ʒj.; aquæ, ʒj. 4tis. Enema terebinth horâ somni.

In the evening there was so much prostration that it was necessary to give her a little brandy occasionally. There was frequent vomiting.

The next morning there was a feeling of heat in the

wound, and upon examining it a bright yellow fluid in small quantity was found escaping from it. It was quite liquid and evidently bilious, and there had been no stools. The face was flushed, the skin hot, the eyes sunken, the pulse 110; but there was little abdominal pain or tension, though there was stercoraceous vomiting. 24th. Her state was more hopeless, and on the 25th she died.

Post-mortem.—The body was examined about twelve hours after death. Rigor mortis was fairly established, but was very moderate. The body was not at all emaciated; the skin was very sallow; the abdomen was moderately full, but not tense. The sides of the chest were much flattened, and the lower ribs were pressed downwards, as if by stays. A wound with inverted edges, and discharging a bilious-looking matter, appeared in the right groin. Upon a careful examination of the surface, no tumour, nodule, or irregularity could be felt by the finger. The body was opened by the usual straight incision from the top of the sternum to the pubis. A cross incision was made from the umbilicus to the right side of the ileum, and the flap turned back so as fairly to expose the parts *in situ*.

Upon examining the contents of the cavity, the intestines appeared to lie in their natural position; but the edge of the right lobe of the liver was thin, though otherwise of natural appearance; but it extended downwards nearly to the crest of the ilium. The stomach and transverse colon were covered, and concealed by the depressed ribs of the left side. A long process or appendix was observed stretching from the free margin of the great omentum to the right groin, where it adhered to the abdominal parietes at the inner ring of the inguinal canal. It was not very tightly stretched, and could hardly be said to constrict the coils of intestine over which it passed; but was quite capable of doing so if the intestines were distended. Immediately underneath this band, a coil of small intestine was perceived bent upon itself at a somewhat acute angle, very partially engaged in the internal ring, that is to say, a portion of its circumference slightly projected within the opening, but there was no obstruction to the passage of fecal matter along it. It was however firmly adherent to the sides of the ring. A probe could be easily passed from the wound in the groin into this portion of the bowel. This coil of intestine, together with the omental appendix, and the portion of the abdominal wall in which the wound was situated, were removed together for the purpose of a careful examination. The portion of intestine removed was about a foot in length; it consisted of the first part of the ilium.

17, Wimpole-street.

REPORTS OF PRACTICE,

ILLUSTRATIVE OF THE

DIAGNOSIS, PATHOLOGY, AND TREATMENT OF OVARIAN TUMOURS.

By FREDERIC BIRD, M.D.,

Lecturer on Midwifery and the Diseases of Women at Westminster Hospital.

(Continued from page 64.)

In illustration of the remaining class of cases to which I have adverted, as well as of the association of unilateral enlargement of the abdomen with peritoneal adhesions, I may refer to the following example in which, from the commencement of the disease to its termination in death, there existed symptoms of such great and increasing urgency as to have justified extirpation had not the presence of other and fatal disease negatived its performance.

Case 9.—Mrs. V., aged 30, of strumous diathesis and phthisical family, was attacked about six months previously by acute pain in the right iliac region, increased by defecation, micturition, and external pressure, and accompanied by febrile disturbance. Menstruation, always ill-performed, had for some months been nearly altogether wanting. Under topical depletion and appropriate remedies the local symptoms subsided; but before many weeks had elapsed she began to suffer from frequent cramp and pains affecting the right leg, dull pain was also felt in the pelvis, often increased by urinary or fecal accumulation. Soon an evident enlargement of the abdomen was discovered, chiefly involving

the right iliac and hypogastric regions, the local suffering became greater, and she began to emaciate rapidly. At this time I saw her, when a tumour equal in size to the uterus in its seventh month of gestation was found lying chiefly on the right side of the abdominal cavity, and causing marked unilateral projection; above its fundus could be distinctly traced, below its inferior portion could be felt dipping down behind the pubes; examined internally, the pelvis was found to be in great part occupied by the tumour, the vagina much shortened, the uterus pressed against, and rather above the symphysis pubis. Scarcely any movement of the tumour could be effected; firm upward pressure produced some slight motion, but too little to afford relief; fluctuation was very indistinct, and the lobulated outline of the mass, both above and when examined by the vagina, left no doubt of its compound character. The local and general symptoms were painfully urgent; the leg was much enlarged from œdema, and was constantly flexed upon the abdomen to afford some little alleviation of the almost unceasing pain in the pelvis, which, always severe, often became exceedingly acute. Her general health was greatly reduced; emaciation, rapid pulse, and impeded respiration, already threatened life, while dullness on percussion and bronchophony below the left clavicle, only permitted the employment of palliative means. Narcotics afforded relief for a time, but she soon sank, worn out by suffering rather than by the pulmonary disease.

Autopsy revealed a large multilocular ovarian mass, seated in the right ovary, nodulated by projecting subordinate cysts, which, of uncertain size, were filled by secretions varying from transparent mucus to gelatinous and colloid-looking matter, while in some, inflammatory action had existed. The tumour was bound down to the right iliac fossa behind, and to the corresponding portion of the abdominal parietes in front by adhesions, but they were not very numerous, and might have been separated; the lower portion of the tumour, in great measure, filled up the pelvis, and was with difficulty raised from out its cavity, but where it seemed rather to have been retained by its accurate adaptation to the pelvic brim than by peritonæal attachments. The viscera of the pelvis afforded indications of the pressure from which the suffering evinced in life had resulted.

Painful and destructive as the symptoms in this and similar examples were, it was yet evident that they arose less from the tumour than from the complications attending it, for almost impacted in the pelvis by adhesions and otherwise, the morbid growth which, free to move, would have caused but few symptoms, became, by the pressure it was made to exert, a source of continued suffering. Instances such as this form the exceptions to the common history of the progress of ovarian disease; for, although peritonæal adhesions are the most frequent, as well as the most important complications, yet in the great majority of cases such adhesions do not occur until the tumour has acquired so large a size as to exercise pressure upon the abdominal walls, and then, for the most part, are limited to the anterior and superior portions of the cystic parietes; and, however much they may interfere with the removal of the diseased growth, do not necessarily give rise to painful symptoms. Occasionally it happens that impaction of the lower portion of the tumour in the pelvic cavity, in the absence of adhesions, gives rise to similar symptoms; but the cases are rare, and are those only in which the basic portion of the tumour is formed by some hard unyielding mass, either of cartilaginous, fibrous, or partly ossific structure; under such condition the same suffering may ensue, and may often be relieved by mechanical assistance. In one case, among others, occurring in the practice of Mr. Streeter, the impaction of the inferior portion of a large ovarian tumour in the pelvis had, by its great consequent pressure, given rise to much local suffering, frequent uterine bleeding, and œdema of the legs; it was determined by Mr. Streeter and myself that an attempt should be made by appropriate instruments to carry the cause of pressure above the pelvic brim, and in a few days this object was effected, and considerable relief afforded. Leaving those cases in which pelvic pressure is thus produced, either by contraction or adhesion, as a separate class requiring distinct treatment, and in which impairment of general health is proportionate to the amount of suffering, I pass to the common history presented by the less complicated forms. In such it will generally be observed, that between the occurrence of the initial symptoms, as those of

ovarian congestion or inflammation, and the period in which the abdomen becomes fully distended, there is interposed a variable interval, during which little is complained of save the inconvenience of increased size. In many instances several months pass away before the abdominal fulness demands relief, or the general powers fail; in others a briefer space is noticed, but perhaps in all cases in which the tumour is chiefly formed by fluid, and free from secondary changes, there intervenes a period varying with the slowness or rapidity of the cystic secretion, in which there is an absence of suffering. For a time the tax of exhaustion is readily paid, and although the patient may be less strong than before, yet she can scarcely be said to have grown thin, and although incapable of active exertions, yet she may be no more so than might be expected from her increased size. But when at last paracentesis is required, and a second accumulation of fluid has begun, the general health seldom fails to become impaired, and very often gives way with great rapidity. In a case in which a moderate fulness only of the abdomen has existed for the first time, and has been present but for a few months, and is yet accompanied by marked emaciation and all the evidences of constitutional distress, it may commonly be inferred that such general symptoms are not dependent upon the ovarian disease, but have their origin in other and perhaps distant mischief. As an example of this kind, I may refer to the following case, occurring in the practice of the Messrs. Pretty, of Camden Town.

Case 10.—Mrs. S., aged about 50, had for six months been the subject of abdominal enlargement, unpreceded by any well-marked symptoms. The increasing size of the abdomen had gone on at nearly the same rate, and she had at no time suffered from local pain. She had, however, rapidly emaciated, and was greatly enfeebled. Yet the only symptoms remarked were those of greatly impaired digestion; her countenance was indicative of more than simple ovarian disease, and a dry harsh skin and yellow-tinted conjunctivæ suggested the existence of other abdominal disease; but there was too much distension to allow of any accurate manipulation of the abdomen. Seen in consultation by my brother Dr. Golding Bird and myself, it was determined that the tumour should be punctured, with a view to relieve the distension, and to allow of subsequent examination of the abdominal viscera. This was done, and about a dozen pints of ovarian fluid removed. As the cyst collapsed (for it was not adherent) its fundus could be felt, and almost seen, falling towards the hypogastrium, while above a large, hard, nodulated mass, no longer concealed by the loaded cyst, passed forward, filling up the right hypochondriac and umbilical regions, and announcing the presence of malignant disease of the liver. There was little to be done by treatment; asthenic peritonitis ensued, and she shortly sank.

The examples I have now quoted tend to prove that uncomplicated ovarian tumours are not necessarily marked by any local symptoms, and may acquire a considerable size before the general health becomes affected; in the earlier stage of disease, there may occur the indications of ovarian inflammation, but they are not always noticed, and perhaps often absent. More than this there is nothing, in the absence of the physical signs, by which the characters of these growths may be determined. It has been supposed that the catamenial function soon feels the influence of disease; becomes irregular, perhaps arrested; but, in the cases I have seen, little if any alteration from the previous condition has been observed, until the tumour has acquired a greatly enlarged size, and when, by cystic distension and pelvic pressure, it has become probable that the uterus would share in the general derangement of the local circulation. As the morbid growth increases, menorrhagic losses become frequent, and in some few instances constitute one of the most urgent effects of the disease. Little assistance to diagnosis, however, is furnished by such deviations from healthful menstruation, as they who afterwards become the subject of tumours, have not generally been remarkable for catamenial regularity. The complete arrest of the function has been sometimes noticed; and it is probable that disease affecting both ovaria may be thus indicated; but my own experience is too limited to add more to this feature in diagnosis than that I have seen double ovarian tumours co-exist with arrested menstruation in two instances, and that I have extirpated both ovaria in a case in which the catamenial secretion had always been previously natural, but in which,

after the operation, it never again occurred. It is certainly more than probable that the removal of the ovaria, either by the knife or by disease, would be followed by the cessation of that function, with which they are intimately connected; but, as a diagnostic mark, arrested menstruation would not be of great value, as, even in the examples of disease affecting both organs, if only a comparatively small portion of healthy structure remain, the secretion may still go on.

This perhaps, with many other questions, might admit of a certain solution by a reference to statistics, but statistical results are often very devoid of practical utility, and have proved especially so when brought to the investigation of ovarian disease. Without, therefore, attaching undue importance to such mode of inquiry, or attempting to apply it to the question of menstruation, it may yet be useful to ascertain how far the results obtained from a given number of examples may serve to support or refute the reputed value of certain conditions said to belong to ovarian disease, and often believed to give value to the previous history. I allude more particularly to the diathesis, social position, and age. With this object I have tabulated one hundred cases occurring in private practice, selected, not to defend any particular theory, but solely because the correctness of the diagnosis was in each of them verified by paracentesis, extirpation, or dissection. The prevailing diathesis forms the most interesting and useful of these questions, and so far as my own experience may support the opinion, I have no doubt that ovarian tumours are far more frequent in the strumous than in any other constitution. In a large proportion of my own cases struma has been well marked, and limiting myself at this time to the one hundred examples to which I have alluded, indisputable evidence of the strumous diathesis has been present in forty-one, whilst in many others a tendency to struma appeared to exist, but was not indicated by sufficiently certain signs to allow of their being justly added to the number. In several of these cases there was the history of having previously suffered from some disease of an essentially strumous type, and in some phthisis was found to have destroyed collateral branches of the families, or to have co-existed with the ovarian disease in the individuals themselves. In the progress of several cases, also, it happened that supervening inflammation, by its modified results, furnished additional proof of the strumous tendency. In this frequent association with struma is probably to be found the explanation of the fact, of persons suffering from ovarian disease seldom evincing tolerance of mercury. Often more slow than others to present the local indications of the mercurial influence, they appear to suffer more complete impairment of general health, and, whenever such treatment has been adopted, the constitutional powers eventually give way, whilst the ovarian disease more readily undergoes subordinate changes, becoming often affected by inflammatory action, and leaving the patient exhausted and suffering. A cachectic state is thus induced, and if paracentesis be then employed, or any similar injury be inflicted on the tumour, a new action is set up in the lining membrane of the wounded cyst, changing its secretion from mucoid to purulent fluid, and terminating in the final prostration of the general system.

The next question, and it is one of less practical value, is that of the influence of marriage in the production or prevention of ovarian disease. As is often the case with inquiries of lesser importance, much has been written, and not less discrepancy displayed in attempting to determine it. Contrary to older opinions, it has recently been advanced, that the unmarried are more prone to this affection than the married. My own observation is quite opposed to this statement, and employing the word marriage in its physiological sense, and classifying those as unmarried, who had contracted marriage after having become the subjects of ovarian tumour, I find the comparative frequency to be:—

Married . . .	63
Unmarried . . .	37

100

Of the sixty-three married persons, rather more than half were childless, and not so, as might be assumed, from the mechanical impediment presented to the enlargement of the

uterus by the presence of an ovarian tumour in the abdominal cavity, for in several other instances pregnancy supervened on the disease of the ovary, and although paracentesis was required either in the later months of gestation or during parturition, yet the full period was commonly attained, and well-developed offspring resulted. The married, therefore, are certainly more liable to ovarian disease; and such results might have been anticipated, as there can be little doubt that any set of organs are more likely to take on disease when in an active condition than when in an unexercised and passive state; and this observation is strengthened by the fact, that if the sixty-three married persons be subtracted from the one hundred cases, there are found among the residual thirty-seven, five examples only in which the catamenial period of life had been passed, while not less than thirteen occurred at or before the twentieth year, and when the uterine system was in a full and active state.

Age forms the remaining question, to which a statistical answer may be given; and the cases I have to adduce, although affording several instances of the occurrence of ovarian tumours at a very early period of life, yet serve to establish the greater frequency of that disease at a time when the reproductive organs are perhaps in their highest state of action, while a comparative rarity is observed at the age when the functions of menstruation and conception ceasing, leave the ovaria for the rest of life organs of little importance, preserving little of their original structure, and liable in an equally diminished degree to become the seat of morbid change. The greatest number will be found to have occurred between the ages of twenty-five and thirty-five, and the opinion once entertained of the frequent occurrence of ovarian disease at the cessation of the menstrual function is not supported. In the following Table, the age of each patient has been calculated at that stage when the abdomen had attained sufficient size to attract her attention, and induce her to seek for relief. The disease must, therefore, have existed for some time previously, but the impracticability of determining the interval occupied by the earlier development of the tumour was so evident, that no course was left but to record the age at that period when the full distension of the abdomen left no doubt of the presence of tumour. Of the 100 cases there occurred:—

I at 12½	4 at 34
1 .. 16	3 .. 35
2 .. 17	3 .. 36
5 .. 19	2 .. 37
4 .. 20	2 .. 38
2 .. 21	1 .. 39
1 .. 22	4 .. 40
4 .. 23	3 .. 41
3 .. 24	2 .. 43
5 .. 25	3 .. 44
3 .. 26	2 .. 45
5 .. 27	1 .. 46
7 .. 28	1 .. 47
2 .. 29	2 .. 48
3 .. 30	5 .. 50
1 .. 31	1 .. 56
4 .. 32	—
8 .. 33	100

The remarkable case which heads the above list, forms an exception to the law which seems to render the establishment of the general signs of puberty a necessary condition for the development of ovarian disease; for in this instance the patient still presented a childlike appearance, and the catamenial function had not occurred, nor was it perfected until after the disease had been present for some months. I believe the age of this patient to be the earliest at which tumour of the ovary has been observed, the nearest approximation to it being furnished by the cases mentioned by Frank and Itard, in the one instance the thirteenth and in the other the fourteenth year having been attained. This case, moreover, is marked by many other features of interest, and merits narration.

Case 11.—Miss F. had, with the exception of infantile illness, enjoyed full health until the month of October, 1842, when, being twelve years and three months old, she was attacked with cynanche parotidæa, which somewhat abruptly subsiding, was followed by pain in the pelvis, hardness and fulness of the abdomen. These symptoms were ascribed to constipation, to which she appears to have evinced an

habitual tendency. Ordinary treatment was pursued, but without advantage, the abdomen still remaining large, and continuing to increase in size. Before the next month had passed, her general strength began to fail, and she was then seen by Dr. Lee; active purgatives were given, and with the effect of dislodging considerable fecal accumulations, but without causing any diminution in size, or arresting the increasing impairment of health. Dr. Merriman was then consulted, who at once detected the presence of fluid in the abdomen, and subsequently she had the advantage of the opinion of Dr. Paris. Hypercatharsis and diuresis were maintained for several days but unavailingly; she continued to grow thin, and, from augmenting distension of the abdomen, the spine, unequal to the support of so great a burden, began to curve. Wasting in health and increasing in size she passed on to the month of April, when she suffered acute pain for nearly four days in the right inguinal region, on the cessation of which she was supposed to have somewhat decreased in size. Six months elapsed, during which time various forms of treatment were uselessly tried, the abdomen becoming so filled by fluid as to impede respiration, and occasionally to give rise to urgent dyspnoea. Paracentesis was then performed by the late Mr. Aston Key, and seventeen pints of dark fluid, containing flocculi, removed. Much relief followed, and, although fluid could again be detected at the expiration of a week, yet for a time her health manifestly improved, but soon again began to yield, and in five months there was a greater accumulation of fluid than before. On February 1, 1845, I was first consulted, at which time the abdomen had a circumference of forty-two inches; fluctuation was general and equal, except in the hypogastric region, where a large and hard growth could be detected,—no evidence of peritoneal adhesions existed. The spine, having yielded to the pressure of the tumour, was much curved. She was greatly emaciated, and a rapid and feeble circulation gave evidence of failing powers. Possessed of remarkable vivacity and intelligence, she bore her troubles lightly and well, and, save the discomfort of the abdominal fullness, complained of little. In person she was a tall, slightly-built brunette, presenting none of the ordinary signs of puberty; her chest, though encroached upon by the upward pressure of the tumour, was free from disease.

Believing the tumour to be a non-adherent ovarian growth, containing more or less solid matter, and not referrible to the simpler class of such diseases,—deeming the general health to be impaired from prostration of power rather than from morbid taint,—looking to the youth of the patient as an important element of success, and regarding her rapidly increasing emaciation and positive danger to life as sufficient justification, I at once advised the extirpation of the tumour. As the views of Dr. Lee were completely opposed to my own, I requested that the patient might have the advantage of Dr. Locock's opinion, the great accuracy of which was subsequently proved. Dr. Locock stated that the case was favourable for excision, that few or no adhesions existed, and he concurred in the propriety of operating. Subsequently Dr. Hamilton Roe was consulted, whose opinion was the same. Dr. Lee still dissenting, it was determined that the tumour should be punctured to afford present relief to the patient, and to admit of a more accurate examination subsequently; accordingly, on February 9, I opened the tumour below the umbilicus, and evacuated thirty pints of fluid; when a small quantity had passed out, the canula became temporarily obstructed by a portion of fatty substance, matting together a little bundle of thin hair. The fluid was evidently ovarian, had a sp. gr. of 1.020, was faintly alkaline, contained much free albumen in addition to albuminate of soda, with a small admixture of blood corpuscles and fine plates of cholesterine; a thousand parts afforded 46.6 of solids, and 953.4 of water. During the escape of the fluid, the receding margin of the collapsing cysts could be felt through the thin and flaccid walls of the abdomen; and, as soon as the tumour had quite receded, a small but not hard mass could be felt in the course of the transverse colon, and from its capability of being moulded by pressure, was no doubt fecal; certainly, in the evening of that day, it became less, and on the morrow was no longer felt. Dr. Lee attached much importance to this epigastric swelling, and gave his judgment against extirpation.

The patient rapidly recovering from the effects of tapping, the question of extirpation was again raised, and consultations were held to determine the presence or absence of the supposed epigastric tumour. Dr. Locock, Dr. Hamilton Roe,

Dr. Merriman, Dr. Lee, and myself were present, each of whom (with the exception of Dr. Lee) gave a positive opinion as to the non-existence of any such disease, and pronounced in favour of extirpation. Dr. Lee still dissented, as he stated that he was convinced of the presence of disease in the epigastrium. Dr. Blundell subsequently examined the patient, and denied the existence of any other disease than that involving the ovary. With a natural desire to spare their child useless suffering, the parents were influenced by the apparent doubt based on Dr. Lee's opinion, and months passed on until tapping was again and again demanded, the secretion on each occasion becoming darker from the increased proportion of blood. As the fluid became more sanguineous, so did her health become more prostrated; and when nearly a year had passed away, and the extirpation of the tumour was at last eagerly sought for as the only means of averting her impending danger, her powers had become too low, and the distension too great, to allow of its performance; tapping was practised, and it was hoped that tonic remedies and sea air might yet restore sufficient strength to carry her through the operation. But the decision came fatally late, for I was soon afterwards called to her at Ramsgate, where I found her suffering from all the symptoms of internal hæmorrhage. I heard that she had vomited violently, soon afterwards became faint, and since that time had been growing weaker. The whole surface was pallid and cold, her features marked by anxiety, the pulse feeble, and denoting loss of blood; the abdomen distended and painful; repeated fainting now and then replaced by hæmorrhagic restlessness, continued for a few hours, when, stimulants no longer sustaining her, collapse quickly came, and so her young life ended.

The body was brought to town, when an inspection was made in my presence by Mr. Barnard Holt, assisted by a medical friend of the family. On opening the abdomen, a large ovarian tumour was seen, between the anterior surface of which and that part of the abdominal parietes punctured in tapping, a few recent adhesions existed. A single and feeble adhesion readily separable connected a small point in the edge of the omentum with the fundus of the tumour. The right ovary was found to be the seat of the disease, the opposite organ being perfectly healthy. The tumour was of multilocular form, consisting of one very large cavity, to the walls of which, internally, were attached numerous subordinate growths; about the upper portions of the primary cyst they hung in fascicular groups, varying in size, and generally filled by thick but clear mucoid secretion; posteriorly and inferiorly much larger secondary cells were seen, which were of more dense structure than the parent cyst, and filled by semi-gelatinous fluid, and protruding in many parts, gave to the general outline of the tumour an irregular and lobulated appearance. A condensed cluster of small cysts in great measure covered internally that portion of the tumour which must have been in contact with the spine; several of the cysts had ruptured, and others were filled with dark blood. Separating these secondary growths, the part of the parent cyst to which they were attached was seen to be extremely thin, and, in one spot, had given way, causing an irregular fissure of two or three inches in length, having in its course traversed and lacerated a large vein, which, with many others, were seen running in all directions beneath the lining membrane. From this torn vessel, blood had escaped; the large cavity of the tumour contained several pints of fluid, a great portion of which was sanguineous; and, on entirely removing the diseased growth, the pelvis was found to contain a large quantity of dark coagulated blood. The vascular supply was everywhere great, and within the venous trunks near the base of the tumour, together with those traversing the pedicle, were of unusually large size; near the Fallopian tube an artery scarcely so large as the radial, and two or three smaller, passed. The pedicle was about three or four inches long, and was chiefly found by the broad ligament and tube; the uterus was perfectly healthy.

No tumour of any kind existed in the epigastrium,—with the exception of the ovarian disease there was none.

If no other lesson be taught by this case, it must at least be conceded, that, as extirpation could have been performed, so might life have been preserved.

53, Lower Brook-street.

[To be continued.]

COMMENTARIES

ON

CONVULSIVE DISEASES.

BY CHARLES BLAND RADCLIFFE, M.B.,

Licentiate of the Royal College of Physicians.

(Concluded from last Volume, page 648.)

IV. OF THE TREATMENT OF CONVULSIVE DISEASES (CONTINUED).

3. The beneficial influence of *tonic remedies* in the treatment of convulsive affections would appear to be well established in many instances. In chorea, iron is the sheet-anchor of practice; and in hysteria the same remedy is scarcely less necessary. Iron, also, has been of infinite service in cases of epilepsy, where the evident weakness of the system has caused the practitioner to disregard his theoretical notions about an excited condition of some part of the nervous system. Induced by these results, and especially by what takes place in chorea, Dr. Elliotson has given the same remedy in tetanus, and he says with advantage. It is well established, also, that quinine has the power of curing ague, and of furthering convalescence in ordinary fever when the vascular excitement is subsiding and when the muscles begin to be shaken with subsultus,—so that, in two points of view, we would seem to have proof of the efficacy of this alkaloid in combatting the convulsive condition associated with fever.

Now, it is well known, that the ferruginous constituents of the blood are deficient in persons who, like the majority of those affected with convulsive affections, are wan and pale, and therefore we may readily suppose that benefit should result from the administration of iron in such cases. We may understand, also, that quinine is desirable to counteract a specific poison, like that of ague, and further, perhaps, to assist the bitter principle of the bile in the process of digestion. Iron, in fact, may be useful to correct the debility resulting from pure exhaustion, and quinine to relieve that which is determined by the presence of some depressing poison; but, whatever the explanation, there is no doubt that both remedies are beneficial in the proper time and place.

There are other metallic remedies as well as iron, which have been employed in the treatment of convulsive affections, but none which are so sanctioned by experience. Sulphates of zinc and copper, nitrate and oxide of silver, have each their advocates, and not unfrequently they seem to act indirectly as tonics in relieving some irritable condition of the alimentary canal which has interfered with the perfect discharge of nutritive absorption, or in assuaging some exhausting diarrhoea. In relation to the salts of silver no benefit whatever would seem to have resulted from absorption into the system. In epilepsy, at least, many cases are on record of patients who have been completely blackened without any relief to the fits; and in other convulsive affections there is no unquestionable evidence that good has resulted from its use. It is not impossible, however, that arsenic may have a beneficial constitutional action, and this we may argue from its known mercurial-like powers in relieving the system from the specific poisons of ague or syphilis. It is not impossible, also, that sulphate of zinc may properly deserve to be the favourite which it has been during the last three or four years; and the explanation of this may possibly be in the relief which it afforded to the frequent diarrhoea which preceded the late outbreak of cholera, and which has not yet passed away. I have not had much opportunity of testing the operation of this remedy, but an intimate friend, who has had abundant means for arriving at some definitive result, assures me that the benefit was very decided where care was taken to regulate the dose so that no sickness was occasioned by it—a result not unlikely to happen from an overdose.

Where tonics are necessary we often find, also, acids or alkalies in constant use, a change being made from one to the other, without (as it seems to me) sufficient reason, or without any reason at all. Now, as to the first of these remedies, I conceive that we may possibly expect some benefit where the first stage of digestion is defective, and as to the second that it may be indicated where the duodenal

functions are tardily discharged. In reference to alkalies, however, I must confess that I find a strong objection to their use, in the fact that a great majority of persons subject to chronic convulsive affections, exhibit unequivocal signs of a strumous disposition. I know that in these very cases these remedies have been recommended for the purpose of favouring the absorption of any deposit which has already taken place, and this from the fact that tuberculous matter is seen to break up under the microscope into a granular fluid when a drop of alkaline solution is added to it; but in opposition to this view I would say that it is by no means proved that this softened matter is more absorbable than the solid. I would ask, indeed, whether the contrary conclusion is not rather necessary? At any rate it would seem that an ordinary indurated gland in the neck or groin disappears far more readily before softening than afterwards; and for this reason, therefore, I would pause until this question has been more carefully examined, before I would give alkalies with the view of correcting any strumous disease, whether this be associated with convulsive symptoms or not. About acids, on the contrary, there is less difficulty, for we have no such doubtful evidence in connexion with them. It yet remains to be shown, however, what is the precise action of sulphuric or nitric acid; and I cannot but think that until more is known upon this subject, it would be well to substitute for them—as was recommended some time ago—some artificial combination which should represent as nearly as possible the gastric juice.

While upon this subject, I must not neglect to refer to a measure to which tonic powers are ascribed, and this to object against it. I refer to the cold bath. There is no doubt that benefit may result from it in warm countries, where life is cherished by a glowing sun; but that it should be equally beneficial for us, who, notwithstanding our warmer clothing and richer diet, find great trouble in keeping up a feeble existence, is very doubtful. Under any circumstances, I conceive that it is to be deprecated in the cases under consideration, for if it will cause violent shuddering or severe cramps in a state of health, I think it should be avoided where there is a marked convulsive disposition; and this not only on account of the direct influence which it would seem to have in exciting spasm, but also from its likelihood to increase that congestive state of the brain and other visceral organs which is the consecutive evil most to be dreaded. Indeed, it is difficult to see why a delicate person should not obey the natural instinct which prompts him to avoid cold, and at once endeavour to secure the healthy glow which succeeds upon bathing, (which, and not the feelings of depression and internal congestion or the blueness and coldness of the limbs, may be presumed to be the effect sought after,) by the most direct and likely means, namely, by the substitution of warm water for cold.

Many remedies, indeed, have been recommended in virtue of their tonic properties, either real or supposed; but the conclusion at which we arrive, after passing them in review, is, that our choice is restricted to very few. Zinc may be necessary in one case, and silver in another, and this in consequence of some accidental peculiarity which these remedies are calculated to relieve; but iron and quinine are alone deserving of confidence in ordinary circumstances. Judiciously selected and administered, however, we may conclude that tonic remedies are of great value in the treatment of that constitutional debility which is the fundamental error in convulsive affections.

4. The question of the propriety of stimulants in the treatment of convulsive affections has been anticipated and partly answered in the remarks upon hygiene. A glass of wine has been found to be an excellent remedy in tremulousness, whether this be in early life or advanced age; and not only so, but also in the severer movements of shaking palsy, as well as in the paroxysms of chorea or hysteria. Wine and other alcoholic drinks have also been found to be indispensable in the treatment of the subsultoid jerkings of the last stage of fever. In tetanus, indeed, the indications were more doubtful. Stimulants, however, have been given in large quantities, and are still given; and, if we have no evidence that they have relieved this spasm, it cannot be shown that they have aggravated it.

Experience has also decided in favour of the warm-bath as a remedy in the treatment of many convulsive affections. In the fits of childhood, the relief obtained by this means is generally immediate and effectual. In the agitation of chorea, or in the paroxysm of hysteria, the calmative influ-

ence is most decided. Even the fierce spasms of epilepsy would seem to be assuaged by it; for I am told at Hanwell, that whenever a fit is unusually violent or protracted, the patient is placed as soon as possible in a warm bath, this plan having been found more decidedly beneficial than any other. It is well known, also, that the low and miserable feelings and shiverings connected with ordinary colds are speedily terminated if we muster resolution to undress, and avail ourselves of the relief which this means affords. And, finally, it may be said,—and this is very strong evidence in its favour,—that notwithstanding the universal prejudice which ascribes convulsive affections to excitement, it has never been said that the warm bath is productive of any mischievous results. Prejudice has no doubt prevented its use in many cases, but it has never so far prevailed as to vitiate the evidence, and cause it to be asserted that it had done harm where it had been employed; and this is the more surprising, for, of all means this is most likely to favour any state of vascular activity.

Passing to the remedial stimulants the evidence still continues of the same character. In ordinary nervous tremulousness, or in the severer distress of chorea or hysteria, the popular custom is to breathe the stimulating vapours of volatile salts, or to swallow a solution of the same in water; and, in cases where medical interference is deemed necessary, the practitioner in all probability has recourse to the same remedy, either alone or in conjunction with something still more powerful, as a preparation of ether. A similar practice is of undoubted benefit in the subsultus of feverish prostration. Compound spirit of nitric ether is another popular remedy for the relief of the shiverings, which are the most distinctive features, and which mark the onset of what are called “colds;” and I have been told by several medical men who practised in the fenny districts of Lincolnshire, when ague was more common than at present, that a good dose of this remedy was found to be one of the most effectual means of cutting short the cold stage of this malady. In epilepsy, again, it is found that turpentine is the remedy which has met with most general, and as it would appear, with most deserved support; and this not because of any action it may have upon the bowels, (for the benefit is often altogether irrespective of this,) but on account of its stimulant properties. Turpentine, also, by itself, or in conjunction with various stimulants, is of great service in relieving the convulsive agitation, which sets in towards the close of typhus; and the fact, that the benefit in this case is to be mainly ascribed to the stimulant properties possessed by the remedy, is an argument that it affords relief in epilepsy, in virtue of the same properties.

It would appear, therefore, that we arrive at the same conclusion in reference to these purely medicinal agents, as we did, when considering the question of wine and the warm-bath; and hence we may conclude, that stimulants are necessary to the treatment of convulsive maladies.

5. So far as we are concerned there would not appear to be any but an accidental necessity for remedies which possess anodyne properties. At times, perhaps, they may be needed to entice sleep, to remove any irritability which interferes with the use of tonics or stimulants, or in other and analogous circumstances; but most generally, (as indeed we might anticipate from the absence of pain in this class of affections) they are not wanted. In chorea, hysteria, or epilepsy, opium is apt to cause dizziness and sickness, with great restlessness, if given at the times when the fits are expected. In fevers, also, it is well known that there is an extreme susceptibility to the depressing influence of this drug, and as this is the case during the stage of vascular excitement we may argue that it would be still more so in the cold or shivering stage. On the other hand, however, there is said to be a great tolerance of opium in tetanus; but, here again, it is to be observed, that this supposed tolerance may be due, not to the disease, but to the large quantity of wine which is usually given along with the drug.

In speaking in this way I would be understood to refer merely to doses large enough to produce a narcotic action. In smaller quantities the result might be different, for there is no doubt, that morphia in many instances is a tonic remedy of the highest value; but still I must confess, that (so far as I have been able to judge) the cases in which this alkaloid acts in this manner, are those in which the nervous depression is associated with pain rather than spasm.

It would appear, also, that experience and theory are equally silent in favour of the remedies allied to opium, as

henbane, hemlock, foxglove, and others. There may be, no doubt, peculiar circumstances which require the occasional employment of anodyne remedies; but there appear to be no general facts and considerations which indicate their special fitness for the cure of convulsive affections.

6. We have found that there is no reason to suppose that convulsive affections are dependent upon any inflammatory or congestive condition of a visceral organ; and in this discovery we lose the grand argument for the employment of *counter-irritants* in their relief. In the majority of cases, also, we have some reason to believe that the determining cause of the malady is of a general and not of a local character; and hence, if we wished to have recourse to these particular appliances, we should be at a loss where to find a seat for them. However useful in other cases, therefore, we may doubt their utility here; indeed, if we are satisfied that convulsive affections are irrespective of any local disturbance of an inflammatory or congestive character, it follows as a direct consequence that we discard remedies which have been recommended on the supposition of this disturbance.

If, then, we regard convulsive affections collectively as well as individually, we obtain—what is the great object of all practical researches—a fixed and constant rule of action, as well for the attack itself as for the predisposition to the attack.

1. In the first place, I conceive there are no cases of convulsive seizure in which we need stand balancing in our mind as to the propriety of blood-letting, for, under all circumstances, this measure would appear to be altogether unjustifiable. On the other hand, stimulants have been found to be beneficial; and the question therefore is, as to which of these we should select, if any interference be necessary. Is it to be the warm-bath, or ammonia, or the spirit of nitric ether? In ordinary febrile shuddering there is no doubt that the first and last may be associated with great advantage; and it is the same, also, in aggravated paroxysms of hysteria and chorea. The cases of most difficulty and doubt are those of epilepsy and tetanus, but even here we need not depart from the same rule of practice. In the former affection it may be sufficient to unloose any band upon the neck, and to place the patient on a mattress laid on the ground; but if the fit continues, there is no better plan than to place him in a warm bath, (if this be practicable,) and to cause him to inhale the vapours of hartshorn, giving a good dose of nitric ether when he has recovered so far as to be able to swallow.

This practice of avoiding bleeding with the most religious dread, and of employing a warm-bath in conjunction with the stimulants I have mentioned, I have tried repeatedly without ever finding any reason to doubt of the beneficial results. I have had no opportunity of putting these views in practice in a case of tetanus, but I am prepared to carry them out without any faltering on the first opportunity. I would abstain, in short, from bleeding, from purging, from narcotics, and I would try the effect of long and continued immersions in hot water, with wine and soups, and with or without, as the case might be, ether, ammonia, turpentine, or other remedial stimulants. I have never had a case of catalepsy under my care, and here also I cannot speak from experience; but I see no reason why a similar practice may not be pursued, and especially the immersion in a hot bath; for, if a corpse may be prepared for injection by this means, it seems reasonable to suppose that the arteries in this corpse-like condition may again become filled, and the languid movements of the blood once more re-animated.

2. Similar principles must guide us in our endeavours to prevent convulsive affections. No low diet, no fatiguing exercise, no bleeding, no purging, no narcotics, no counter-irritation, must be the constant rule; but on the contrary, we must urge with steady purpose a free supply of animal food, with wine or beer, warm bathing, medicinal stimulants, and tonics.

After insisting upon the desirability of good food and rest with occasional warm bathing, what we have to do in chorea or convulsive hysteria is, to give common steel mixture, or iron in conjunction with quinine, and some bitter extract in the form of a pill, while we take care not to counteract the good we may expect from this course by leeching, purging, or cold baths.

In epilepsy the greatest care and most unfaltering per-

severance are necessary to bring matters to a satisfactory issue, but if these be had there is much reason for encouragement. Here, as in the former cases, the essential indications require rest, and a nutritious and generous diet, with warm bathing, and the most sedulous avoidance of all debilitating practices. First and foremost to be guarded against is unnatural activity of the sexual function, for without this little good is to be expected from any measure. Next, we must never be tempted to apply leeches for the relief of any transient fulness in the head; but if such condition be present we must endeavour to master it by the local application of cold. And further, we must discountenance altogether the old practice of administering purgatives, except occasionally for the purpose of dislodging any alvine accumulation. If these things are attended to before any consecutive mischief is established, we shall find a manifest improvement without the employment of any other means. We shall indeed require infinite care and patience, with unwavering steadiness of purpose, but we shall find no reason to despair if we are fortunate enough to commence our treatment at an early period in the history of the malady.

In more difficult cases we must call to our aid medicinal tonics and stimulants. Whenever there is sallowness and other evidences of the want of good blood, but with no very serious deficiency of strength and energy, I have great confidence in the juncture of the two, as in a pill consisting of iron and quinine with camphor, or in some similar form. When more diffusible stimulants are wanted, as is more usually the case in winter than in summer, I have found great benefit in associating with, or substituting for, the pill just mentioned, turpentine, in conjunction with cod-liver oil, this combination being suggested by the frequent association of the consumptive with the epileptic habit. I generally recommend a draught like the following to be poured carefully upon the centre of the surface of a small cup of milk, or coffee, and drunk suddenly before it has had time to touch the edge of the vessel, for in this way the unpleasant taste may be avoided in great measure.

R. Ol. terebinthinæ, ʒij. to ʒiv.; ol. jec. asselli, ʒss. to ʒj; ol. cinnamonii m. j. Fiat haustus.

When turpentine is objected to, which is often the case, I believe nitric ether may be substituted with advantage, either along with the cod-liver oil, or in combination with some bitter infusion. The secret in this case is, not to be afraid of quantity, and to act as you would with an ordinary stimulant. A patient of mine, who was once subject to epilepsy, but who has now been well for some time, assures me, that when he feels any of his former threatenings he finds very speedy relief from a dose of nitric ether, varying in quantity from a dessert to a table-spoonful; and from other cases in which I have been able to test the effects of this remedy, I should say that this quantity is not more than what may be given to an adult in ordinary cases, and this with the most beneficial results.

It is not intended to say that these are the only tonics, or only stimulants, which may be employed with advantage; but until the claims of others are better established than at present, it is, perhaps, as well that we keep to these. Anyway, we are not to forget that the chances of the disease are far too serious to allow any delay from experimental tampering with doubtful remedies, or merely fashionable empiricism.

In the prevention of tetanus, all that we can do is to preserve health from failing, and, in order to this, we must have recourse to the ordinary means which experience has pointed out; and in catalepsy, any preliminary treatment will not differ from that necessary in chorea or hysteria. It is unnecessary, also, that we refer specially to the prevention of the initial shudderings or spasms of fever or cholera, for it is now very well known, that all that is necessary is to remove out of the foul atmosphere, and not stint the quantity of food or wine, and so prevent the system from sinking to a certain state of lowness. Just, indeed, as in the prevention of the subsultus of the latter stages of these complaints, we must watch carefully, and begin to administer food and wine before the system is left prostrate and exhausted; so in the prevention of the muscular movements which mark the onset, must we endeavour to prevent the glow of health from slipping away, and this by the very same means. It is unnecessary, also, that we refer particularly to the prevention of those vaguer forms of convulsive affections which originate in direct exhaustion, as loss of blood, for here the indication is simply to avoid this exhaustion.

In conclusion: The whole resolves itself into this,—that in convulsive maladies we have to remedy weakness or exhaustion by direct means, as rest, good food, stimulants, tonics, while we avoid with extreme care everything which would counteract this intention, namely, fatigue, abstinence from animal food or wine, sexual excesses, or artificial depletion, whether this be by the direct abstraction of blood, or by inducing increased discharge from the bowels or cutaneous surface by purgatives or counter-irritants. Success, indeed, often depends upon the care we take that we do not throw down with one hand what we raise with the other.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

CASES ILLUSTRATIVE OF VARIOUS POINTS IN CHEMICAL PATHOLOGY.

By LIONEL S. BEALE, Esq.,

Medical Associate, K.C.L., late House-Physician to the Hospital.

CASES OF ENCYSTED TUMOUR OF THE CHEEK, WITH EXAMINATION OF THE FLUID.

Case 1.—Mary Corner, aged 39, married, and the mother of several children, applied to Mr. Bowman on the 15th of October, 1848, in consequence of having suffered for some time from a tumour situated on the right side of the face. The patient is an Irishwoman, and has generally enjoyed excellent health. So far as she knows no member of her family has ever been troubled with an affection at all resembling that of which she now complains. About eight years since she had an attack of scarlatina, her throat being affected, but at this time she was not troubled with any enlarged glands. Soon after her recovery, however, she noticed a small swelling in the neck, about the situation of some of the glandulæ concatenatæ, which at first grew very slowly, but about three years after its first appearance increased in size more rapidly, and soon presented the appearance of an ordinary scrofulous abscess which was opened, but without much benefit, as it again filled with pus, and it was found necessary to open it several times during the next six months. Various means were tried to promote the obliteration of the abscess, but without effect. The patient now ceased to attend the hospital for some time. The tumour again increased, and soon resumed its former size, in consequence of which she was compelled again to seek relief. At this time the tumour was rather less than an ordinary egg, and presented the usual appearance of a chronic enlargement of some of the cervical glands. Iodine paint was applied to the swelling, and under treatment it slowly improved. The patient also suffered from another swelling, situated on the cheek, and apparently not in any way connected with the enlarged glands.

The history she gave of this tumour was as follows:—Four years since she noticed a small swelling on the right cheek, close to the ala of the right nostril, and when the tumour before-mentioned increased, about three years since, this swelling also suffered an augmentation in size, and gradually spread over the cheek. She suffered little pain, however, from its presence until the autumn of last year, when, in consequence of suffering uneasiness about the situation of the tumour, she applied to Mr. Simon (whose patient she was at this time.) Mr. Simon opened the tumour by making an incision under the upper lip, and a considerable quantity of fluid escaped. It soon, however, collected again, and has been opened twice since, each time growing larger than before.

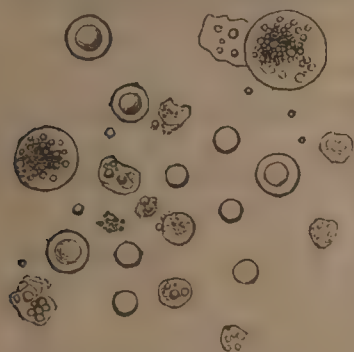
On November the 7th it appeared as a tumour of considerable size, occupying the whole of the canine fossa of the right side, extending upwards so as to cause partial closure of the right eye. Fluctuation could be distinctly detected in the tumour, which was not at all painful at this time. Mr. Bowman now opened it, and about an ounce of a light brown and somewhat viscid fluid was evacuated; a lint tent was placed in the wound, and in the course of a few days suppuration was set up in the cavity of the tumour, and in about a fortnight more the wound had nearly healed. In a short time she quite recovered.

The fluid which was evacuated was slightly tinged with red, in consequence of the presence of blood corpuscles. It was not very viscid, and numerous sparkling plates of cholesterine were suspended in it. Upon the application of heat, or by the addition of nitric acid, it coagulated. Under the microscope, the following appearances were observed with a quarter of an inch object-glass:—

(a) Large cells, for the most part of a circular form and clear outline, appearing very dark towards the centre, and composed of numerous very minute oil globules, distinguished by their defined circular outline and high refracting power.

(b) Cells somewhat resembling pus globules, but more transparent, and having a much paler appearance; these cells varied considerably in size, but all appeared to contain granular contents.

(c) Round and apparently perfectly spherical cells, rather larger than a blood corpuscle, supposed to be blood globules distended by endosmosis.



(d) Perfectly round cells, with a defined outline, and with an apparently concave centre, in fact, resembling an ordinary blood corpuscle in general appearance, but of nearly twice the diameter. The accompanying woodcut was taken from a sketch made at the time the specimen was examined, and represents the four different kinds of cells present in the fluid—magnified 200 diameters.

A portion of the fluid was submitted to analysis; and in 1000 parts I found:—

Water	..	..	..	..	954.60
Solid matter	..	..	..	..	45.40
<hr/>					
Animal extractive soluble in water and alcohol	..	..	..	..	1.20
Animal extractive soluble in water only	..	..	..	..	.72
Brown fatty matter and cholesterine	..	..	..	..	1.04
Soluble fixed salts	..	..	..	..	2.88
Earthy salts	..	..	..	..	.58
Albumen	..	..	..	..	39.58
					<hr/>
					1000.60

For the two following very interesting cases I am indebted to Mr. Bowman, who kindly allowed me to copy them out of his note-book.

ENCYSTED TUMOUR ON ALVEOLUS.

Case 2.—Rebecca Dixon, aged 34, came to me on March 8th. She is a healthy-looking woman. The right cheek projects forwards so as to form a swelling about the size of a walnut over the canine fossa; within, there is a fluctuating swelling above the bicusps, which are stumps only. The border of the swelling is hard, as though formed of bony deposit. She came here because the lids had become a little inflamed from contiguity. The swelling has been noticed two years. She suffers no pain in it, except when the infant hits it. I punctured the swelling within the mouth, and two drachms of whey-like fluid, with very numerous flakes of cholesterine escaped. This fluid became opaque and solid by heat.

11th.—Bony projections are perceptible around the part punctured; the tumour has much diminished in size; the wound soon healed.

AQUEOUS CYST IN ORBIT.

Case 3.—February 4, 1850.—An infant, two months old, was brought to me at the Ophthalmic Hospital, with a small tumour above the inner canthus, which was apparently the size of a pea, and evident to the eye only when the child looked outwards; it was not easily fixed by the finger so as to be felt. I took it for an encysted sebaceous tumour beneath the orbicularis. When most prominent it appeared of a dark leaden-colour through the skin, and I thought it was sebaceous, having seen the contents of such a cyst of a slate colour. The mother thinks it increases in size.

I waited a week to see if it did increase, and on February 11, found it certainly more obvious to sight and touch, so I resolved to extirpate it. I dissected carefully down to it

through the orbicularis, and found a very delicate transparent vascular cyst, containing apparently a dark leaden fluid; but I was unable to get round it as it passed deeply, and I therefore punctured the cyst, intending to draw it out and remove as much as I could. Nothing but watery fluid (apparently not serum, but it could not be caught) escaped; and this fluid, from being deeply seated in the orbit, had given the false appearance of having dark contents. I removed a good part of the cyst.

18th.—Wound healed.

March 18.—No return.

June 3.—Child well; hardly any cicatrix.

There is something very peculiar and characteristic in the particular appearance of these cysts of the canine alveolus of the upper maxilla, and it will not be uninteresting to consider under what conditions they are produced in this locality, so that, if possible, some conclusions respecting their pathology may be arrived at. For the substance of the following remarks on this interesting question I am indebted to the kindness of Mr. Bowman.

From the several cases just detailed we are led to surmise, if not to infer, that there may be something in the conformation, or structure, of this part, derived from an early period of development, capable of affording some explanation of the manner of formation of these cysts at a later period of life. What is there in the structures at the outer orbital process to determine the singular frequency with which sebaceous cysts are found there in so many persons *under the orbicularis muscle*, and not in or under the skin? We ask in vain, for up to this time we have no knowledge of the anatomy of these parts which will afford a satisfactory solution. But it is not difficult to believe that there must be an answer concealed in the structure of the part; for here we are not concerned with any malignant growth or new formation, which may take its origin in, or spread into any tissue indifferently, but rather with a simple cyst which it is more natural to refer to some of the natural elements of the part unduly changed under a morbid cause. For these cysts, it would appear, occur at the canine fossa close to the junction of the intermaxillary with the supermaxillary bone, and they occur in the bone, for in their enlargement they borrow a part of their wall as a shell from the surrounding bone. Have they, then, any reference to this suture so early closed, yet, as shown in the case of hare lip and cleft palate, so prone to mal-development? It would seem that the absence of such cysts from the lower jaw would lend countenance to this idea.

Considering how easily the form of the superior maxilla may change under the influence of a morbid growth, or even of a morbid accumulation of secretion in the antrum, it seems very probable that the cavity of the cyst in a case of Mr. Fergusson's, which was in the hospital about twelve-months ago, was not the natural cavity of the antrum, but rather that it had so far encroached from the alveolar region into the position of the antrum as to obliterate that cavity by pressing its anterior wall backwards in contact with its posterior.

This explanation would bring the case in question into the same category with the others, and all would then serve to throw mutual light on each other.

These cases form very interesting examples of one of the many forms of serous cysts which are from time to time met with in different parts of the body, and affecting various organs. Slow in their growth, and difficult of cure, they may continue to increase in size for years, without affecting the health of the individual, and without producing any morbid change in the tissues in their immediate neighbourhood, beyond that resulting from the pressure of the tumour; until, from their increasing bulk and great weight, they bring discomfort to the patient, or by distending cavities, or pressing on some nerve in their vicinity, give rise to great suffering, which renders the interference of the surgeon necessary. Where the cysts are not very large, cures are sometimes brought about by inducing suppuration. Thus the secreting portion of the cyst becomes destroyed by supuration, and the cyst itself almost reduced to the condition of an ordinary abscess, which ultimately heals by the process of granulation. In other instances, complete extirpation of the cyst is effected by excision.

There can hardly be any subject in the province of pathology of greater interest than the growth and development of these cysts containing serous fluid, and there is scarcely any subject involved in greater obscurity, or

fraught with greater difficulties of investigation. This is scarcely to be wondered at, when the various conditions under which such cysts have been found, and the different localities which they occupy are taken into consideration, some appearing to be developed in the areolar tissue of various parts of the body, while other cysts, having similar characters, have frequently been met with in the solid parenchyma of various organs. Some appear prone to infect particular localities, as we have just remarked. Occasionally, cysts of this description seem to owe their origin to the permanent obstruction of some secreting tube or canal. Often they appear to be developed in consequence of a series of morbid actions having taken place in an organ, or in some of its component parts, by which its healthy functions become perverted, in fact, giving place to those changes which terminate in the production of a new and highly organised secreting cyst, which bears no resemblance to the tissue from which it seems to have been developed, either in the structure of its walls or in the nature of its contents.

It will perhaps be interesting to compare the microscopical appearance of the fluid from the cyst in the first case, with those of a somewhat similar secretion from the antrum of Mr. Fergusson's patient, whose case was just now referred to.

The cavity of the antrum was laid open by making an incision into its anterior wall after raising the upper lip. About two ounces of a brown, transparent, and very viscid fluid, holding in suspension a great number of micaceous plates of cholesterine, escaped. The reaction of this fluid was very slightly acid, and, upon the addition of nitric acid, it coagulated nearly as firmly as white of egg. Upon microscopical examination with a quarter, the fluid was found to contain a few blood corpuscles, a great number of plates of cholesterine, of very variable sizes, a considerable number of very delicate and granular cells, larger than a pus corpuscle, and with no distinct nucleus, free oil globules, and a few large cells composed of minute oil globules, and much resembling some of the fat cells found in the urine of patients suffering from fatty degeneration of the kidney, as pointed out by Dr. G. Johnson.

The microscopical characters of these two serous fluids were very similar; both contained cholesterine (as also did the fluid in *Case 2*), delicately granular cells; and large cells, filled with minute oil globules, were present in each instance, but the large cells, (d) described in the first specimen, were absent in the last. The nature of these peculiar cells we are at a loss to conjecture, but they have been noticed in fluids having somewhat similar characters to the present.

The chemical composition of this fluid is found to agree very closely with that of some other serous fluids, the products of secretion of closed cysts; and, it is found, that these fluids present microscopical and chemical peculiarities amply sufficient to distinguish them from serous fluids resulting from mechanical causes, so that by microscopical examination and chemical analysis we are enabled, in numerous cases, at least, to say whether a serous fluid be derived from a secreting cavity, or whether it result from transudation through the coats of vessels. Of this point I shall have to bring forward further illustrations in future papers.

Analysis II. may be referred to as an instance of a fluid of very similar composition, but derived from a very different source, although both fluids may have been secreted from structures whose development may have resulted from morbid changes of one common character; but which were manifested in different situations, and, perhaps, become somewhat modified according as the nature of the tissues in which these changes are seated differ. This analysis is one of a specimen of ovarian fluid of specific gravity 1014, which was furnished by the kindness of Mr. Walne.

From the composition of healthy serum it differs materially, in the amount of solid matter it contains, and also in the quantity of fixed salts:—

	II.	III.
Water	950.20	906.0
Solid Matter	49.80	94.0
Fibrin		3.4
Extractive Matters . . . .	.99	3.0
Albumen	40.48	77.0
Fatty Matter }		3.0
Soluble fixed Salts	7.71	8.0
Earthy Salts . . . .	.62	

Upon comparing Analysis I. and II. with each other, we also observe a disproportion in the amount of saline matter; but, whether this be the result of accident, or whether it is a characteristic difference, future investigation must determine. III. is an analysis of the plasma of the blood by Lecanu; and from the two first analyses it is found to differ very materially in the quantity of solid matter, and in the quantity of albumen which it contains. In this analysis we find that 100 grains of solid matter would contain about 8.5 grains of fixed salts; while, in Analysis II., the same quantity would contain nearly 17 grains, and in 100 grains of the solid matter of Analysis I., the amount of salts would be nearly 8 grains.

L. S. B.

THE MEDICAL TIMES.

SATURDAY, AUGUST 2.

THE PROVINCIAL ASSOCIATION.

WE remind our readers, that the Annual Meeting of the Provincial Medical and Surgical Association will take place at Brighton on the 13th and 14th of August. The vicinity of this delightful watering-place to the Metropolis; the eminence of the gentlemen who are appointed to address the meeting, the importance of the subjects which it is understood will be brought forward for discussion, and the exertions that our Brighton brethren are making to entertain the Members, will, doubtless, command a very numerous attendance. The addresses in Medicine and Surgery are to be delivered by Dr. King and Mr. Vallance; and Dr. Mantel—a host in himself—will illustrate the topography of Sussex. We have reason to know that great efforts have been made to render this, the Nineteenth Anniversary of the Society, worthy the year of the Great Exhibition; and we earnestly call upon the Profession to show, by their attendance at Brighton, that they are not indifferent to the kindly feelings which universally prevail, and that Medical men can be as united and social as any other class of society.

WATER SUPPLY FOR THE METROPOLIS.

IF the gentleman in the *Lancet* who has so abused Father Thames have any bowels at all, the admirable Report of Professors Graham, Miller, and Hoffmann, just published, (a) must convince him that he has done injustice to a really worthy individual. Our old acquaintance, we are happy to say, has gone through a severe trial by the able chemists above named, and has come out quite a renovated character. All sorts of names have been given to Father Thames. He has been called a ditch, a sewer, a cesspool, the dirtiest river in creation; and the imaginative public have been frightened out of their wits by grotesque figures, purporting to represent the bosom offspring of his polluted waters. So much obloquy might have made any less dignified stream boil over its banks with indignation; but our noble river has kept down his temperature, and waited for the time when justice should be done him. That day has come, and we are happy to be able to circulate the following testimonial of his good qualities. Father Thames, as represented in the water of the Companies, is not dirtier than his suburban neighbours the Lea or New River, and is as clean and much less salted, than his kindred at Hampstead. He contains, in an imperial gallon, only 2.43 grains of organic matter, while the New River has 2.79, the Lea 4.12, and the Farnham water 1.78 of the same substance. Father

(a) Report of the Commissioners on the Chemical Quality of the Supply of Water to the Metropolis. Ordered by the House of Commons to be printed. 23rd June, 1851.

Thames has been accused of being hard, but this is true only in one sense; for his hardness is temporary, and arises not from sulphate of lime, but from carbonate of lime held in solution by carbonic acid; and, although at first its degree may appear considerable, being about 14° of Clark's scale, yet, if he is boiled for a little while, he comes down at once to 5°; and, by Clark's process of "liming," which consists in adding lime to unite with the free carbonic acid, which holds in solution the carbonate of lime, the old river may be made as soft as the gentlemen who have lately favoured us with so many severe observations on him; which is saying a good deal. The Thames is a little turbid and yellow after floods, but this is chiefly owing to the agitation he suffers on being mixed up with the Brent, one of his tributaries, emerging from the clay at Brentford; and, if a pipe is laid down above Teddington Weir, he comes out quite or nearly clear in all weathers.

It is, however, true, that Father Thames, excellent as would be his supplies, were they taken above Teddington Weir, and *limed* to make them soft, cannot compare in point of purity with the water recommended by the Board of Health, nor with that which can be obtained from Barnet. But, in spite of the able engineering Reports sent in to the Board of Health, it appears very doubtful whether the quantity furnished from the Hindhead and Farnham district would be considerable, and the expense of bringing it up would be very great. The Barnet water is nearer, and is of most excellent quality; containing, it is true, a good deal of carbonate of lime, but scarcely any sulphate. By boiling, or *liming*, it becomes quite soft, and is then a pure, limpid, and sparkling fluid, containing a good deal of carbonic acid, and being pleasant to the taste. The proposal of the Watford Company, is to supply only ten millions of gallons a day; but there seems every reason to believe that a much greater supply than this could be obtained.

In forming an opinion as to the source of supply, three main points are to be kept in view. We want good water, in good quantity, at the cheapest possible rate. Now, there is much to be said for the Thames. It is close at hand, and is by far the cheapest and most abundant source of supply. There is nothing in its mineral ingredients injurious to health: if taken above the tidal flow and above the opening of the Brent, it is very seldom discoloured, and contains only a trifling proportion of animal matter^(a); it can be made soft at little expense, and, from the carbonic acid it contains, it does not act upon lead. Added to this, in preserving this source of supply, much of the present apparatus for filtering and distributing water would continue to be used; whereas, if we give up the Thames, there are vast works which will be a dead loss to persons who have invested money on the faith of Acts of Parliament, or for which we must give compensation, and fresh rates must also be levied for the new works which will become necessary. If, therefore, the existing Water Companies were consolidated, or, still better, superseded by paid and responsible Commissioners, we should obtain very good water, in any quantity, and at a trifling cost.

There are, however, objections to the Thames. In heavy floods it becomes yellow, even above Brentford; it becomes also, like almost all rivers, impregnated with vegetable decomposing matters, washed out of the fertile country through which it passes. It is also contaminated with sewage matters from the towns on its banks, although, from the rapid oxidation of these products, this is at present in-

appreciable above the tidal flow. Yet, with the increase of population, this evil will increase, unless the draining of these towns and villages is diverted from the Thames.

What we have said about the Thames applies also to the Lea and New River, only those waters are little liable to turbidity, and the sewage into them can be more easily averted.

With regard to the scheme of the Board of Health and the Watford plan, the water is unobjectionable, and no doubt, abstractedly, is to be preferred to that of the Thames; but the doubt as to the amount of supply, and the expense of forming new works, which must, assertions to the contrary notwithstanding, make the expense of those waters considerably greater than that of the Thames, are serious obstacles to the exclusive and immediate adoption of either of these plans.

It requires no great amount of sagacity, therefore, to perceive which plan should be pursued, and it does not demand that we should be possessed of clairvoyance to foretell what the Government will do in the Session of 1852.

The great point which must be settled first, is that which Sir George Grey has brought forward,—the organisation of the administrative body. An efficient, well-remunerated staff of Commissioners, responsible to the Secretary of State and to Parliament, will we trust transact ere long the present business of our many-headed water-hydra, at a comparatively trifling cost. Profit on selling water will be, of course, out of the question; and all the cost to the consumer will be, the actual outlay on the quantity supplied. The Commissioners will probably commence with Thames water, drawing their supplies from Ditton, or even higher, by means of pipes, purifying it by liming and other processes modern chemistry has placed at their disposal, and by careful filtration, and will distribute it by means of the present apparatus. In this way the greatest cheapness will be attained, and the water supplied cannot be objected to. But as it is also advisable to have the purest water possible, the Commissioners will no doubt have it in view to supersede, gradually, the Thames water by the water drawn from Watford, and (it may be) from Hindhead and Farnham, and by means of a small rate, which would be almost imperceptible, they will, we should imagine, establish a sinking fund to form works at these places, and gradually, without apparent pressure on the ratepayers, change the source of supply.

The extravagant invectives which have been vented against the Thames water have very much influenced the public against it; but with the Report of the Government Commission before our eyes, it is impossible not to admit that it would be in the highest degree ridiculous to abandon, at present, a really pure source of supply, which is close at hand, and therefore as cheap as possible, and from which water can be supplied in any quantity.

In another part of our paper, our readers will find the analyses of the Government Commission. We also recommend them to read the Report itself, a very interesting and instructive document.

EXTRAMURAL INTERMENT.

THE first sign of life that the Board of Health has exhibited since the Legislature invested it with the power of carrying out the Act for the abolition of burials in towns, was manifested in the House of Commons last week, when the Chancellor of the Exchequer proposed a grant of 130,000*l.*, to enable the Board to purchase the Cemeteries of Nunhead

(a) Scarcely more than the Watford water.

and Brompton. The great design of establishing a Metropolitan Cemetery of sufficient magnitude to provide decent burial for the entire dead of this populous City, deserves encouragement and promotion. It will be a magnificent monument of the advancing civilization of our age, and when the chariot-wheels of destroying Time shall roll over the prostrate columns of our fallen capital, not the least interesting relic of our greatness will be the silent tombs that sepulchre the ashes of our mighty and immortal dead. The future heroes of the Cabinet or the battle-field—the illustrious workers of the laboratory, the loom, or the forge,—all the men of intellect, whose thoughts or deeds have shed splendour upon the page of British history, will lie here, memorialising the grandeur of genius and beauty of virtue, that raised to the highest pinnacle of greatness the country they adorned and served. Many a traveller, in ages to come, will pause before the tomb of some unforgotten sage; and whilst the fragrance of his wisdom still breathes in the air that lingers about his dust, will draw inspiration from the memory of his life, and labour to ennoble his own land with equal services, and advance in his turn the great destinies of his race.

Apart, however, from considerations such as these, the time had arrived when, for the comfort and health of living generations, it had become absolutely necessary to amend the pestilential and immoral system of interment by which this country has been characterised among nations. The evils to be removed have long been admitted; powers have been given by Parliament for their abolition, and the public have been waiting somewhat impatiently for the realisation of the hopes that had been raised. The Board of Health has now made an effort to carry out a uniform system, and, for that purpose, has demanded a grant of money from Parliament. Our fear is, that if too many applications be made to Parliament for money to buy up the rights vested in existing cemeteries, some of which are beautifully situated, and much frequented by our more contemplative fellow-citizens, and with which many hallowed associations are already connected, the public and Parliament will begin to ask the necessity of large grants of money for the purchase of cemeteries, against which no serious objections have yet been alleged. It is possible to carry a system too far; and something of this kind was expressed in the House of Commons on the debate upon the grant. We do not know what is the actual condition of the Nunhead and Brompton cemeteries, and, perhaps, in a sanitary point of view, sufficient reason may exist for their closure; but if there be any unnecessary interference with other cemeteries, it is very certain that public opinion will be strongly roused. A strict surveillance over these grounds might be considered sufficient. It may be objected against the maintenance of several graveyards, that the expense of burials must be necessarily increased. The objection is, in our opinion, of very doubtful force, and we are disinclined to place any reliance upon such a statement. We are by no means sure, in a financial point of view, that a Government monopoly is likely to be less expensive to the public than a moderate competition between several private Companies. All experience tends to the disproof of such an assumption; and if the Board of Health be too meddlesome, they may find too many opponents of this opinion.

On the other side, it is alleged that unless the Board of Health have a monopoly, they will not be able to procure loans for effecting their objects. This is possible; yet, after all, the capacities of the better description of cemeteries being known, it is a matter of simple computation, and the

fewer dead the Government will be required to bury, the less money they will want. If we could begin *de novo*, we would not allow a single cemetery to be established within seven miles of London; but, for the reasons already assigned, we would impress upon the Commissioners the necessity of caution. The Government already trembles to adopt the responsibility of the Board's requisitions.

We merely suggest these remarks for consideration, being ourselves as anxious as any persons can be for the entire abolition of the sanitary and moral evils which intramural sepulture has entailed upon our population. The Act under which the Board exercise their powers is one of the most important that the Legislature has passed for many years, and ought to procure for this body absolution for many other shortcomings.

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF
MEDICINE AND SURGERY.

[ELEVENTH NOTICE.]

AMONG the galvanic apparatus we find a very ingenious and novel mode of applying galvanism to the human body as a remedial agent, invented by M. Pulvermacher. The apparatus is in the form of a chain battery, which may be worn continuously on or around the affected part; and it differs from the other forms we have already noticed in affording a weak and almost painless current, which occasions little or no inconvenience to the wearer. The construction of the chain battery is thus described by the inventor. "In order to produce a large surface within a small space and with little material, positive and negative wires (of zinc and brass) are coiled round a small lengthened piece of wood in such a manner that they run parallel to each other at very small distances, but without immediate contact. At each extremity of the wooden core, the end of one of the wires is bent into a gilt eye, (the other end being fixed into the wood,) so that at one extremity of the wood, the eye from the positive wire, at the other extremity that from the negative wire, projects beyond the core, the whole forming the metallic part of a galvanic element, with space between the wires for the fluids. A number of such elements linked together on the principle of the voltaic pile, therefore, constitutes the metallic part and arrangement of a battery, permanently connected, flexible in all directions, of considerable surface (quantity) in proportion to its size, and of an intensity, only limited by the number of elements employed." These batteries, although so small and light, are capable of producing powerful effects, as we have ourselves experienced, and we have no doubt that all the statements made by the inventor in his prospectus are correct. Thus a powerful shock can be obtained by a battery of 120 elements charged with distilled vinegar; and when the two halves of the battery are connected by an interrupting cylinder, consisting of a spring fixed in a small glass tube, so that every motion of the instrument breaks and renews connexion, producing a vibratory current, the effect is almost insupportable, and approaches in character to the more powerful electro-magnetic machine. The inventor states that a battery of eighteen of the elements decomposes acidulated water, while one of 150 produces visible sparks with the interrupting clock-work. Another curious effect is produced by these batteries, when the clock-work apparatus just mentioned is added to the apparatus, that of exciting rather powerful muscular contractions, unaccompanied by any considerable amount of pain. We have personally tried this apparatus, and can vouch for the accuracy of the statement that, while muscular contractions were excited, little pain or other inconvenience was produced. The exciting fluid may be either water; together with the perspiration, the mildest form in which it can be applied, which produces a "constant mild irritation, felt as a slight itching, and the production of small pimples; or vinegar, when charged with which, the battery produces a burning sensation at and near the poles. When the interrupted current is required, as in paralysed limbs, the small glass tube or interrupting cylinder may be inserted in

any part of the chain, by which slight but sensible shocks are produced by every movement of the body.

We have been thus particular in describing this form of apparatus for the application of galvanism to medical purposes, because we look upon it as most ingenious and novel. Whatever may be thought of the influence of galvanism on disease, it is quite evident that we have in this battery a means of exciting and perpetuating a form of counter-irritation whose effects may be as great or greater than those of the electric current itself in the removal of the morbid condition.

Among the exhibitors of philosophical instruments, we are delighted to see two of our own profession. Mr. C. Brooke has here a number of most ingenious applications of the calotype to the self-registration of the indications of the horizontal and declination magnet, the thermometer and the barometer, by which the immense labour of consecutive observations at short intervals, and the inaccuracies thereupon necessarily ensuing, are altogether obviated; and the actual observations may be preserved for an indefinite period. We cannot, of course, enter into a detailed description of these forms of apparatus, but we must express our high opinion of the inventive talent that Mr. Brooke has brought to bear on this important subject.

The other apparatus exhibited by Dr. Merryweather is designated the "Tempest Prognosticator." It has long been known that many animals are affected by changes in atmospheric electricity, and that they indicate the approach of changes of weather by their movements. Popular tradition has long assigned to the leech the capability of prognosticating change of weather by the position it takes in a bottle of water; always rising to the surface when storms are approaching. Dr. Merryweather determined to put this popular belief to the test, and he has, by a long series of observations, positively ascertained that the opinion is correct, and that storms may be predicted with great certainty by means of these animals. In the course of his observations he remarked that some leeches were much more sensitive to atmospheric changes than others, and for this reason he employs a dozen of these animals in his "Tempest Prognosticator." The instrument, which is very handsomely fitted up, and would adorn a study-table, consists of twelve pint bottles arranged in a circle filled with water, with a single healthy leech placed in each of them. The mouth of the bottle is plugged with a metallic tube, with a perforated cover, admitting air, and fitted with a sort of perch, connected with a chain, which pulls the clapper of a bell placed at the upper part of the apparatus. The bell is single, with twelve clappers, which are arranged around its circumference. When foul weather is approaching one or more of the leeches rise into their respective metallic tubes, and turning around the perch, pull the chain attached to the clapper by their weight, and ring the bell. The inventor gives a considerable number of vouchers of predictions of storms by this instrument. Future and more extended observations will determine whether this curious feature in the natural history of the leech can be constantly depended on for this purpose.

Connected with this subject—the varying conditions of the atmosphere—is a very pretty instrument, exhibited by Mr. Collins,—a self-registering hygrometer, by which, it is stated that the dew-point can be accurately determined by inspection and a very simple calculation. By a misnomer it is called a self-registering hygrometer, although incapable of registering its own variations during the twenty-four hours. Supposing it capable of giving the dew-point accurately, as stated by its inventor,—which we have had no opportunity of ascertaining,—the addition of Mr. Brooke's method of self-registration, could this be done, and some accurate method, could it be devised, of ascertaining and registering the variations in character and amount of atmospheric electricity, would complete our means of determining all the meteorological variations of the atmosphere, and would enable us, from a well-conducted series of observations, to determine the influence of these variations on the general health,—a subject, we would remark, of great importance in the history of disease. The instrument in question consists of a long narrow slip of wood or cork, cut across the grain, fixed at one end, and connected at the other end with a thread, passing over a pulley and turning a small reel, to which an index is attached, which, in traversing a circle divided into degrees, indicates the relative contraction or expansion of the strip of wood. The influence of the wood is

counteracted in part by a bell-spring of wire, which brings back the index when the wood elongates by moisture, and the circle is surrounded by numbers, which, being subtracted from the temperature indicated by a thermometer in the case, gives the dew-point. We ascertained, by breathing into the instrument, and thus increasing the moisture of the air within it, that the indications were very delicate.

As might be expected, we find in the Exhibition barometers, thermometers, air-pumps, electrical machines, and a large assortment of philosophical apparatus of the ordinary construction, which do not demand or deserve the separate notice which we reserve for what bears the appearance of novelty and utility.

The only electrical machine in which we saw any novelty of construction, is that exhibited by Mr. Westmoreland, (444.) The novelty consists in using an endless band of gutta percha turning on two rollers, covered with green baize, rotated by a winch, and excited by four brushes of hog's bristles similar to hair brushes. In the building it was, of course, impossible to bring the machine into action; but, as the inventor has gone to the expense of a patent, we presume that it possesses considerable power. It certainly is less liable to damage than the ordinary cylinder or plate machine, and may, probably, be brought into action with greater facility.

The application of thin wires heated to redness or whiteness by a galvanic current to the removal of piles, the division of fistulæ and other similar purposes by Mr. Marshall, the talented Assistant-Surgeon to University College Hospital—has been extended to the destruction of the nerves of carious teeth, by more than one dentist. Mr. Waite (441) exhibits an apparatus for this purpose, by means of which the wire is first introduced into the hollow of the tooth, then, the connexion with the battery being completed, the wire is heated, and the nerve cauterized. We have consulted a very eminent dentist on the applicability of heat to the cauterization of carious teeth, who objects to its use, because it frequently excites inflammation in the periosteum of the fang and alveolar process, and thus produces abscess and caries of those parts.

REVIEW.

Familiar Letters on Chemistry, in its Relations to Physiology, Dietetics, Agriculture, Commerce, and Political Economy. By JUSTUS VON LIEBIG. Third Edition, revised and much enlarged. 12mo. Pp. 535. London: 1851.

To Liebig, beyond question one of the most distinguished chemists of modern times, the mere reading public is indebted for the most persevering efforts to place within its reach all that is easily intelligible of the principles of a science which, of all others, comes most immediately home to the interests of men, whether in their personal capacity, or as members of the great communities of the world. The annual income of every country, that is the means of providing for the maintenance, the conveniences, and the comforts of its inhabitants, is ruled by the more or less perfect application of the principles of the science of chemistry. Berzelius, whose recent death deprived chemistry of a head, acknowledged as such for near a quarter of a century, set the example of striving to render his own science at once interesting and intelligible to the world at large. His *Treatise of Chemistry*, voluminous and comprehensive as it is, never fails to put the most abstruse subjects within the grasp of ordinary attention. It is to be regretted that this great work of Berzelius has never been translated into English,—now, perhaps, it is too late; for such is the rapid progress of chemistry that the newest work, if it have the quality only of accuracy, must always outshine its predecessors in the market. It must be confessed, however, that the taste of the English reader hardly yet runs upon an eight-volume work on chemistry, like that of Berzelius, however attractively put together. The turn of our time is for short books, and with that turn the work of Liebig now before us happily coincides. Though entitled a third edition of his former letters, it is so much enlarged, without ceasing to be a portable volume, that it may be considered as a wholly new work, embodying the most recent views of its distinguished author on the all-important subjects of which he treated in his four several popular works formerly published,—namely, his "Chemistry of Agriculture and

Physiology," his "Chemistry of Physiology and Pathology," his "Chemistry of Food," and the former editions of his "Letters on Chemistry." The first Letters in this volume are entirely new, and contain some most interesting views on the origin and development of chemical science, under which fall not a few observations attractive to the medical reader, as bearing on the history, the character, and the future prospects of medicine. In this notice of Liebig's work, we propose to confine our attention to what more or less directly concerns medical science. We begin with the following quotation:—

"It is not unworthy of remark, that many physicians profess to hold chemistry in contempt, exactly as they do with physiology; that medicine reproaches physiology, and with equal injustice, as she reproaches chemistry. The physician who has learned medicine, not as a science, but as an empirical art, acknowledges no principles, but only rules derived from experience. The object of his inquiries is only whether a remedy, in any given case, had a good or a bad effect. This is all the empiric cares about. He never asks *why*? He never inquires into the *causes* of what he observes!

"From what a different point of view should we contemplate the abnormal or diseased conditions of the human body, if we were first thoroughly acquainted with its normal conditions,—if we had established the science of physiology upon a satisfactory basis!

"How differently would the treatment of diseases be conducted, if we had perfectly clear notions of the processes of digestion, assimilation, and excretion! Without just views of force, cause, and effect,—without a clear insight into the very essence of natural phenomena,—without a solid physiological and chemical education,—is it to be wondered at that men, in other respects rational, should defend the most absurd notions; that the doctrines of Hahnemann should prevail in Germany, and find disciples in all countries? Reason alone will not prevent whole nations from falling into the most abject superstitions, whilst even a child whose mind has been duly developed and instructed will repudiate the fear of ghosts and hobgoblins.

"Can men who do not apprehend the nature of scientific investigation in a philosophical spirit, and who cannot interpret the language of phenomena,—can such men be expected to derive the least advantage from the discoveries of chemistry or physiology; and can they be deemed capable of making the most insignificant application to practical purposes of those discoveries? We often see such persons annoyed that truth should be so simple; and yet, in despite of all their efforts, they cannot succeed in deriving from it any practical advantages. From such persons emanate the most absurd, nay, impossible notions, and they have created for themselves, under the name of the *vis vitæ*, a miraculous thing, by which they would explain all the phenomena they are unable to understand. With a totally incomprehensible, indefinable something, they would arrest inquiry, and explain everything which is not comprehensible.

"But this *vis vitæ* is itself but a subject of investigation, and, in order to explore it, to comprehend its essence, to understand its operations and effects, the physician must pursue the same method which has been followed in natural philosophy and chemistry with such signal success." Pp. 12, 13, 14.

Liebig has here, beyond doubt, correctly indicated the only plan on which medicine, as a science, can be successfully prosecuted. Our Author, however, is not a practical physician; he does not point to the misunderstandings which continually arise in our discussions on such subjects, owing to the improvement of the science of medicine being confounded with practical skill in the application of the art of medicine. It is quite certain, that all great improvements in the art of medicine have arisen from an advance in what is strictly termed medical science. It is also true, that no one is prepared to enter on the practice of medical art who is not fully conversant with medical science; but it is true, moreover, that a man may be deeply imbued with medical science, and yet be but imperfectly qualified to practise the art with success. Even in chemistry, a turn for the successful prosecution of the art, independently of superior excellence in the science, is not unknown; but in medicine, to a far greater degree is it necessary for excellence that the practical mind should concur with attainments in science. The treatment of particular cases of disease is like influencing the affections and wills of a multitude of different persons; both depend on general principles, but the mere knowledge of these principles would wholly fail in both cases, without the possession of a certain tact for the adjustment of the general rules, to each individual case.

Nothing appears more surprising to Liebig than that the absurdities of Hahnemann should take hold of men educated in medical science. He has referred to it in the passage just quoted, and he recurs to it again in a subsequent letter, from which we are about to make an extract. We should join in the same surprise, if we were satisfied that a real conviction of the truth of Hahnemann's doctrines were the motive which uniformly actuates those who profess homœopathy.

"Who can maintain," says Liebig, "that the majority of well-informed and cultivated men of our time stand on a higher level in regard to knowledge of nature and her powers than the iatro-chemists of the sixteenth century, when he knows that hundreds of physicians, trained in our universities, regard as true, principles which defy alike all experience and sound common sense; that there are men who believe that the effects of medicines are due to certain forces or qualities, which, by means of grinding and shaking, can be set in motion and increase in force, and thus communicated to inert bodies; who believe that a law of nature, to which no exception is known, is false for medicines, since they admit that their efficacy may be increased with their dilution, and with the diminution of active matter? Truly, one is tempted to adopt the opinion, that among the sciences which have for their object a knowledge of nature and of her forces, medicine, as an inductive science, occupies the lowest place."—Pp. 76, 77.

In the last part of this passage, our author deals but a hard measure of justice to the cultivators of medicine. It is not to be expected that all those who acquire a smattering of medical science shall be exempt from the common failings of humanity, and in particular from that weakness of moral principle which leads so many persons, in all departments of life, to apply the talents with which they were endowed for better purposes, to make dupes of their fellow-men when opportunities offer, for the sake of filling their own pockets at a less expense of exertion than that can be done by honest labour.

Liebig in one part of the volume before us puts in a word of defence for the alchemists. Speaking of the ages prior to the revival of letters in Europe, he says:—

"When compared with this stage of development of the human intellect, alchemy, as far as regards a knowledge of natural truths, was in advance of other natural sciences."—P. 29.

Yet, in the very same letter in which he argues that the alchemists, in knowledge of natural laws, were in advance of their contemporaries, he is forced to cite examples of the rogueries practised by the unprincipled among them on the princes and great men who were weak enough to become their dupes.

"The impostures," he says, "which were practised on a great scale by the makers of gold were not sufficient to weaken the popular belief in the reality of transmutation of metals. Henry IV. of England, in 1423, in four successive decrees, summoned all nobles, doctors, professors, and clergymen, to devote themselves, according to their several abilities, to the study of the art, in order to procure the means of discharging the debts of the State. 'The clergy,' said the King, 'should engage in the search for the philosopher's stone; for, since they could change bread and wine into the body and blood of Christ, they must also, by the help of God, succeed in transmuting the baser metal into gold.' What success attended these decrees may be gathered from the fact, that the Scottish Parliament subsequently ordered a strict watch to be kept in all the harbours of Scotland, and on the land-frontier, in order to prevent the introduction of false money. It is said, that the descendants of the gold-makers of that period still exercise their craft in Birmingham."—Pp. 38, 39.

We willingly subscribe to our author's opinion as to the superiority of the alchemists in natural knowledge over their contemporaries; but we think it particularly unfair that one who, like Liebig, at the same moment acknowledges the impositions practised by the unprincipled among them on the weak men of their own age, should overlook the parallel which the treatment of diseases in our days presents to this state of things. We think Liebig would have spoken more truly if, instead of saying that the prevalence of homœopathy in our times makes one suspect that medicine occupies the lowest place among the inductive sciences, he had remarked, that, notwithstanding the high mental cultivation which the study of medicine affords, the temptation held out to unprincipled men by the facility of mind produced by the valetudinarian state, is such as to seduce not a few from an ill-requited, honest course of life, into profitable knavery.

Among the points in this work bearing on the character of medical science which well deserve attention, as coming from so acute an observer as Liebig, is his denouncement of the folly of modern medical authorities when they exalt themselves at the expense of their predecessors; looking down with contempt on the great names which adorn the past history of medicine.

After giving a brief outline of the system of Galen, he says:—

“The removal of disease, or the restoration of health, depends, according to Galen, on the supply of the deficient quality by communication, or in a removal of that which is in excess, by means of a remedy which tends to abstract it.

“In this consistent system, disease and the action of remedies were reduced to a very limited number of causes. Diseases, like remedies, admitted of classification on a certain number of divisions; and when he had ascertained the place in the arrangement to which a disease was to be referred, the physician found, in the corresponding division, the appropriate means of restoring health. He knew the origin of the disease, and he knew why the remedy cured it.

“In place of the empirical art and the method of experience which had led Hippocrates of Cos to his innumerable observations and his admirable system of dietetics, there now appeared the theory which combined, arranged, and explained these observations. The treatment of diseases followed by the great physician of Cos could be learned only by imitation; the new system was infinitely better adapted for teaching, and the acquisition of medical knowledge was rendered much easier.”—Pp. 64-65.

On these passages we will merely remark, that the practical physician will not readily admit, that, after all that can be acquired from such a systematic method of diseases and remedies as that to which Galen reduced medicine, there is not much left to be acquired, as Liebig says Hippocratic medicine can be only learned, namely, by imitation.

But we must condense into a few words what our Author says further of the history of medicine. Remarking that the Pharmacopœia of Galen contained no chemical preparations, and that his views of diseases and treatment had been regarded for thirteen centuries as impregnable truths, he calls on us to figure the kind of impression which must have been made on the physicians of the sixteenth century “by the discovery of the truly wonderful effects of the preparations of mercury, antimony, and other metals.”

“There was discovered in the blood a property belonging to the alkalis; in the gastric juice, a property belonging to acids. A contrast, or opposition, was noticed between these fluids, corresponding exactly to the contrasts of the Galenic qualities.” * * * “The vital phenomena, and the action of remedies now, as it appeared, depended not alone on the relative proportions of salt, mercury, sulphur, alkali, and the acid. In consequence of such new and altered ideas, the art of healing assumed a new form.” * * * “If the normal chemical character of the juices was the condition which determined the healthy state, the abnormal character of these juices was, of course, the proximate cause of disease; and disease could be removed by the predominating chemical character of remedies, and health thus restored. In selecting remedies, then, especial attention must be paid to the chemical constitution and character of the bile, of the saliva, of the sweat, and of the urine, etc. This was a step forward of incalculable importance. The valuable discovery was soon made that the chemical state of the urine stood in a definite relation of dependence to certain diseases; and as, in the period of science now under review, all effects were taken for the causes, the deposits formed in the urine, or the tartar, were regarded as the causes of many diseases.”—Pp. 72, 73, 74.

Our Author goes on to state that, in the spirit and mind of Paracelsus, the new ideas of the times assumed a definite shape; that when Luther had burned the Papal Bull at Wittenberg, Paracelsus, at Basle, following his example, committed to the flames the works of Galen and Avicenna:—

“In Paracelsus are reflected all the ideas, all the faults, all the errors of his time. In him a gigantic force strives against the impediment of outward fetters. He has the instinct, but not the full consciousness of the right path. He seeks it in vain in the wilderness which surrounds him; hence his internal struggles. But his word gives to the century its direction. ‘The true use of chemistry,’ he says, ‘is not to make gold, but to prepare medicines.’” P. 75.

We must add the following quotation, as offering some

reparation for the slight put upon the claims of medicine to science, in the passage already cited:—

“By Paracelsus, chemistry was taken out of the hands of the gold-makers, and brought into the service of the far more learned and cultivated physicians; and, as he and his followers prepared their own medicines, chemical knowledge and an acquaintance with chemical operations were thenceforth regarded as among the most essential qualifications of the physician.” P. 75.

One of the great merits of Paracelsus, with all his faults, was, that he called on men to abandon vain dreams, fancy, and book-craft, and to follow nature. “The eyes which have pleasure in looking, they are the right professors.” The chief difficulty which impeded the onward progress of medicine, and, indeed, of all other branches of natural knowledge, was the imperfect ideas still prevalent as to the character of matter. It was long before the notion of occult qualities was laid aside, and the truth was established, that “matter and its properties are practically not separable.” The uneducated agriculturist still explains the operations of nature in the economy of his fields and crops by a reference to the occult qualities of the various substances concerned; and the still more unscientific homœopathist out-Herods Herod, in his conception of the wonderful latent virtues to be called forth from infinitesimals of matter by frivolous manipulations.

We have left no room for entering at present on Liebig’s improved views bearing on physiology, pathology, and dietetics; but, before closing this notice, we cannot help drawing attention to a passage which manifests the soundness of this great philosopher’s views as to the true character of human knowledge.

“The human mind perceives in nature no limit either above or below itself, and in this infinity—scarcely conceivable, since it is in both directions unfathomable by human power—not one drop of water falls to the ground, not one particle of dust changes its place without compulsion. Nowhere beyond the sphere of his own being does man perceive a conscious will; he sees everything around him bound in the chains of invariable immutable fixed laws. Within himself alone he recognises a something which may govern these effects,—a will which has the power to rule over all natural laws,—a spirit which, in its manifestations, is independent of these natural powers, and which, where it is, in its conceivable perfection, is subject only to its own laws.”

“The mere empirical knowledge of nature forces upon us irresistibly the conviction, that this something within us is not the limit beyond which there exists nothing similar or more perfect. The inferior gradations only of this something are accessible to our powers of perception. And this conviction, like every other truth, in inductive natural investigation, affirms the existence of a higher, indeed, of an infinitely exalted Being, to contemplate and to comprehend whom our senses are too feeble; and of whom, in His greatness and sublimity, we can only form some conception by the highest cultivation of every faculty of our minds.”

GENERAL CORRESPONDENCE.

“MERITS AND DEMERITS OF THE PERINÆAL SECTION.”—DR. MÜLLAR v. THE BRITISH AND FOREIGN MEDICO-CHIRURGICAL REVIEW.

[To the Editor of the Medical Times.]

SIR,—It is with much reluctance, and after mature consideration, I feel myself imperatively called upon by a sense of duty, which I owe not less to my own character than to the professional question at issue, to obtrude myself again on public attention; and for that purpose I shall be greatly obliged to you for a place in your next Number to the following communication. Every candid mind who has perused the document to which my remarks refer; viz., the article in No. XV. of the *British and Foreign Medico-Chirurgical Review*, July 1851, headed, “Merits and Demerits of the Perinæal Section,” will, I am persuaded, admit that the appeal to a reply through your columns is a favour which I may claim, in reliance on the character which your Journal enjoys, as the enlightened and independent medium through which the advancement of knowledge and the refutation of error ever find impartial access. The unbecoming spirit of the Reviewer is unworthy of notice, and I simply allude to it to show the incon-

sistency of a party making onslaughts on "vulgarity and bad taste" who is so utterly destitute of the common courtesies which one gentleman owes to another, and the feeling of respect which he owes to himself. It is equally unnecessary to point out motives, for no one who has read the Review can be at any loss to discover those by which its writer has been instigated. But before he had ascribed to others the fama of "a natural incapacity for recognising truth," it had been well if he had previously informed his readers, by what process the "faculty" can be trained to conscious misrepresentation, and how long is the habit being acquired, of distorting truth, under the veracious pretence of upright and honourable dealing? The article professes to be a review of the "Merits and Demerits of the Perinæal Section;" but it is really and undisguisedly an open defence of the merits, and an undermining attack on all who have exposed the demerits of the question. No talisman need be conjured up to unfold the sources from which all the private information its author displays has been drawn. Its animus is *sui generis*, and quite unmistakable. It contains within itself all the distinctive marks between what, in military parlance, is known to exist between "an inspection" and a "review,"—the one is the secret prelude to the private preparation of the other, and in the present instance, as in the *corps-de-garde*, were the truth known, it would be found that all the work is privately done by previous inspection, and the review is afterwards got up as a mere public parade, serving both as a praise and protection to its prompter. The origin and authorship of deeds can be traced by a title not less plain than the "handwriting on the wall;" and the traits of character and temper of some men "may be as readily distinguished in their productions without their signature," Junius has long ago affirmed, "as by the blackest features of the human face." But let the Reviewer pass incognito; I shall proceed to discuss what has been said by him relative to the "*cui magna fui pars*" in the perinæal controversy.

In the first place I may here remark, that I would never have published the cases which formed the subject of my "Remarks on the Operation of the Perinæal Section," had Mr. Syme not denied all knowledge of the cases as they appeared in the *Medical Times* of the 26th October, 1850; and, secondly, I was the more induced to take this step, because Mr. Syme, in his "Treatise on Stricture of the Urethra," had promulgated the following conclusions, viz. :—

1st. That division of a stricture by external incision, is sufficient for the complete remedy of the disease in its most inveterate and obstinate forms.

2nd. That in cases of less obstinacy, but still requiring the frequent use of bougies, division is preferable to dilatation, as affording relief more speedily, permanently, and safely.

When case after case presented itself of failure of the operation, especially when I found that some of the cases were actually those recorded by Mr. Syme as instances of its curative effects, I felt myself compelled, for the information of the Profession, to publish such failures, these satisfactorily proving to me that the operation was not the speedy, permanent, or safe cure for which it was held out.

The first case in my pamphlet is that of Edward Monro, aged 42, plasterer; he submitted to the perinæal section in the Royal Infirmary here on the 20th November, 1848. His statements were, 1st, that he inhaled chloroform; 2nd, that the operation of the perinæal section was followed by excessive hæmorrhage, which reduced him very much in strength; 3rd, that he required the introduction of a catheter upon several occasions to prevent the operated stricture contracting; and 4th, he distinctly stated that the disease of heart was consequent on the loss of blood from the operation. He ultimately died of that disease. To substantiate the fact of hæmorrhage after the operation, and the consequent disease of heart, I have subjoined a full copy from the Physicians' Case-book, Royal Infirmary, Ward No. 1, and to which some credit may be attached. 1st, because it was a voluntary statement; and 2nd, because it was made by a man nearly dying, (as he thought,) and for the purpose of instructing the medical gentleman as to the cause of his disease, and thereby possibly obtaining the best means of relief.

Copy from Physicians' Case-book, fol. 192, Royal Infirmary, Medical Ward No. 1 :—"Edward Monro, aged 41, plasterer, was admitted into the Royal Infirmary, March 6, 1850, under Dr. ——. Previous history :—For many years back has been affected with stricture of urethra, resulting from an injury on his perinæum; finding the difficulty of passing his water increase, he came to the Surgical Hospital in the autumn of 1848, under the care of Dr. Duncan; he was afterwards dismissed somewhat relieved, but an abscess formed in the perinæum and burst spontaneously, and for this, as well as the increasing stricture, he was re-admitted under Professor Syme in November of the same year. The stricture was

cut, but he had secondary hæmorrhage to a considerable extent, and it was subsequent to this that he was attacked with palpitation and angina pectoris on exertion. He states that, since that time, whenever he walks fast, or attempts to exert himself in any way, he is seized with violent pain in the region of the heart, shooting to the left shoulder, and down the left arm to the fingers. If he attempts to ascend a stair the pain is so violent as to compel him to stand for a long time still; even a sudden change from the recumbent to the erect position never fails to produce it; the palpitation usually comes on in the morning, from 3 to 5, a.m., but he sleeps well during the early part of the night; these symptoms have been increasing till admission.

"For the last sixteen months he has been unable to work; he has no dyspnœa or cough; has never had rheumatism or inflammation of his chest; and is not aware of any cause of these symptoms, except hæmorrhage after the operation referred to; none of his relations have ever had any heart affection, so far as he knows; of late his appetite has been bad, and he is troubled with flatulence and uneasy sensations of his stomach. *Present State.*—Appears somewhat cachectic; appetite bad; tongue clean; bowels regular; pulse 84—somewhat jarring; is much troubled with the symptoms above mentioned. The dullness, on percussion, over the region of the heart, extends laterally over a space of three inches and a half. Impulse somewhat increased. Apex can be felt somewhat nearer the left side than natural, and not distinctly punctated.

"The carotid arteries beat strongly and visibly.

"No venous pulsations.

"On auscultation a distinct endocardial murmur is distinctly heard, obscuring both the cardiac sounds. The rest of the chest sounds well on auscultation and percussion. No cough; no dyspnœa; percussion of liver natural; urine, sp. gr. 1029; not albuminous; presenting an abundant pale-coloured deposit of lithate of ammonia, mixed with the octahedral crystals of oxalate of lime. He was dismissed relieved, on the 28th March, 1850."

This report of the Edinburgh Infirmary physician will be conclusive as to the fact, that hæmorrhage did take place after the operation, except to those who have the talent to distort, or an object to suppress the truth. But, Dr. Myrtle (not the Infirmary physician, under whose care he was,) is applied to by Mr. Syme, seemingly for evidence, to show that disease of heart did not supervene to the operation; and Dr. Myrtle gives the following certificate, December 2nd, 1850, four months after the patient's death.

"Edward Monro applied to me, as medical officer of the Dispensary of the City Parochial Board, on the 12th June, 1848, labouring under disease of heart, bronchitis, and disease of the urinary organs. He was sent into the Royal Infirmary in the following November, and placed under the care of Professor Syme, who performed an operation for the remedy of an obstinate stricture."—*Vide* Mr. Syme and his assailant in *Lancet*, 14th December, 1851.

If we compare this statement with the entry made by Dr. Myrtle, of the same case, in the parochial register book, we find that on the 12th June, 1848, he describes the man "as suffering from bronchitis and stricture of urethra." But there is not one word about disease of heart. The disease of that organ is introduced into a report two years and a half afterwards, in answer to a communication made to him on the subject by Mr. Syme; and the report is intended, by Mr. Syme, to show that the cardiac affection was not the consequence of the operation. We have, therefore, the notice of a disease inserted in a subsequent report, which had no place in the original entry of the patient's state of health. But, supposing that disease of heart had really and truly existed before the operation, how is it that Mr. Syme took no notice of it in his history of the case? Was his mind so wholly taken up with the impediment to the passage of the urine, that he could not afford to bestow a passing thought on the cause of a fatal obstruction to the circulation of the vital fluid? Or, was he so intent to operate, that irrespective of all consequences, he prescribed chloroform to a patient so circumstanced, regardless of the effects which the shock of a capital operation might produce? Is such conduct in accordance with the duties of a pure or consulting surgeon, or does it fairly represent his definition of the operative province which he takes under his especial superintendence, and holds himself responsible for? One, indeed, is led to infer, from the part Mr. Syme himself avows having taken, in a case of Professor Miller's—having operated upon a patient under chloroform, whom he had never seen, or put a single question to before—that, in his department, any examination of the patient is uncalled for, and that the operations of the hand should exclude and supersede those of the head.

In regard to the recurrence of the stricture, I decidedly and distinctly aver, that I myself introduced the catheter upon several occasions for his relief, and arrogate nothing in mentioning that

my evidence is as trustworthy as that of any of the gentlemen whose testimony is attached to Mr. Syme's statement.

The Reviewer, for obvious reasons, takes no notice of the important difference between Dr. Myrtle's two reports upon the same case; of his introduction of an *ex post facto* statement regarding the presence of a disease, the symptoms of which are too marked and important to have been neglected. But the Reviewer is not only silent as to the insertion of matter into reports; but I ask, where were his critical eyes in his minute analysis of the cases which he has given, where suppression of matter, on the point of hæmorrhage, is so apparent and palpable in the hospital report respecting Cree's case? In Professor Lizars' account of that case, (see his Treatise, page 79,) which is a literal transcript from the hospital report, the surgeon says, "I put on a plug;" but from the subsequent history of the case published by the operator, the employment of the plug is wholly excluded. By such manoeuvring is not our confidence in hospital reports seriously affected? and what reliance is to be placed on the candour and sense of justice of the Reviewer, who passes *sub silentio* the two instances to which I have referred, of one party introducing matter not contained in the original document, and another suppressing an important fact recorded? Such outrages against fair dealing on the part of the Reviewer can only be explained, that to please the party by or for whom his review was concocted, it was convenient to omit noticing the first instance, and inconvenient to explain the other. The sight of blood makes some men sick; but it seems there is forbidden ground on which its name must not even be mentioned.

The next case is (No. 11 of Mr. Syme) that of A. S., aged 28, bookbinder. His history in full will be found in my pamphlet, and in *Medical Times*, Oct. 26, 1850; I therefore need not recapitulate it. I may merely state that Mr. Syme and the worthy Reviewer deny that hæmorrhage occurred in this case. Subjoined is the man's own declaration;—

(Copy.)

"I hereby solemnly declare, that I, Archibald D. Sutherland, was operated on for stricture of the urethra in the Royal Infirmary here, by Professor Syme, in August, 1849, and was discharged in September, same year. I lost a great quantity of blood, and finding the stricture return again, I applied to Professor Lizars, in July, 1850, and continued under his treatment some months, who ultimately restored me to health.

(Signed) "ARCHIBALD D. SUTHERLAND.

"Edinburgh, March 20, 1851."(a)

To substantiate this case more fully, I subjoin the following certificate from the night nurse who had charge of him:—

(Copy.)

"I hereby certify that I was night nurse in the Royal Infirmary, and saw Archibald D. Sutherland, after he underwent an operation for stricture in the urethra by Dr. Syme, which caused him to bleed so much that I despaired of his recovery; likewise I had to put a dish below the bed to catch the blood coming through the mattresses. I hereby certify the above to be true.

(Signed) "ELIZABETH HOGG,

"Late Night Nurse of the Royal Infirmary.

"Edinburgh, March 19, 1851."(b)

Case 3 is that of Francis Rodger, tailor, aged 25. For history see my pamphlet, as also *Medical Times*, October 26, 1850.

Copy of declaration to substantiate my statements in regard of this case:—

"I hereby declare that I, Francis Rodger, entered the Royal Infirmary of Edinburgh, in March, 1850, affected with stricture of urethra, having been previously under Dr. Mullar's treatment for that disease. There Mr. Syme performed an operation on me, cutting into my urinary passage from without, near to my bottom, to the extent of one and a half or two inches long. I lost a considerable quantity of blood after the operation, and I was weakened by its loss. The wound had not healed when I left the Infirmary, although I remained in it eight months after the operation, and I still continue to pass my urine through several openings below, and for these I have been obliged to consult Professor Lizars, under whose care I have been ever since. I further declare that I was shown to the gentlemen at the Medical Society, Surgeons'-square, February 28th last.

(Signed)

"FRANCIS RODGER.

"Edinburgh, Blackfriars Wynd, March 17, 1851."(c)

The Reviewer has evidently tried his utmost to cast a doubt as to the truth of this case. He quotes a sentence from Professor Lizars' work on Stricture, p. 48, where he says, "This day, 15th October,

(in alluding to the case of Francis Rodger,) his perinæum presents a number of fistulous openings, etc. On being laid on a sofa, Professor Lizars inserted No. 7 catheter with comparative ease." A plain unvarnished tale is readily rehearsed, and dreads no contradiction. And these are the facts! This patient, when No. 7 catheter was inserted by Mr. Lizars, had newly left the hospital, where a full-sized bougie was inserted shortly after the operation was performed. Mr. Lizars introduced No. 7 catheter with comparative ease on the 15th October, 1850; but in his notice of this case, published shortly after that date, (*vide* Appendix, page 43,) he says, to quote his own words, "I experienced the greatest difficulty in progressing with the catheter." Does not this prove that contraction had rapidly supervened; and corroborates my statement of the "stricture being much more contracted than ever"? The statement I made was subsequent to the first introduction of the catheter by Mr. Lizars. Let it be noticed, where this Reviewer, so ready to impute disingenuousness to others, makes no mention of what Mr. Lizars has said respecting the difficulty which he experienced in progressing with the catheter. The passage was too palpable and important, to be omitted by mistake, but its insertion did not suit his purpose. The present condition of the patient is deplorable in the extreme. His urethra has contracted so irregularly, that even No. 1 catheter cannot be carried through the tortuous channel; his perinæum is a perfect quagmire, and bleeding often profusely.

The fourth case in my pamphlet is Joseph Antonio, in regard to which the reviewer makes the following remark: "Dr. Mullar's account of this case is about as disingenuous as anything we ever remember having met with." I can only account for the conclusions to which he has come, on the ground, not what he assigns, of "a natural incapacity for recognising truth," but of the disposition to distort it. My reason for having given this case was, in the first place, because it was published as a case of perinæal section; and secondly, to show in what cases this serious operation has been had recourse to, and what urethræ have been submitted to it,—No. 11 bougie having been passed previous to the operation. I will only give the man's own statement; and I may here be allowed to say, that this case was not published by me to prove the want of operative skill of the operator, but to show that the operation, however skilfully performed, was unjustifiable and uncalled for, in so far that No. 11 catheter was passed before the consultation as to the propriety of the operation; and secondly, to prove that the operation could not be depended upon.

The man's statement is the following:—After three months' residence in hospital, the surgeon succeeded in introducing No. 11 bougie. The patient then wished to leave the hospital, but was advised, after a consultation, to submit to the perinæal section, which was accordingly had recourse to. He states that the staff which was inserted before the operation was No. 6. The operation was performed at one p.m.; he was scarcely five minutes in bed before hæmorrhage commenced; the steel staff was withdrawn, a silver catheter was inserted, a search was made for the bleeding vessels by making some new incisions; the wound was then stuffed with lint, and compresses and bandages applied. The dressing was removed three days afterwards, and the catheter withdrawn; poultices were applied for three weeks, and at the end of that time a No. 5 catheter was inserted for half an hour, and repeated twice a week, which treatment was continued for six weeks, until No. 11 could be inserted. He then left the hospital, since which time the disease has relapsed so severely that he is obliged to let down his trousers (the same as if he were about to relieve his bowels) before he can get relief from his bladder, the urine flowing almost entirely by the wounds in the perinæum, and only a drop or two passing by the external meatus. And in this state he remains up to this moment.

The Reviewer then mentions the man William Tucker, who was allowed to leave the hospital with the idea that he was cured. I will conclude by asking the surgeon under whose care he was: 1st. Did he not return to the Royal Infirmary ten months after his leaving it as cured? 2ndly. Was the stricture not again contracted? 3rdly. Was he not submitted to the perinæal section for a second time? 4thly. Has that stricture not again contracted? 5thly. Is he now convinced that the advantages to be gained by the operation are commensurate to the risk incurred by its performance?

In conclusion, I have only to append a flat denial to the audacious and unfounded charge of misrepresentation which the Reviewer has so recklessly made against some of my statements. The only inaccuracy my pamphlet contains is in reference to the number of a solitary case; and the cause of mistake, as explained, needs no comment to an honourable mind. I have nothing to retract of what I stated in my remarks on Mr. Syme's published cases attached to my tabular view of them. Subsequent experience and reading have confirmed the views therein expressed, that the

(a) See Lizars on Stricture, p. 115.

(b) See Lizars on Stricture, p. 115.

(c) See Lizars on Stricture, p. 115, and Plate 10, Fig. 2.

rapid publication of the result of an operation is an uncertain and fallacious test of the completeness and permanency of a cure, as asserted by Mr. Syme. On the contrary, there is abundant evidence to prove, that the artificial urethral passage made by incision with the knife is liable, at no distant date, to recontraction and perinæal fistulæ. The cases I published incontestably show the dangers resulting from the perinæal section; and it was my professional duty to warn my brethren against the adoption of an operation, which should seldom or never be undertaken, but the encouragement to the performance of which was ushered in under such powerful but mistaken and misleading auspices.

I am, &c.

S. G. WILLIAM MÜLLER, M.D. and Surg.
Edinburgh, 3, Maitland-street.

DR. MERRIMAN'S CASES OF INVERSION OF THE UTERUS.

[To the Editor of the Medical Times.]

SIR,—I am sure that all junior practitioners, at least, will feel that Dr. Merriman has rendered them a service in having published the six cases which have come under his notice during the very lengthened period in which he has occupied the highest place in the Profession as an accoucheur.

It is to such men only that General Practitioners and others can look for definite instructions in the management of cases, fortunately so unfrequent, and always so distressing, as those of inversion of the uterus soon after delivery; and it would be matter for congratulation, if the compeers of Dr. Merriman would follow his example.

Dr. Merriman's cases have especial reference to two of the questions mooted in the communication to which he referred, viz., the degree of blame which from *primâ facie* evidence attaches to midwives in these accidents, and the propriety and safety of first removing the placenta before the reduction of the inversion is effected. It is gratifying (however melancholy such a gratification may be) to learn that five-sixths of the cases occurred under the management of regularly-educated medical men; and should this be the experience of others, it would justify us in regarding this accident as only very incidentally associated with mal-practice.

The placenta was first peeled off in all the cases; and, with one exception, patients ultimately did well. This is a very encouraging statement, since no doubt can be entertained as to the increased facility in reducing the inversion when the adherent mass has first been removed from the uterus.

The recital of Case 2, and the ultimate unfavourable occurrence in Case 5, indicate pretty clearly the necessity which exists for more definite rules of practice in these cases; and I am sure that your readers would reap great advantage if Dr. Merriman and others would give more in detail the results of their experience in reference to these and other mooted subjects of inquiry.

I am, &c.

EDWARD SMITH.

MEDICAL NEWS.

THE ROYAL COLLEGE OF PHYSICIANS.—The portals of this College, which have, until lately, appeared hermetically sealed in their aristocratic stateliness, were thrown open, for the second time this season, on Wednesday evening; and to the great gratification derived from the former *soirée* was doubtless to be attributed the large number of visitors, both home and foreign, who assembled on this occasion. To the genial influence of this eventful year may be attributed the dissolution of many barriers to social intercourse, and in the College of Physicians the effects were visibly portrayed in the kindly manner in which the President and Fellows received their guests; nor was it difficult to perceive, that mutual recognitions and exchanges of courtesy formed the staple of the hour. The floral decorations throughout the various salons were displayed in excellent taste, added to which, the brilliant mode of lighting the grand library greatly facilitated the observation of such objects of interest as covered the tables, and gave additional effect to the charming *coup d'œil* from the gallery of the Museum. We cannot in justice omit a remark, *en passant*, on the profusion with which the supper tables displayed in elegant arrangement their tempting delicacies;—the greatest credit is due to the Messrs. Staples, on whom, we understand, this, not the least important, part of the entertainment devolved. We only hope the Council of the College of Surgeons will not fail to profit by the example afforded them, and render their public meetings more dignified

and better worthy the object they seek to elevate. Among the company assembled we observed,—The Duke of Newcastle, Lord Colborne, Bishop of Sodor and Man; Archdeacons Hale, Sinclair, and Burney; Sir Henry Ellis, Sir William Newton, Sir Benjamin Brodie, Sir James Ross, Sir Charles Fellows, Sir James South, Sir John Herschell, Sir Charles Young; Lieutenant-Colonel North, Captain Sibthorpe; Judge Patteson, Sir Frederick Thesiger, Sheriffs Carden and Hodgkinson; Seyd Abdoollah, Baron Homfeldt, Don José de Odriozola, Don Miguel de Odriozola, Don Cubi y Solis, Dr. Pantaleone, Father Gavazzi; Professor Pattison; Rev. Drs. Russell, Croker, Plumptre, Major, Richard Fayle, Edwin Fayle, R. N. Russell, Babington, Rowlatt, Williams; Mr. Pusey, M.P.; Mr. Gladstone, M.P.; Mr. Hastie, M.P.; Mr. Goulburn, M.P.; Mr. Jacob Bell, M.P.; Hon. Charles Villiers, M.P.; Mr. Pickersgill, Mr. David Roberts, Mr. Copley Fielding, Sir Richard Westmacott; Doctors Paris, Monro, Hawkins, Alison, Hue, Merriman, Tyler Smith, Dew, Henry Monro, Sieveking, Walshe, Babington, Roberts, Balfour, Blacklock, of Dumfries; Malcolm, of Edinburgh; Benjamin Bell, Quain, Jenner, Bushnan, Hodgkin, Turley, Thomson, Reid, Diruf, Lee, Coxe, Toogood, Scholfield, Goodfellow, etc. etc.

COLLEGE STUDENTSHIP.—Mr. John Falconer, formerly of the University of Edinburgh, has just been elected Student in Human and Comparative Anatomy in the Royal College of Surgeons England.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 23rd ult. :—

BURROWS, MERRICK LLOYD, Devizes, Wiltshire.

DAVIS, EDWARD, Thatcham, Berkshire.

HEADLAND, FREDERICK WILLIAM, Guildford-street, Russell-square.

HENRY, JAMES FALLS, Royal Navy.

HOWARD, HORACE FULCHER, New Buckenham, Norfolk.

NICHOLS, GEORGE WILLIAM, St. Ives, Huntingdonshire.

OLDMEADOW, JOHN HENRY PEACOCK, Great Coram-street.

TAPIN, JOHN DOUGLAS, Barbadoes.

WARKE, WILLIAM, Liverpool.

WOODMAN, WILLIAM ROBERT, India.

Admitted on the 25th ult. :—

AVELING, JAMES HOBSON, Rochester, Kent.

BURNHAM, GEORGE, Great Grimsby, Lincolnshire.

DAVIES, DAVID DANIEL, Carmarthen.

GODRICH, FRANCIS, Brompton, Middlesex.

HODGES, ROBERT JOSEPH, Bassington, Gloucestershire.

LANGDON, JOHN, Bampton, Devon.

LOVELL, WILLIAM CECIL, St. John's Wood.

PRATT, FREDERICK, Swinbridge, Devon.

RICHARDS, RICHARD, Carnarvon, North Wales.

SANDERSON, JOHN SCOTT, Newcastle-upon-Tyne.

WADE, WILLOUGHBY FRANCIS, Derby.

At the same meeting of the Court, Mr. DANIEL CARTER passed his examination for Naval Surgeon; this gentleman had previously been admitted a Member of the College, his diploma bearing date December 5, 1845.

Admitted on the 28th ult.

ADEY, ARTHUR, Hon. East India Company's Service, Madras.

ASHTON, EDWARD, Boston, Lincolnshire.

BOND, HENRY, Ware, Herts.

BERESFORD, HERBERT, Chesterfield, Derbyshire.

CHALDECOTT, CHARLES WILLIAM, Dorking, Surrey.

CRAWFORD, JAMES, Belfast.

CRONIN, JEREMIAH, Cork.

LEMAN, D., London.

LANGWORTHY, SOUTHMEAD, Modbury, Devon.

WOOD, HENRY WILLIAM, Royal Navy.

YATES, WILLIAM HENRY, Stroud, Gloucestershire.

OBITUARY.—Dr. Clarke, surgeon of the Meander, while on a cruise in that ship.

MILITARY APPOINTMENTS.—5th Regiment of Dragoon Guards, Staff-Assistant Surgeon John Wyatt to be Assistant-Surgeon, vice Arden, promoted on the staff; 17th Regiment of Foot, Staff-Surgeon of the second class Robert Allan to be Surgeon, vice William Smith, who retires upon half-pay; Hospital Staff—Assistant-Surgeon William Arden, from the 5th Dragoon Guards, to be Staff-Surgeon of the second class, vice Allan, appointed to the 17th Foot: Acting Assistant-Surgeon James M'Gregor Laing to be Staff-Assistant Surgeon vice Wyatt, appointed to the 5th Dragoon Guards.

NAVAL APPOINTMENTS.—Surgeon Charles R. Brien, M.D. (1842), to the Centaur, steam-frigate; Assistant-Surgeon Hugh

Girven (1847), to the Centaur; Surgeons Gerald Yeo (1850), to the Archer, 14, screw steam-sloop, on the West Coast of Africa station; George Roe, M.D. (1850), to the Ranger, 8, sloop, on the West Coast of Africa station; and Thomas J. Layton (1850), to the Volcano, paddle-wheel steamer, on the same coast; Assistant-Surgeons James Henry (1842), formerly of the Antelope, steamer; Henry Wellings (1846), Robert Sproule (1851), and C. H. Chambers (1851), to the Penelope, 16, paddle-wheel steam-frigate and flag-ship of Commodore Henry W. Bruce, on the West Coast of Africa; acting Assistant-Surgeon William A. Turner (1851), to the Styx steam-sloop, at Devonport.

THE QUALITY OF THE WATER SUPPLIED TO THE METROPOLIS.—Extracts from the "Report of the Commissioners on the Chemical Quality of the Supply of Water to the Metropolis," presented to Parliament, June, 1851.

Analysis of the Water Supplied to London, or proposed as Supplies.

	Water (Watford.)	Water (Watford.)	Farnham.	Lambeth Company, supplied at Lambeth.	Southwark and Vauxhall Company, supplied at Red-house, Battersea.	Chelsea Company, supplied at Red-house, Battersea.	West Middlesex, supplied at Barnes.	Grand Junction Company, supplied at Kew.	Water taken at Thames Ditton.	Hampstead Water Company.	Kent Water Company.	East London (Lea)	New River Water Company.
Carbonate of Lime	17.94	16.13	0.23	8.99	10.57	9.28	9.94	10.9	11.79	4.95	7.01	10.16	7.82
Sulphate of Lime	0.11	0.23	1.31	2.99	3.05	5.61	4.78	3.26	3.06	...	11.03	2.33	3.23
Nitrate of Lime	1.06	0.75	trace.	trace.	0.35	trace.	trace.	trace.	0.27	0.07	0.07	0.72	0.09
Carbonate of Magnesia	0.53	0.01	0.64	1.44	1.29	1.08	1.16	1.17	1.27	3.53	3.42	1.51	1.02
Chlorides of Sodium	0.85	1.31	0.93	1.95	1.99	1.47	1.88	1.40	1.10	6.79	3.50	1.76	1.73
Sulphate of Soda	...	...	0.07	...	...	...	...	0.18	0.67	15.14	...	0.94	1.49
Chloride of Potassium	0.25	0.44	0.43	0.95	1.34	0.55	0.43	0.61	0.17	...	0.44	1.25	1.11
Sulphate of Potassa	0.58	0.48	0.43	...	...	...	...	...	0.62	1.80	0.76	0.62	0.50
Carbonate of Potassa	1.16	1.59	0.99	1.04	0.76	0.71	1.00	0.44	0.09	traces.	traces.	0.47	traces.
Silica	...	...	0.88	0.85	0.34	0.29	0.76	0.67	0.09	traces.	traces.	traces.	traces.
Iron Alumina and Phosphates	...	...	...	trace.	0.03	trace.	trace.	trace.	traces.	1.84	2.61	4.12	2.79
Ammonia	...	...	1.78	2.59	1.51	2.38	2.75	3.07	2.29	...	...	...	...
Organic Matter	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	22.48	23.50	7.26	20.80	21.53	21.37	22.75	21.70	21.31	35.51	29.55	23.88	19.78
Solid Residue obtained on Evaporation	21.63	22.97	7.33	20.40	21.08	21.28	22.67	21.72	20.78	35.41	29.71	23.51	19.50
Free Carbonic Acid in Cubic inches, at 44° Fahr.	12.48	15.3	trace.	16.64	13.57	12.30	11.56	13.46	16.89	13.30	10.15	12.38	14.49
Free Carbonic Acid Grains in a Gallon	6.24	7.6	trace.	8.32	6.78	6.15	5.78	6.73	8.25	6.67	5.07	6.19	7.24
Suspended Matter	17.8	18.1	2.27	1.15	1.92	...	0.02	0.01	...	0.52	...	1.07	1.49
Degree of Hardness (Clark's Scale)	...	...	...	14.16	15.00	14.44	14.60	14.00	14.22	9.3	16.0	15.0	14.9

The waters containing carbonate of lime are temporarily hard; those containing the sulphate of lime are permanently so. By boiling, the carbonic acid which holds the carbonate of lime in solution is partially driven off, and carbonate of lime precipitates. By an hour's boiling, the hardness of the Thames water fell from 14.6 deg. (Clarke's scale) to 1.5 deg.; and that of the New River

from 14.7 deg. to 4.1 deg. The Batchworth water, from Watford, fell (in five minutes' boiling) from 14 deg. to 5.6 deg. By Clarke's process of *liming*, the hardness of the Thames water was reduced from 14.0 deg. to about 4.0 deg., and some of the other solid constituents were thrown down. The cost of *liming* adds about 4 per cent. to the cost charged to the consumer. The action of water on lead has been investigated by the Commissioners, who find that the protective influence is due chiefly to the carbonic acid which the water contains, and which gives rise to the carbonate, the most insoluble of all the salts of lead. The influence of salts appears to have been overrated. Such salts (the sulphates, for example) do not protect lead when exposed to water freed from carbonic acid.

EXTRAMURAL INTERMENTS ACT.—The House of Commons have agreed to advance the large sum of 130,000*l.* to the Board of Health, for the purchase of the Brompton and Nunhead cemeteries, and for other purposes.

LODGING-HOUSES.—The following is an abstract of two important Acts lately passed for regulating and constructing Lodging-houses:—"The Act for encouraging the establishment of Lodging-houses for the Labouring Classes," received the Royal Assent on the 24th July. By the Act, authority is given to the Municipal Council of any borough to apply its provisions, and the expenses incurred are to be provided for by a borough rate. The income derived from the lodging-houses is to be carried to the credit of the borough fund, and the accounts of the receipts, payments, credits, and liabilities are to be kept distinct, under the title, "The Lodging-houses' Account." The local Board of Health, if such exist, may also apply the provisions of the Act, and provide for the expenses by a District rate; the income, in this case, to be carried to the account of the District fund. Any Improvement Board may also adopt the provisions of the Act, provided the consent of the ratepayers of the district be obtained (supposing that the Board is not elected by ratepayers), and the expenses are to be paid by an Improvement Rate. Also, on the requisition of ten ratepayers, the vestry of any parish may be convened, and if it is determined to put the Act in force, permission to do so is to be sought from the Secretary of State, and being obtained, seven Commissioners are to be appointed to carry out the provisions. The expenses are to be paid out of the Poor-rates. For the more easy execution of the purposes of the Act, the Commissioners are incorporated under the title of "The Commissioners for lodging-houses in the parish—, in the county of —." Power is also given to borrow money, to appropriate lands vested in the Mayor of a borough, or belonging to a parish, &c., or to contract for the purchase or rental of lands. The Council, Board, or Commissioners chosen by the vestry, are empowered to build houses on the land so appropriated, purchased or rented, or to alter, and modify houses previously built. Commissioners of Water-works, Gas Companies, etc., are empowered to supply water and gas on favourable terms, or without charge. If any such Lodging-house, after seven years' experience, be deemed too expensive, it may be sold. The Council, Board, or Commissioners may make bye-laws and recover penalties. They can make reasonable charges for tenancy and occupation. The Local Board of Health is to have the power of inspection of such houses. A very important clause enacts, that no person receiving parochial relief, except for accident or temporary illness, shall be a tenant or occupier of such houses. A penalty, recoverable by information, is attached to the reception of fees by Members of the Council or by Commissioners, or by the servants of the Establishment. And such officers are not to be interested in contracts. The Act is not to extend to Scotland. Another Act also received the Royal Assent on the 24th July, entitled, "An Act for the well ordering of Common Lodging-houses." It provides for the registry and visitation of Lodging-houses. Among other important clauses, notice is to be given by the keeper of any common lodging-house if any men are confined to bed for forty-eight hours with an infectious or contagious disease.

THE GREAT METROPOLIS.—ANOTHER EXHIBITION.—The Registrar-General, in his Quarterly Return, just issued, observes:—"The health of London exhibits no improvement." And how should it, with its unconsumed smoke, its unventilated workshops or sheds, its Jacob's Island ditches, its Fleet ditch, its domestic cesspools, its one-privied, densely-populated courts, yards, and alleys; with its surface drainage, its ever-corrupting dung-heaps, and, to crown all, its Sewer Commission lumber? The country votes 130,000*l.* for a receptacle for the dead, and, by its inaction, takes good care that there shall not be wanting dead for the receptacle. The Bills of Mortality issued by the Registrar-General are, on every weekly recurrence of them, of painful, melancholy interest, as showing a condition of things which ought,

long ago, to have shamed our authorities into a befitting course of action. Let those of our foreign visitors who have been for weeks or days past gazing and gaping at the magnificents of "the Great Metropolis," go with us to another display—our Sanitary Exhibition. We cicerone them to Sydenham, in the outskirts, and there, in Jew's-walk, we point to a house in which last week a gentleman died after suffering twenty-four hours from diarrhoea. We introduce them to the medical attendant, and what says he?—"Within 100 yards of the residence of deceased, and on his own property, there is, and has been for a considerable period, upwards of twenty square yards of surface overflowed with sewage, emptying itself into a ditch of about thirty yards long, which has no outlet, and is constantly stirred up with rains and exposed to the rays of the sun, emitting at all times the most pestilential effluvia. The immediate neighbourhood is thickly populated, and the health of the inhabitants much endangered. Choleric and gastro-typoid cases are constantly occurring. The evil is referrible to the adjacent property; it does not come under local jurisdiction, and the deceased had no redress." Again, let them go with us to a single apartment in Vincent-street, Hackney-road, occupied by six persons, where a child, aged ten weeks, had died of English cholera, on the 17th July, and where still, on the 26th,—*ten days after*,—the body of the child still remained in a close room, with the out-door temperature at 60°, the decomposition of the body sending off its pestiferous influence to all around, the street itself in which the house is situated being "close, crowded, and undrained." Again, to Islington, at 12, Payne-street—where a child lies dead of diarrhoea, the medical attendant considering "the disease to have been engendered by the badness of the drainage, and another child of the family lying ill with the same complaint." Again, to 63, Ely-place, Shoreditch, where lies a victim to "fever," in "a close and confined place, consisting of 77 houses, without back yards, and having large cesspools in front, which, during the hot weather, emit such a stench, that the inhabitants are obliged to shut their doors and windows." And yet, once more, let us introduce our sight-seers to a bereaved family in Southampton Mews, Bloomsbury, who, since the end of March of this year, have had taken from them no less than *five* children,—of the ages of 17 years, 7 years, 4 years, 2 years, and 5 months; and, on inquiry, we learn that the family lived in a stable, devoid of ventilation; that three of the children who first died slept with three others in a room entered from the front room, having no fireplace, and only a small window, a mere hole, looking into the loft, the stable having no back windows. Such is one single week's result, as reported by the Registrar-General, and yet with all this, and such as this, week by week laid authoritatively before the country, no abatement of such cruel nuisances has taken place since the cholera decimated our population, and our Legislators can adjourn to their field-sports and their country recreations, satisfied with having provided for the burial of the dead!

MEASLES, accompanied with, or followed by hooping-cough, is very prevalent in Twickenham. There is hardly a house in which there are not some sick.

THE cholera is very fatal in Cincinnati, United States.

MANSLAUGHTER BY QUACK MEDICINES.—A quack, named William Cleathing, having been committed for trial for the manslaughter of a child by a patent medicine, at Scarborough, Mr. Justice Williams, in his charge to the Grand Jury for the county of York, thus laid down the law of the case:—"He," (the man, Cleathing,) "is charged with manslaughter, in respect of having occasioned the death of a child at Scarborough, and the mode (so far as I can gather from the depositions,) in which it is proposed to implicate the prisoner in the imputed guilt, is by showing that he was in the habit of preparing a sort of patent medicine,—a cordial. The mother of the child, whose death forms the subject of investigation, purchased some of this medicine from the prisoner's wife, and, having administered it to the child to cure some disorder of the stomach, the medicine proved too strong an opiate, and caused the death of the child. Now the law on this subject is this,—that if a man gives, or causes to be given to another, by way of medicine, some stuff which no person of competent skill would have administered, and thereby causes death, that would amount to manslaughter. But you will observe that, by applying that doctrine to the present case, you will have to consider, first, whether there is evidence that the death of the child was caused by this medicine; secondly, that the medicine was such that no person of competent skill would have administered it; and, thirdly, that it was administered by the authority of the prisoner. Unless there is some evidence to maintain all these three propositions, there is no case against the prisoner, and you ought to throw out the bill. The depositions before me certainly hardly seem to afford requisite evidence; but very likely the case will be put in a different shape

when it is laid before you; and I think I ought to tell you, with respect to the third branch of the inquiry,—whether the medicine was administered by the authority of the prisoner,—that, at all events, for the purpose of making it your duty to find a true bill, you must consider that, if the prisoner gave authority to his wife to dispose of the medicine to all comers, that would be sufficient authority alone for making him responsible for all the consequences of her having executed that authority." The Grand Jury ignored the bill against the quack:

MR. BROTHERTON lately presented a Petition to the House of Commons from the Medical Botanists (?) of London and its neighbourhood, praying for an inquiry into medical science and practice. Who are these medical botanists? Are they the Coffinites, the Holloways, the Morrisons, or any other class of quacks? We know not any such body of men, and we cannot but consider that Mr. Brotherton grossly insulted the House of Commons and the Medical Profession by the presentation of such a Petition, on such a subject, from a body of quacks assuming such a designation.

MR. HOARE, of Luscombe, Dawlish, has presented 50*l.* to the funds of the Teignmouth and Dawlish Dispensary and Marine Infirmary, to aid in establishing free wards in that Institution.

PROGRESS OF SCIENCE.—A scientific journal or almanac has been published by Dr. Macgowan, in the Chinese language, in Ningpo, China, in order to impart to the inhabitants of the Celestial Empire a knowledge of the principles of the electric telegraph, of galvanism, and magnetism. It is of the long folio size, stitched, with a cover of yellow silk. It is entitled the "Philosophical Almanac."

SOIREE FANTASTIQUE.—MADAME JULIE AND MADAME ROBIN.—"The bane and antidote are both before me."—Madame Robin, without being mesmerised, performs far greater wonders than Madame Julie, after being placed "*en rapport*." Let all those who, because they cannot detect the cheat, believe in the mysteries of clairvoyance, pay a visit to sharp M. Robin and his clever wife, and they will see a clairvoyante who has the boldness to declare that all she is doing is deceiving you, yet laughs at your efforts to detect the cheat.

STATE OF THE PUBLIC HEALTH,

ENGLAND AND WALES.—THE QUARTER ENDING JUNE 30.

FROM the Registrar-General's Quarterly Return we gather as follows:—

99,639 deaths were registered in the quarter ending June 30, 1851; the deaths in the corresponding quarter of 1850 were 93,005; and 102,143 in the corresponding quarter of 1849, when cholera was in the kingdom. The annual rate of mortality in the spring quarter (April, May, June) was very uniform in the years 1841-46, or 2.141 per cent. on an average, 2.174 when highest (1841), and 2.077 when lowest (1844); in the spring of 1847, after the potato failure, the mortality rose to 2.506, and remained 2.314 and 2.341 in the springs of 1848 and 1849; in 1850 it fell to 2.106. In the spring quarter of 1851, the mortality was at the rate of 2.228 per cent. per annum, (which is lower than the mortality of the three bad seasons 1847-8-9), but higher considerably than the mortality in the corresponding quarter of the 7 years, 1841-6 and 1850. Measles, scarlatina, small-pox, and hooping-cough were epidemic in many districts, and the chief causes of the high mortality.

The health of London exhibits no improvement. The deaths out of 2,361,640 living were 13,093; which exceed the deaths in the corresponding June quarter of the preceding year by 1855, and are 88 more than were registered in 1849; 209 persons, chiefly children, died of small-pox, 495 of measles, 169 of scarlatina, and 734 of hooping-cough. The mortality from diarrhoea is declining; it caused 202 deaths in the June quarter of 1847, and 191 deaths in the corresponding quarter of 1851. The deaths from cholera in the 5 June quarters, 1847-51 were 4, 17, 268, 9, 3. Influenza has been prevalent, and 108 deaths are referrible directly to that cause, besides deaths from bronchitis and pneumonia, which are frequent terminations of influenza, and properly belong to the epidemic. It is a favourable circumstance, that few deaths are ascribed to purpura and scurvy. Typhus, metria (childbirth fever), erysipelas, and rheumatic fever have been less fatal than usual. No death from hydrophobia occurred in London. Consumption is more fatal than any other disease; it has destroyed 1815 lives in the three months. The deaths from consumption in the June quarter of the year 1850 were only 1548. So great a fluctuation in the mortality of this

disease is unusual, and deserves attention. Chorea (St. Vitus's dance), epilepsy, and tetanus (lock-jaw), have been more than usually fatal. Of metria and other diseases incidental to childbearing 82 mothers died, or one to every 234 births of living children registered; 16 deaths were directly ascribed to intemperance; 32 to delirium tremens. By poison 19 deaths were caused; the number is considerably less than the average, and will, we may hope, be still further reduced under the operation of Lord Carlisle's Act. Burns and scalds caused 48 deaths; by hanging, strangling, and suffocation 50 persons died; by drowning, 70. The deaths from fractures and contusions amounted to 159; from wounds to 31. Both the latter numbers exceed the averages.

The health of the South-Eastern Division, Surrey out of London, Kent, Sussex, Hampshire, and Berkshire, is always above the standard of England, and is in this quarter better than usual. The deaths (7597) are considerably below the average. Yet there has been much sickness in Chertsey; scarlatina, measles, whooping-cough, and croup have been prevalent in Rochester and Gillingham; low fever in Beckley, Rye; influenza in two sub-districts of Hungerford, Kintbury, and Lambourn, where scarlatina has also been fatal in ill-ventilated apartments, too small for the large families of the poor occupiers. Scarlatina still exists in Shrivenham; whooping-cough and measles in Sutton Courtney. The mortality was somewhat above the average in Gravesend, Brighton, Southampton, and Reading, from epidemics or causes which the Registrars have not named.

The health of the South Midland Division is above the average in every county from Buckinghamshire to Cambridgeshire. The deaths were 6189 out of 1,234,283 inhabitants. Small-pox and measles were prevalent at Uxbridge; cases of small-pox occurred in North Mimms parish, Hatfield; 13 persons died from small-pox in St. Albans; whooping-cough prevailed and was fatal in Quainton, Whitchurch, and Waddesdon; scarlatina was very fatal in Oxford, and in Wing, Leighton Buzzard; whooping-cough in Wisbeach.

The Eastern Division was less healthy than usual; of about 1,113,710 inhabitants, 5994 died in the quarter. Norfolk suffered extensively from scarlatina; and the mortality was above the average. Measles prevailed almost universally among children in Manningtree, Essex; but only 2 deaths from the disease were registered. Many persons were attacked by small-pox in Coggeshall; only 3 died. In Hedingham the deaths of the quarter were doubled from bronchitis and pneumonia, chiefly in children. Whooping-cough, measles, and pulmonary affections were fatal in Sudbury, Suffolk, during the early part of the quarter. The Registrar notices that the cutting of the Norfolk estuary has induced an afflux of population to Kings Lynn, and that measles has been rife. The mortality was above the average in the districts of Chelmsford, Tendring, Halstead, Gosford, Mutford, Yarmouth, Flegg, Kings Lynn, Downham, and Thetford.

The South-Western Division was generally healthy; the deaths out of about 1,803,706 inhabitants were 9352. Wiltshire was healthy; but a parish in the Chippenham district offers an example of one of those circumscribed epidemics which so well deserve attention.

Diarrhoea was common, but not fatal, in Heavitree near Exeter. Scarlatina declined in Plymouth, was prevalent in Torrington, and fatal in Bideford, where it still prevails.

Scarlatina and small-pox were prevalent in Cornwall, and raised the mortality of the county above the average. The registrar of St. Ives gives an instance of the effects of the mistaken fatalism of an ill-instructed people:—

"People have a superstitious fear of having their children vaccinated. They say 'it is taking the cause out of the hands of God.'"

Taunton and Bridgewater, Chard and Bredminster, have suffered from scarlatina. Bath was healthy. Ilchester is an example of unusual exemption from disease.

The West Midland Division presents considerable diversities in the six counties of which it is composed; in Staffordshire and Warwickshire the mortality was above the average; in Gloucestershire, Herefordshire, Shropshire, and Worcestershire the mortality was below or not above the average; out of 2,132,853 inhabitants, 12,662 died in three months. The mortality was great in West Bromwich, Dudley, Birmingham, and Aston. The deaths in Birmingham amounted to 1295 out of 173,878 inhabitants; measles, small-pox, bronchitis, and pneumonia prevailed; vaccination and other sanitary precautions appear to have been neglected in this important town. In Shrewsbury the mortality was high; of the 34 persons who fell a sacrifice to small-pox in the sub-district of St. Mary not one had been vaccinated. Measles was fatal in many districts of the division. Scarlatina is rarely mentioned.

The population has decreased in the agricultural, and typhus has prevailed in the mining parts of the district of Shiffnal.

The North-Midland Division has been unusually healthy; and out of 1,214,621 inhabitants, 6521 died in three months. The mortality in Leicester was remarkably low. Measles prevailed in several districts of Lincolnshire, in Nottingham, and Basford; yet the mortality in Lincoln, Nottingham, and Derby was low.

The North-Western Division comprises Cheshire and Lancashire. Out of 2,487,351 inhabitants, the deaths were 15,812; the mortality is therefore high, but lower than it was in some previous years. Small-pox was epidemic in many districts; measles, whooping-cough, and scarlatina also prevailed. The Registrar of Heaton Norris says, that 7 persons in one house were attacked by small-pox; all had been vaccinated in infancy, and all recovered. Stockport is healthy. The deaths in Liverpool were 1898 out of 255,055 inhabitants; the mortality was below the average. Wigan is in an unhealthy state; small-pox, measles, and typhus are very prevalent: many nuisances still exist. In Bolton the mortality is low. In the Manchester district the deaths were much below the average, or 1599 out of 228,437 inhabitants.

The York Division presents some contrasts, but the health of the county is above the average condition. The deaths were 10,751 out of 1,788,767 inhabitants. Small-pox, measles, scarlatina, and influenza were epidemic in some districts; but the prosperous state of trade is said to have led to an increase of births, and diminished mortality. The majority of the deaths have been among the young, principally from pneumonia.

The mortality in Sheffield, Leeds, York, and Hull, was above the average. Measles was epidemic in several of the districts.

The Northern Division was comparatively healthy. Out of 968,934 inhabitants, 4985 died. Measles prevailed epidemically in Stockton, Durham, Easington, Houghton-le-Spring, Gateshead, and Morpeth, in Durham, Alston and Kirkoswald in Cumberland, Kirkby Lonsdale in Westmoreland. This division contains some of the healthiest as well as some of the unhealthiest districts in the Kingdom.

The Welch Division was in a less favourable state. Of 1,188,821 inhabitants, 6616 died. Scarlatina, measles, and small-pox prevailed in certain districts. In Abergavenny the deaths exceeded the births in number.

DEATHS in the Metropolis for the week ending Saturday, July 26, 1851.

CAUSES OF DEATH.	July 26.				Sum of Ten Weeks.
	0	15	30	All Ages.	
ALL CAUSES	486	301	169	956	10286
SPECIFIED CAUSES	486	301	169	956	10236
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases	219	49	14	282	3418
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat	2	20	0	31	452
3. Tubercular Diseases	64	114	8	186	1907
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses	58	32	51	121	1160
5. Diseases of the Heart and Blood-vessels	2	11	13	26	265
6. Diseases of the Lungs, and of the other Organs of Respiration	42	19	24	85	776
7. Diseases of the Stomach, Liver, and other Organs of Digestion	21	25	8	54	728
8. Diseases of the Kidneys, &c.	1	6	9	16	93
9. Childbirth, Diseases of the Uterus	...	9	1	10	97
10. Rheumatism, Diseases of the Bones, Joints, &c.	...	3	3	6	58
11. Diseases of the Skin, Cellular Tissue, &c.	1	1	...	2	9
12. Malformations	1	...	...	1	28
13. Premature Birth and Debility	21	1	...	22	233
14. Atrophy	32	2	1	35	255
15. Age	...	...	46	46	424
16. Sudden	3	1	1	5	81
17. Violence, Privation, Cold, and Intemperance	19	8	1	28	250
Causes not Specified	...	...	...	...	50

TO CORRESPONDENTS.

COMMUNICATIONS have been received from—
Dr. FREDERICK BIRD, of Brook-street, Grosvenor-square; Mr. F. H. HEWITT, of Clapham; T.; Mr. SMITH, of Stevenage; Mr. SPENCER WELLS, R.N.; Dr. BARRATT, of Ross; A COUNTRY SUBSCRIBER; EPIDIKALOMENOS; Dr. FAIRLESS of Crief; Mr. ROBERTSON, of Union-place, New Kent-road; Mr. SQUIRE, of Oxford-street; A TIMES READER; X. Y. Z.; ZENO; SECRETARY OF THE AGE ASSURANCE COMPANY; Mr. WALKER, of Kil-machomas, Ireland; Mr. KINGSTON, of Edinburgh; Mr. SIMPSON, of Liverpool; Mr. EDWARD SANDFORD; Mr. ROBERT MULLER; A COUNTRY SURGEON; A. B.; Dr. LETHBY, of Rodney-terrace, and the London Hospital; LEWES; Dr. HASTINGS, of Cheltenham: to all of which we hope to reply next week.

The Pharmaceutical Journal (Aug. 1.)

CONTENTS:

The Progress and Prospects of the Pharmacy Bill—Proceedings in the House of Commons on the Bill—The Pharmacy Bill (as amended in Committee)—Kokum Butter—Two Species of Cotyledon—Tinct. Ferri Ammonio-Chloridi—Tinct. Quinæ Comp.—The Great Exhibition—Atomic Volumes and Atomic Weights—Mode of Contracting the Fibres of Calico—The Growth of Plants in various Gases—Nitro-Glycerine—The Preservation of Alimentary Vegetable Substances—On the State of Pharmacy in the Brazils—Cases of Poisoning with Arsenic, Scheele's Green, Sulphate of Iron—Muriate of Baryta, Prussic Acid, Oil of Bitter Almonds, and Nicotine—Poisoning by Coffinism—On Ozone, &c., &c. Price 1s.

Published by John Churchill, Princes-street, Leicester-square; MacLachlan and Stewart, Edinburgh; and Fannin and Co., Dublin.

VOLUME X. may be had in boards, as well as the preceding volumes, price 12s. 6d. each.

Uxbridge School, Middlesex, (esta-

lished 1790,) for the Preparation of Young Gentlemen for Public Schools, the Universities, and the Professions, for the Colleges of Sandhurst, Addiscombe, and Haileybury, and for Commercial Pursuits. Resident Principal, the Rev. JOHN HUNTER, M.A., for ten years Vice-Principal of the National Society's Training College, Battersea; Author of several established Works on Education. Terms:—Board and Instruction, with the supply of all requisite articles of Stationery, and the use of all the ordinary class-books, 40 Guineas per Annum. For pupils under 9 years of age the terms are 30 Guineas per Annum, inclusive of washing and all other charges, except surgeons' and tradesmen's bills. Terms for private pupils, from 60 to 100 Guineas per Annum. The School RE-OPENS on MONDAY, JULY 28.

Medical Society of London.

The subjects for the Fothergillian

GOLD MEDALS, offered for competition by this Society are, for MARCH, 1852,—

THE MODE in which THERAPEUTIC AGENTS INTRODUCED into the STOMACH PRODUCE their PECULIAR EFFECTS on the ANIMAL ECONOMY. And for MARCH, 1853,—

WOUNDS and INJURIES of the ABDOMEN, and their TREATMENT.

Also, for MARCH, 1853, an ADDITIONAL GOLD MEDAL,

The Subject being—

THE PATHOLOGY of CONVULSIVE ACTION.

Candidates for these Medals are informed, that practical and original facts and illustrations will be considered as especial merits in all Essays sent in for competition, which must be written in the English or Latin language, copied in a fair and legible hand, and delivered at the Society's Rooms, 32a, George-street, Hanover-square, on or before the 1st of December preceding the award, with a sealed packet, containing the author's name and address, and having on the outside a motto or device, corresponding with a motto or device on the Essay. That any Essay in the author's handwriting, or with his name affixed, or which may in any way discover him, will be excluded from competition. And that the Prize Essay will become the property of the Society.

The Society also offers for competition, TWO SILVER MEDALS ANNUALLY, one to be given to a Fellow, and the other to an Honorary or Corresponding Fellow, or to any author not a Fellow, who may contribute a paper during the Session considered worthy of that distinction. The learned of all countries are invited to become candidates for these honours.

C. H. F. ROUTH, M.D., } Hon. Sec.
C. COGSWELL, M.D., }

* * The Fothergillian Medals for 1851 were awarded to Dr. Cotton, of Bolton-street, Piccadilly, for an Essay on "Phthisis;" and to R. Hodges, Esq., Rochford, Essex, for an Essay on "Uterine Hæmorrhage."

St. Bartholomew's Hospital and Medical College.

The Winter Session will Commence

on OCTOBER 1st, with an Introductory Address by Mr. Skey, at Seven o'Clock, p.m.

LECTURES.

MEDICINE—Dr. Burrows.

SURGERY—Mr. Lawrence.

DESCRIPTIVE ANATOMY—Mr. Skey.

PHYSIOLOGY and MORBID ANATOMY—Mr. Paget.

SUPERINTENDENCE of DISSECTIONS—Mr. Holden and Mr. Coote.

DEMONSTRATIONS of MORBID ANATOMY—Dr. Kirkes.

CHEMISTRY—Mr. Stenhouse.

SUMMER SESSION, 1850.

Commencing May 1st.

MATERIA MEDICA—Dr. Roupell.

FORENSIC MEDICINE—Dr. Baly.

MIDWIFERY, &c.—Dr. West.

COMPARATIVE ANATOMY—Mr. M'Whinnie.

PRACTICAL CHEMISTRY—Mr. Stenhouse.

HOSPITAL PRACTICE.—The Hospital contains 580 Beds, and Relief is afforded to 80,000 Patients annually. The In-Patients are visited daily by the Physicians and Surgeons; and Clinical Lectures are delivered weekly; those on the Medical Cases by Dr. Roupell and Dr. Burrows; those on the Surgical Cases by Mr. Lawrence, Mr. Stanley, and Mr. Lloyd. The Out-Patients are attended daily by the Assistant-Physicians and Assistant-Surgeons.

COLLEGIATE ESTABLISHMENT.—Warden, Mr. Paget. Students can reside within the Hospital Walls, subject to the Rules of the Collegiate System, established under the direction of the Treasurer and a Committee of Governors of the Hospital. Some of the Teachers and other Gentlemen connected with the Hospital also receive Students to reside with them.

SCHOLARSHIPS, PRIZES, &c.—At the End of the Winter Session Examinations will be held for a Scholarship of £45 a-year, tenable for two years; and for one of £50, for one year. The Examinations of the Classes for Prizes and Certificates of Merit, will take place at the same time.

Further information may be obtained from the Medical or Surgical Officers or Lecturers, or at the Anatomical Museum or Library.

Domestic Baths.—The Bath Depart-

ment of DEANE'S Ironmongery and Furnishing Warehouses is now complete for the Season, and comprises a large variety of Shower Baths of the most improved construction; also Vapour, Hip, Plunging, Sponging, Nursery, and every description of Baths for domestic use. Deane's Baths are distinguished for their superior finish, strength of material, and great durability; while the prices are on that low scale for which their Establishment has so long been celebrated. An illustrated descriptive pamphlet may be had on application, or free by post.

Deane, Dray, and Co., (opening to the Monument), London-bridge.

Wyke-house Asylum is beautifully

situated on SION-HILL, BRENTFORD, (7 miles from London,) within 30 acres of highly cultivated land. From its spaciousness and locality it is not surpassed, and in no Institution in the Kingdom is superior accommodation to be found, for HIGHER and MIDDLE-CLASS BOARDERS of both sexes, the mansion being so constructed as to prevent all communication both within doors, and while taking exercise in the grounds. Divine Service regularly performed. Three thoroughly appointed Bath-rooms in the Establishment.

Independent of the handsome accommodation at Wyke, there is adjoining, situated on a Lake surrounded by its own grounds and a picturesque wood, a COTTAGE ORNE, Wood Lake, intended for the reception of a Lady or Gentleman requiring an entire establishment, replete with every comfort and convenience.

Parties feeling interested can best judge of Wyke and Wood Lake by a visit, to which they are invited by the Proprietor, DR. BASCOMB, of whom every particular may be learned.

Referee in London, Dr. Sutro, 13, Broad-street-buildings, Physician to the German Hospital, &c. &c.

Bullock's Semola. — Several mis-

statements having appeared in the medical journals and the public Press on the subject of his Semola, Mr. Bullock deems it incumbent on him to re-state the facts relating to it, and to remind the Profession of the grounds upon which he recommended this substance to their notice as an article of diet for invalids and children.

The chemical theory of the different functions performed in the economy by nitrogenous and non-nitrogenous elements of food being very generally recognised, many attempts have been made to render wheat gluten suitable for food, in order to meet the numerous cases and conditions wherein a preponderance of nitrogenous matters appears desirable. The so-called gluten bread very imperfectly fulfils this intention, since, in order to make it eatable, not to say palatable, a considerable portion of starch must be retained. The *gluten granulé* of the French manufacturers always contains a still larger proportion of starch, and being, moreover, prepared with the further purpose of economising the gluten usually wasted, it is sold in the shops in a state of incipient decomposition, sour, and, consequently, wholly unfit to become an article of diet for the healthy, far less for invalids.

Under these circumstances, Mr. Bullock conceived that it would be very acceptable to the Profession to have a preparation which should obviate these objections, and upon which they might always rely, from knowing exactly the nature and composition of the substance they recommend for their patients' diet. After numerous experiments he determined that wheat gluten may be separated and prepared without fermenting; and that there being combined with it other constituents of wheat flour in various proportions, it forms not merely an eatable, but highly agreeable article of diet. He deemed it further convenient to fix upon one of the many compounds so formed, containing fifty per cent. of gluten, and to attach to it the trivial designation "*Semola*," in order to make it a convenient article of commerce. The Profession, therefore, in prescribing Semola, may with confidence be assured that they know exactly what they are giving, and may combine this known substance with sugar, milk, animal broths, or whatever they please. In the manufacture and sale of Semola there is no empiricism. It is simply offered on its own merits; and Mr. B. ventures to think it stands on altogether different ground, in these respects, to every other preparatory food advertised for infants and invalids, the composition of which is kept secret; but they generally consist of torried flour, barley-meal, pea, lentil, or rice-meal,—in fact, cheap and coarse materials.

It is further necessary to notice a mistake made by the "*Lancet*" in stating that Semola appears to be like Semolina. Most persons know that Semolina is made from hard varieties of wheat, coarsely ground and sifted, so as to present the appearance of angular fragments. When genuine, generally it contains about sixteen per cent. of gluten; but, of late, there has been sold in the shops for Semolina a mixture of pure Semolina with *gluten granulé*. It must surely be obvious to every one that, to talk of things appearing alike, without subjecting them to chemical analysis, is a vague way of speaking, quite unworthy of a journal devoted to science.

Again, much has been said in the journals of certain preparations of wheat gluten mixed with various substances deposited in the Exhibition. Mr. Bullock would observe, that these are prepared by a servant of the manufacturer, who, under his supervision, prepared the Semola; and that, having himself made extensive trials of gluten, in every proportion, with the other constituents of wheat, he can confidently assert that the proportion fixed upon for Semola, namely, fifty per cent., is by far the best for all ordinary purposes; but that, should any practitioner have any special case, in which he would like to administer a larger proportion of gluten, Mr. Bullock will be happy to prepare it.

Mr. Bullock is not aware of any previous attempts having been made to prepare a dietetic article, which should always have a definite amount of nitrogenous elements; and in order that his Semola should fulfil this condition, every sample sold is subjected to analysis. But it is not merely upon scientific grounds that Semola is recommended; a great number of his medical friends have put it to the test of experience, and their testimony is unanimous to the fact that, as a food for infants, it is invaluable; that, when taken by ladies who are nursing, it secures an increased secretion of milk; and in those numerous cases where invalids require nourishment without stimulating properties, nothing fulfils the intention so well as the Semola.

Should further information be desired, the reader is referred to the "*Lancet*," No. XXIV. for 1849, and No. X. for 1850; Braithwaite's "*Retrospect*," Vol. XXI.

22, Conduit-street.

ORIGINAL LECTURES.

LECTURES ON HISTOLOGY.

DELIVERED AT THE

ROYAL COLLEGE OF SURGEONS, LONDON.

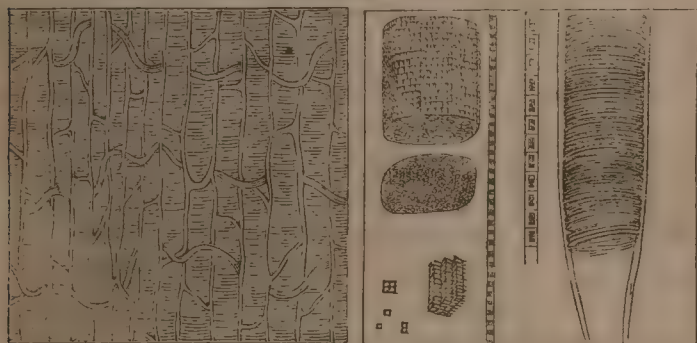
By J. T. QUEKETT, Esq.,

Assistant-Conservator of the Hunterian Museum.

(Continued from page 87.)

WE now come to speak of particular states of disease in which fatty matter takes the place of healthy structures, such diseases being known by the name of fatty degenerations, their most common seat being that of muscle. Before, however, I can give you a satisfactory idea of the commencement of this disease, it will be necessary for me to describe very briefly, the normal anatomy of muscular tissue; and I do this the more willingly, as it would be impossible for me, in any one course of lectures, to describe fully the entire series of tissues classified in the table before you; but, when opportunities occur, as in the present instance, I shall briefly consider such points of them as immediately concern the subjects of which we are treating. For our knowledge of the minute anatomy of muscle we are principally indebted to the labours of Mr. Bowman, and the account I shall give will differ but little from that given by himself, in a paper published in the first part of the "Philosophical Transactions" for 1841. Every voluntary muscle consists of a series of fibres, each of which is termed a fasciculus, and each fasciculus is invested by a sheath of structureless membranæ, termed the sarcolemma. The muscle itself is surrounded by areolar tissue, which dips in among the fasciculi, and there gives support to the blood-vessels and nerves; if a muscle be injected, the capillaries, as shown in *Fig. 60, A*, are readily seen; they run in parallel lines between the fasciculi, and at tolerably regular distances transverse connecting branches are given off.

A. Fig. 60. B C D

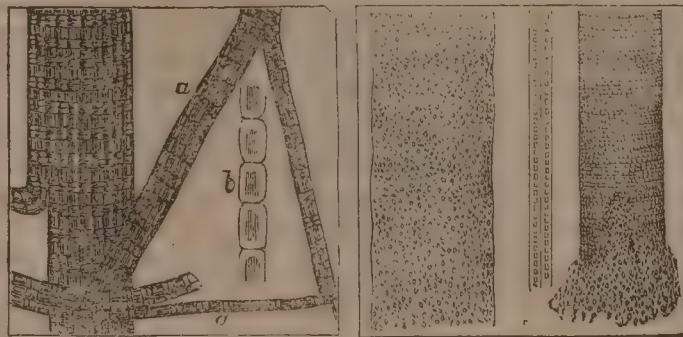


The fasciculi exhibit transverse and longitudinal striæ, but, in most cases, the former, as shown in *Fig. 60 A*, are more plainly exhibited than the latter. In some animals the fasciculi will break up transversely, in others longitudinally, so that, in the one case, we have a series of discs, and in the other a series of filaments termed fibrillæ; if the flat surfaces of the discs, as shown at B, in *Fig. 60*, be examined, they will present a granular aspect, which is due to their being made up of the ends of the fibrillæ; and, if the fibrillæ be viewed with a power of 500 diameters each one, as shown at C, will exhibit a beaded structure, the part forming the bead being a minute portion of muscular substance, termed myoline, surrounded by a thin cell wall. I here show you a portion of the muscular substance of an eel, in which you may have an opportunity of seeing the structureless sarcolemma surrounding a fasciculus, *Fig. 60 D*. I will next send round a portion of the muscle of a pig, on the lower edge of one of the fasciculi of which, as shown in *Fig. 61 A*, are distinctly seen the very delicate fibrillæ *aa*, and, as the power with which this specimen is examined is sufficiently high, the central mass of myoline may be noticed in each little cell; for the sake, however, of rendering this structure more plain, a diagram of one of the fibrillæ is given. In the part of the figure marked *b* it may be readily seen, that each mass of myoline occupies the centre of an oblong cell. If the muscular fasciculi have been kept long in spirit, the fibrillæ will break up, and the masses of myoline will be found either in short lengths or in detached pieces in all

parts of the field of view. A specimen of this kind from the eel is represented in *Fig. 61 E*; the same thing is very common in other fishes, especially the lamprey and lancelet.

Now, when fatty degeneration first commences in muscle, the transverse striæ disappear; and I have long known that the first trace of this disease is marked by a disturbance of the particles of the myoline, which appear as so many very minute granules scattered irregularly within the sarcolemma, giving one the idea that the delicate cell around each particle had given way and allowed the myoline to escape, whereby all regularity of the markings was destroyed. As the disease progresses, the myoline is replaced by minute, highly-refracting globules of oil, until at last the whole sheath is full of them.

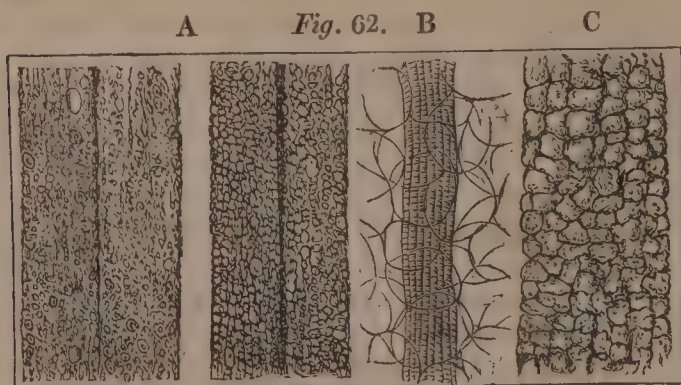
A Fig. 61. B C



I now show you a specimen from the human subject, *Fig. 61 C*, in which you may see the transverse striæ in the upper part, and a partial disturbance of the myoline in the lower; in the next preparation (*Fig. 61 B*) the disease has so far advanced that all trace of striæ is completely lost, and globules of oil, in this case of nearly equal size, but in others of variable diameter occupy the sarcolemma. The fibres most subject to fatty degeneration are those of the heart, and for our knowledge of this disease we are indebted to the labours of Dr. Omerod; but the subject has been lately investigated with great care by Dr. Quain; and in his paper, published in the last volume of the *Medico-Chirurgical Transactions*, you will find all that is at present known respecting it. I now show you a very excellent example of fatty degeneration of the muscular fibres of the heart, taken from a man 103 years of age, for which I am indebted to the kindness of Dr. Edward Smith. In some parts the transverse striæ are visible, but in others, as shown in *Fig. 62, A*, they are replaced by highly-refracting globules of oil. I have lately been informed of a most interesting case in which the disease was present in the voluntary muscles of the extremities. In one family of nine children, six of whom were girls and three boys, all the girls were perfectly healthy, but the boys, on arriving at the age of three or four, began to lose the use of their limbs. One of these, the eldest, has lately died, and, on examination of the brain and spinal chord, both were found to be healthy, but the muscle in the specimens examined had undergone a fatty degeneration, which would, of course, account for the want of power in the limbs. This disease from the first was supposed to be one of some part of the nervous system, probably arising from imperfect innervation of the muscle; but the discovery of the real seat of the disease will, it is to be hoped, lead to such a mode of treatment as may be beneficial to the two afflicted survivors.

Fatty degeneration of voluntary muscle is very common among the lower animals. All of you are aware, no doubt, of the difference in colour between the muscle of the breast of a fowl and that of its legs, the former being more or less white, the latter of a reddish hue. If the white muscle be examined, traces of fatty degeneration are very apparent in the fasciculi, arising, no doubt, from the want of use of the muscle in the act of flying; the muscular structure of the legs, on the contrary, which are always in exercise, is perfectly healthy. I have detected the same disease in the ostriches in our Zoological Gardens, and those muscles of the legs which are engaged in the act of progression, from want of use, are perceptibly whiter than those employed merely in the support of the body, and also exhibit a considerable amount of fatty degeneration. The same disease I have also found in their bones; and it is a fact well known to the keepers, that when they once take to lying down, their doom may be said to be sealed. A knowledge of this circumstance may perhaps lead to the more successful keeping of these

gigantic members of the feathered tribe. In the sheep many instances are on record in which almost the entire muscular substance of the trunk has been converted into adipose tissue. I here show you a mutton chop, in which nearly all the muscular tissue has been replaced by the adipose. In this specimen the disease no doubt first commenced in the fasciculi, and as these were undergoing a diminution in size, adipose tissue was deposited to occupy their place. A portion of a fasciculus exhibiting this, but surrounded by adipose cells, is shown in *Fig. 62, B*, and an entire fasciculus, full of nearly equal-sized globules of oil, in *Fig. 62, C*. Fatty degeneration appears also to be met with in osseous tissues, and the disease termed *mollities ossium* may be described as of this nature. All bones so affected have thin walls, always more or less soft, and contain an abundance of oil. I have examined the bony matter in several cases, and found that the disease first commences in the bone cells, the cell itself becoming larger and larger, its canaliculi disappearing, and several uniting to form a cavity, in which oil globules soon make their appearance, all the parts of the bone in the neighbourhood of the cells, becoming at the same time thin and and transparent from the removal of the granules of earthy matter. In this specimen I now send round, which is a vertical section of the lower end of the tibia, you have a striking example of this disease; the walls of the bone are exceedingly thin, and so soft as to be readily cut with a knife, the entire medullary cavity, and what remains of the cancellated structure, being full of oil and adipose tissue.

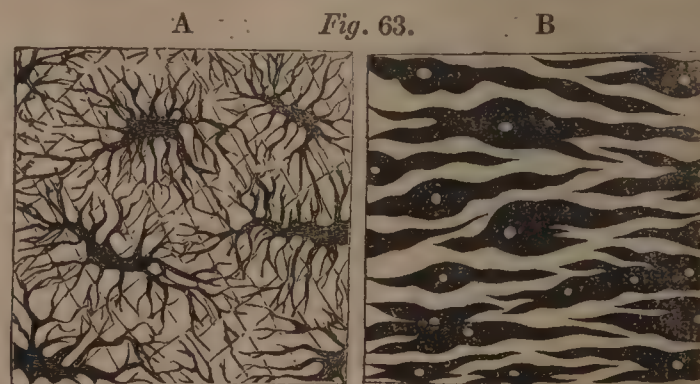


There are still one or two more examples of fatty degeneration of tissues, of sufficient importance to merit notice here: the first of these is a deposit of fatty matter between the layers of the cornea, giving rise to the condition known as *Arcus senilis*. The discovery of the true nature of this change, which is common in the eyes of old people, is due to Mr. Canton, who has published an account of it in the *Lancet*.

Through the kindness of Dr. Edward Smith, I am enabled to show you a vertical section of a cornea, in which the arcus senilis had formed, and you may observe, between some of the layers of which the cornea is composed, a deposit of small, highly-refracting globules of oil. The arcus is not situated in that part of the cornea joining the sclerotic, but a little nearer the centre, there being generally a transparent zone between the sclerotic and the arc. The last example of degeneration of tissues of which I shall speak, is the formation of adipocire, which takes place after death, when flesh is exposed to a certain amount of moisture, or to a running stream of water, as happened in the specimen of the thigh of a human subject, which is now before you. This preparation was presented to the College some years ago by the Regius Professor of Medicine at Oxford, Dr. Kidd. It was a portion of a subject which had been partially dissected, and, not being further required, was placed in a pit beneath the dissecting-room, through which ran a small stream of water. When a portion of this substance is handled, which you now have an opportunity of doing, it will be found to have a soapy feel, and to possess little or no odour. When exposed to the heat of a lamp, it readily melts like spermaceti, crystallizes again on cooling, and also polarises light. When examined microscopically in the fluid state, or after solution in ether, no trace of muscular substance remains, the residue consisting principally of areolar tissue. A thin slice exhibits no appearance of cellular structure. Adipocire, like spermaceti, is capable of being converted into candles; and on the discovery of this substance, many years ago, a patent was taken out for the conversion of the offal of the slaughter-house into adipocire, but the patent

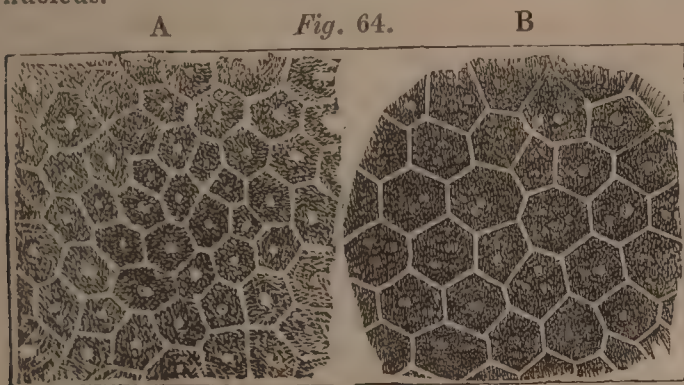
died with the patentee. Most of you, no doubt, have heard of the large quantity of adipocire found in the burial-ground of Les Innocens at Paris, where, in one pit, 1500 bodies were buried, most of which had been converted into this material by the action of water. Some very considerable quantity of this substance was once formed in a pit in this College, into which all the parts removed in dissection are thrown; the adipocire, however, in this case, was derived principally from the muscular substance of a young elephant.

We now arrive at the last variety of permanent cellular tissue occurring in the human subject, viz., *pigment*. This consists either of a solid or a fluid matter, contained within a cell-wall. When speaking of pigment in vegetables, I stated that, in some instances, as in ferns, we had colour resulting from that of the cell-wall; but in all other instances, the various and beautiful hues of flowers were due to a fluid colouring-matter occurring within cells; we have likewise a striking example of fluid colouring-matter in animal cells, namely, in the blood; in all other cases the pigmental matter occurs in the form of granules. We have most striking examples in the eye, upon the choroid coat of which is a distinct layer of hexagonal cells, most probably epithelial, termed the *pigmentum nigrum*, within which are found an innumerable series of minute granules, these, if examined soon after death, will be found to exhibit a molecular movement within the cells; the size of these granules does not generally exceed the 1-20000th of an inch in diameter, the depth of the colour depending upon the quantity aggregated within a certain space. The granules are said to consist of a peculiar animal principle, the chief constituent of which is carbon, and on this account neither the strongest acids, nor chlorine will decolorise them; the more common shape of the cells is hexagonal, as in the *pigmentum nigrum* before described; but between the choroid and sclerotic they are somewhat fusiform, and occasionally have bifid extremities; in some of the lower animals, as reptiles and fishes, they have a stellate appearance, and in some cases very much resemble bone cells. The principal seat of pigment in animals is the cuticular layer of the skin, in which it also occurs in hexagonal cells. In the negro the black colour was formerly supposed to occur only in a distinct layer of the skin, termed the *rete mucosum*, but such is now found not to be the case, the *rete mucosum* being merely the layer of cuticular cells last formed, and which contain the pigmental granules; similar cells are present in white people, those of the last deposited layer being always darker than those nearer the free surface; the difference in quantity of the pigment in the cells giving rise to all the varieties of colour which the skin of the human race presents. In albinos the cells are present, but the granules, if not absent, are so few in number as to occasion little or no shade of colour. I now send round for your inspection a portion of the petal of a pelargonium, in order that you may see that the colouring-matter is contained *within* the cells; it was in a fluid state, but by drying has collected around the walls of the cells; it presents, however, no trace of granular structure. I next show you a portion of the skin of a lamprey, *Fig. 63, A*, in which you may see a number of large cells of stellate figure, somewhat like the lacunæ of bone. In the next specimen you have a portion of the skin of a plaice, and the part in the field of view is one of the red spots; it will be found that the red colour is due to the presence of minute irregular cells occurring in great abundance between others of large size, black colour, and stellate figure; pigment cells are also not unfrequently found in the peritonæum of fishes.



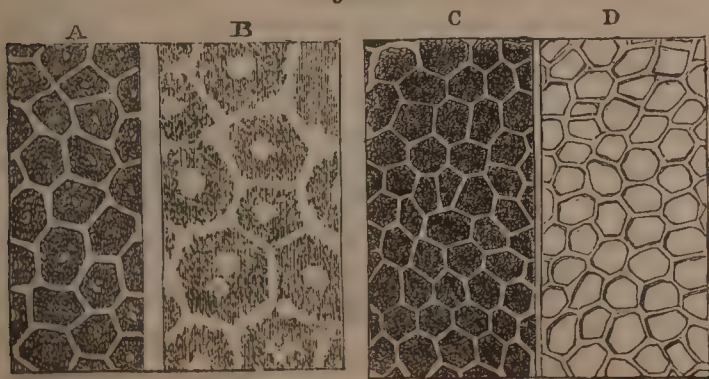
I now exhibit to you a portion of the skin of a newt, *Triton palmatus*, in which the pigment is very abundant,

and gives a marbled appearance to the animal; the pigment-cells are of a stellate figure, and are principally arranged in circles, the central part of the circle being a follicle, which, in some cases, you will see contains granular matter. I next show you a portion of the web of the foot of a frog, in which are numerous pigment cells; these always excite attention when the circulation of the capillaries is being seen for the first time. In some of the reptiles there are pigment cells containing a white material; in this specimen a portion of the iris of a tiger boa, *python tigris*, you will see a collection of white pigment cells, in which the branches of the cells are of great length; when these are viewed by transmitted light they appear perfectly black. I cannot speak with certainty, whether or not the branches of the cells ever communicate or anastomose; in the majority of cases they certainly do not, but in this last object the point cannot be easily determined. The preparations now described have exhibited cells principally of a stellate figure, I shall now proceed to show some examples of the pigmentum nigrum, the first specimen, *Fig. 64 A*, is taken from the eye of a sheep, in which the cells are of an hexagonal figure, and full of black granules; if, however, the back part of the choroid be examined, as in this specimen, (*Fig. 63 B*), you will find that some of the cells are fusiform in shape, whilst others have one or both extremities bifurcate; in the centre of each cell is a large white spot, this is the nucleus.



I now show you a portion of the pigmentum nigrum from the eye of an adult human subject (*Fig. 64, B*), in which the cells are much larger than those in the sheep, and the granules also more plainly seen. In albinos, that is in the white offspring of black parents, the hexagonal cells are present, but the pigment is so small in quantity as to allow of the vascular choroid being seen through the pupil, which gives to the eyes of these people a pink appearance. The same may be said of white rabbits and cats. I here show you, *Fig. 65 C*, a portion of the pigmentum of the choroid in a black rabbit, in which the cells are full of granules, and in the next object, *D*, you will be able to see the same sized cells from a white rabbit, in which the pigment cells are either absent or void of colour, and their eyes from this circumstance are more or less pink.

Fig. 65.



I now show you a portion of the pigmentum nigrum of the eye of a foetus. The cells are not only smaller than those of the adult, but the granules also are few in number, and the centre of each cell is occupied by a large white spot, the nucleus. A portion of this pigment, as seen under the same magnifying power as that of the adult in *Fig. 64 B*, is represented in *Fig. 65 A*, and for the sake of showing the nucleus and the granules, the portion *B* is magnified 600 diameters.

CLINICAL LECTURES,

AT

UNIVERSITY COLLEGE HOSPITAL.

By R. QUAIN, Esq., F.R.S.

ON STRANGULATED INGUINAL HERNIA.

I propose now to return to the two cases of strangulated inguinal hernia, which lately formed the subject of a lecture, taking up their histories after the operation. The wound in the integument in both healed very nearly by "the first intention;" but both had subsequent appearances which require notice. They may be abridged as follows:—H. Wood: Abscess formed upon the abdomen close outside the upper angle of the incision made in the operation, and the matter was discharged through an opening made for the purpose in the integument, as well as through the upper angle of the incision. The abscess then was soon closed up. During these events the health was unaffected, and the abdomen was free from pain. The other patient (George Fife) had a return of tenderness of the abdomen; but it was confined to a small space immediately above the seat of the hernia, and extending in a line upwards towards the ribs. He was likewise troubled with hiccough, which lasted several days; and he vomited almost all that he took into his stomach. These symptoms subsided after the application of a few leeches, followed by free evacuation from the bowels, caused by two or three full doses of calomel and enemata. Subsequently a small abscess formed in the scrotum, and this being punctured and evacuated, soon disappeared, leaving him convalescent, and quickly gaining strength, but with a painless elongated and narrow induration in the groin, resulting from the omentum, which had undergone a degree of thickening.

In the abscess, in the case of Henry Wood, there was nothing very material. The patient had previously been an unhealthy person. In such persons pus is more freely formed, and it is of the diffuent kind seen in this case. Moreover, the formation of matter in connexion with the sac which has been opened, is not an infrequent occurrence. But the other patient suffered from symptoms which are, I think, fairly assignable to the omentum. The pain was clearly over it, and to the inflamed state of that structure, of that part of it, too, which was in the sac, and which was continued up to the stomach, may, I think, the hiccough, and, perhaps, in a measure, the sickness, be assigned.

MANAGEMENT OF THE OMENTUM.

The circumstances just narrated lead to the inquiry respecting the proper manner of treating the structure alluded to, (the omentum,) when it forms part of a strangulated hernia. In discussing this important part of our subject it will be most convenient to proceed from points of practice which are more certain and settled, to others that are less so, and which it is, therefore, desirable to help to fix. This process will bring us, by an easy transition, to the cases which have engaged so much of our attention. The discussion may be arranged under three heads, according to the nature of the circumstances, thus:—

(a) In a case of hernia, consisting of intestine and omentum, we should be satisfied with replacing the bowel in the taxis; that is to say, after having accomplished so much, an operation would not be attempted to restore the omentum also to the abdomen. So, likewise, after having obtained the same result in the operation of Petit (so named), *i. e.*, the bowel being reduced without opening the sac, it would not be justifiable to proceed further, in order to act more immediately upon the omentum, with the view of replacing it likewise in the abdomen.

(b) When, on the other hand, the sac has been laid freely

open in the operation, the practice is different. In such circumstances the omentum would, in all likelihood, if left in the sac, undergo inflammation, and would suppurate freely; and all such inflammatory action is prejudicial, both in itself and in consequence of augmenting the probability of inflammation in the general cavity of the abdomen. If, in the circumstances now supposed, *i. e.*, the sac being laid freely open, the omentum be in small quantity and unchanged in texture, it is best to replace it in the abdomen, provided, however, that the restoration can be effected without much manipulation. But should the omentum be altered, —thickened, or agglutinated into a mass, by the deposit of fibrinous matter,—as it is sometimes found to be after a protracted continuance in the hernial sac, there can be no doubt that it should not be replaced in the abdomen. I once witnessed a case which forcibly illustrated the injury that results from doing so. After the bowel had been returned to the abdomen, in an operation for strangulated scrotal hernia, a thickened piece or lump of agglutinated omentum was likewise passed up. The patient died of peritoneal inflammation, and the mass of altered omentum was found embedded in a quantity of lymph, which its pressure had caused to be effused around it. In short, the omentum, when in the condition adverted to, might well be considered a foreign body, and its presence in the abdomen would be productive of similar consequences. But if not restored to the abdomen, how is it to be disposed of? The best course is to remove the mass with the scalpel. And when the omentum protruded is in large quantity, or though not in large quantity, still does not admit of replacement in the abdomen without much manipulation, it is on the whole best to pursue the same course. If left in the sac, the omentum, (when exposed as we have supposed it to be,) whether changed or unchanged, almost invariably inflames and perhaps suppurates, and in addition to the immediate and local evil of this, the inflammation is prone to extend upwards to the abdomen. Hæmorrhage from the vessels necessarily divided in the operation for removing the omentum is prevented by tying the individual arteries. In one instance, however, a case of femoral hernia, in which the mass of omentum removed was very large, and the number of vessels was so great that it would have required a multitude of ligatures, I applied a small compress to the cut edge of the omentum at the upper end of the sac, the compress being secured with a string, by means of which it was drawn away upon the following day. And the late Mr. Morton, at my suggestion, adopted the same practice in a case of inguinal hernia. Both cases ended favourably.

(c) To the third class the cases of Fife and Wood belong. In this the condition of things partakes of the condition in both the foregoing classes; for while it agrees with the second in that the sac was opened, it approximates to the first, inasmuch as the opening is made only to the smallest possible extent. What is the best mode of management of the omentum here? The cases that form the subject of our consideration have direct bearing upon the answer to this question. The omentum in one (Wood) was laid bare in a very small degree, and was seen to be unaltered in texture. The edges of the wound joined by adhesion; still, an abscess formed; but the abscess might have formed, and I have repeatedly seen it form, without any omentum being contained in the sac. Moreover, the abscess was not, for the most part, in the position of the omentum. These circumstances, and the absence of all thickening, then or subsequently, in that structure, lead me to the conclusion, that the omentum, in this instance, had no share in the superficial inflammation and abscess which formed. The omentum in the other case (Fife) was somewhat more exposed than in the preceding instance. It was adherent to the lower part of the sac, and elsewhere was but slightly altered from the natural state. The wound of the integuments here, too, closed immediately by adhesion. But the tenderness over a limited space in the direction upwards from the omentum contained in the sac, and the continued hiccough, led me to refer the distress this patient suffered to partial inflammation of that structure; and, having happened to mention this view to my colleague, Dr. Walshe, he suggested that auscultation would probably aid the diagnosis. Accordingly, the stethoscope being applied by Dr. Walshe, a distinct rubbing sound was heard. The question now arises, would the removal of the omentum in this case have been a protection against this inflammatory action? To me it seems pretty certain, that the free division of the sac, which is necessary in such an operation, and the

presence of the ligatures used to prevent hæmorrhage, together with the manipulation and protracted exposure of the structure to the air during the process, would have led to a considerable amount of inflammatory action, and that for this reason the course actually pursued was the proper one. The subject is important, and it requires all the illustration from cases carefully observed that can be brought to bear upon it.—With my present experience, then, I would, as I have already indicated, make the practice to be pursued, in disposing of the omentum, depend mainly on the extent to which the herniary sac is opened.

TREATMENT AFTER THE OPERATION.

After the operation in our cases, reliance was placed on the application of leeches and some doses of opium at first. On the third day, enemata were administered. In the case of the patient who had continued vomiting, advantage was derived, after the use of leeches, from two or three pretty full doses of calomel followed up by enemata. In the management of patients in these circumstances, *i. e.*, after operation for strangulated hernia, sufficient time must be allowed for the recovery of the bowel before any remedy calculated to excite intestinal action is given; and the occurrence of peritoneal inflammation is to be constantly and carefully watched for. The necessity of the latter injunction will be understood when I state, that I have not, during a series of years, seen this inflammation wanting in a single instance of *post-mortem* examination after the operation had been performed. During the first two days, the patient must be seen every four or six hours, and a careful person ought to be in charge to report according to instructions given by the surgeon. Bear well in mind, that it is only at the outset that the peritoneal inflammation admits of successful treatment. It is to be looked for and met as it arises. The best test of its approach is, I believe, the presence of tenderness over the abdomen. When there is any indication that inflammation is arising, leeches are to be applied, and the degree of tenderness taken in connexion with the strength of the patient determines the number to be used. In aged or feeble persons, even a very small number will be of service; on the other hand, I have seen advantage derived from beginning, in vigorous persons, with the abstraction of blood from a vein, and following this up with leeches, where the symptoms indicated further bleeding. This more extensive depletion is, however, seldom necessary in the hernia patients of the hospital.

Opium seems to have a beneficial effect during the first day after an operation. The dose at first is half a grain or a grain, and repeated in smaller quantity at intervals of eight or twelve hours. But in this as in most other cases, the effect of the drug requires watching. A short time ago, after the operation for strangulated femoral hernia upon a patient of my friend Dr. Darling, I gave twenty drops of laudanum, divided into four parts, and the administration of these was spread over eight hours, with the effect of producing a considerable degree of narcotism, which, however, soon passed off. The patient was an aged and infirm female. Lastly, I may add, that I have not observed the very beneficial effects which have, within the last few years, been assigned to the use of opium in strangulated hernia.

I had been in the habit of combining calomel with the opium, but I discontinued the practice in a great measure, from the belief that griping pains and tenesmus, which I witnessed in some instances, were caused by that medicine. To any disturbance of the intestine in these cases, there is a special objection in the condition of the strangulated part. In only a single instance do I find it stated in the records of the cases I have operated on in the hospital during several years, that ptyalism followed the use of calomel. When severe peritonitis has come on, we have had recourse, in some instances, to mercury in another form, *viz.*, the mercurial ointment applied over the abdomen, and occasionally to inunction. This practice has, I must confess, been resorted to in compliance with the opinions transmitted to us from our predecessors—a tradition in the Profession—rather than from any evidence I have personally had of the advantage of this treatment. When danger presses, one does not feel justified in omitting any remedy recommended by any reasonable authority, even though his own experience would lead him to consider it of doubtful value.

A considerable time is allowed to elapse before any aperient medicine is given to our patients. We begin with an enema usually on the third day after operation. The

reason for abstaining from the use of aperients you will see very plainly set forth in the condition of the bowel when it has been laid bare in an operation, or in the *post-mortem* examination after an operation.—You will understand, then, that my reliance is placed mainly on the abstraction of blood locally by means of leeches over the abdomen, to subdue the early beginnings of that peritoneal inflammation which, I repeat—having never seen it absent in any instance in which death followed the operation for strangulated hernia—I believe to be the cause of the fatal result in such cases. My observation as to the treatment that proves most efficient in these circumstances, tends to confirm, it appears to me, the conclusions which one of our former Professors arrived at, from extensive experience in the treatment of inflammation in another serous membrane—that of the heart. To the researches and conclusions of Dr. Taylor on this important point of therapeutics I attach great weight, because I know how he laboured by the bed-side, and I know, likewise, how accurate, as well as able [and conscientious he is.

THE USE OF THE TRUSS.

It is no unimportant particular in the history of our cases, that neither of them wore a truss at the time the hernia descended. Fife does not appear to have ever worn one; indeed, he seemed ignorant that he ever had a rupture, and he spoke merely of having had “a weakness” at one time. Still, though without a truss, he remained for years without a return of the hernia. On the other hand, the second patient (Wood) had worn a truss for several years, and had discontinued it only for the space of two or three weeks. It must be noted, too, that neither patient was engaged, at the time the rupture formed and became strangulated, in any active exertion, such as is calculated to force the bowel from the abdomen.—One of them, indeed, had a fall, and may have instinctively made an effort to save himself; it was to an attack of tormina of the bowels that the complaint seems to have been owing in the second case.

From such facts, and they are typical of what is often met with in practice, the plain inference is, that no compromise must ever be allowed as regards the use of a truss in the case of those who have once had a hernia. It is equally plain, that, to be of any service, the truss must be placed accurately over the orifice of the canal by which the hernia descends, and that the apparatus must, at the same time, be well fitted to the part, as well as of strength adequate for the object. The adaptation of the truss is too often left entirely to the seller of the instrument and the wearer, though we often have practical proof how careful the surgeon should be in looking to the matter himself. You have seen that one of the patients at present under care in the hospital, even though he had worn a truss for several years, was found to have placed a new instrument altogether below the inguinal canal. To you it would be a useful exercise in the dissecting-room, to dissect out the inguinal and femoral canals, and to adapt the respective trusses to the parts, for in this, as in most other practical matters, precept and general views, however sound, are not enough.

In common cases an ordinary truss, applied with some care, will prevent the protrusion of the intestine after its replacement; but when the hernia has attained to a large size, the openings in the abdominal walls being proportionably large, there is often a great tendency to the re-descent of the bowel after it has been returned to the abdomen. In some of these cases the proper adjustment of the apparatus becomes a matter of considerable difficulty. Much here depends upon the instrument used. There is before you a number of varied construction. (Here Mr. Quain gave an outline of the advantages, real or supposed, of several trusses, and continued.)

In a very bad case, that of a man (Johns, in Case-book, XIV., p. 114) who had old and very bad stricture of the urethra, with several sinuses opening behind and before the scrotum, and who had a very large hernia in consequence of violent forcing to evacuate the urine, after an operation, by means of which the sinuses were closed and the urine was evacuated by the natural canal, the hernia still descended very forcibly. In this patient, who was, it should be added, a corpulent person, with abundant deposit of fat above the pubes, I succeeded in having the hernia supported by means of a carefully-formed pad, fitted by means of a screw to a slit in the fore part of the spring. By this arrangement the pad admitted of being moved a little in or out, as well as of being altered in its direction, and a sufficiently accurate adapta-

tion was obtained. I mention this case in order to impress upon you that it will now and then happen that the instruments constructed upon a general plan will not suit certain cases; these require special contrivances on the part of the surgeon and the instrument-maker. But a further difficulty arises occasionally from the pressure of the spring, which, when adequate to overcome the tendency of a large hernia to descend, is at the same time so great as to cause ulceration of the skin. An example of this difficulty occurred to me in this hospital. The patient (Kenney, Case-book, XI., p. 115) was a stout, corpulent man, and I had operated for a large strangulated scrotal hernia, without opening the sac. The truss was found to be strong enough to support the hernia, but it soon fretted the skin, and all the more readily because of the cicatrix of the operation. The expedient recommended in books for this complication, is the application of astringent lotions to harden the skin. But there has lately been presented to the Profession a contrivance of a very different stamp, the object and effect of which I would explain in this way. In the ordinary truss, the amount of the pressure is the same at all times; so that if much force or strong pressure is required at any point of time, as when a little exercise is taken or when the wearer coughs, the same strong pressure is continued, though not required at all other times. To remedy this evil a truss has been made, under Dr. Arnott's directions, which, by a mechanical contrivance, may be made to exercise slight pressure against any surface to which it is set, but comes to exercise very powerful resistance when subjected to any influence which tends to separate its ends beyond that degree. This result is gained by a wire placed on the convex side of the spring of an ordinary truss, and fixed at one end by a rivet, while the other end acts as a screw, in an offset from the spring. The wire thus admits of being tightened, and, as it is tightened, (by a key for the purpose,) the pressure inwards of the ends of the spring is restrained and fixed at any required degree of force. Supposing, now, the spring adjusted upon the abdomen, it exercises but the permitted degree of force upon the ring and canal. But should a hernia tend to enlarge the space between the ends of the truss,—in other words, should it tend to press out the pad,—the descent of the bowel would be resisted by the whole force of the metal. To the inventive genius of the same distinguished man we are indebted for several other applications of the principles of natural philosophy to our purposes. I need only mention the hydrostatic bed, which you see constantly, and which has relieved as well as prevented a vast amount of suffering, and has even been the means of saving many a life in this and in other countries.

Before parting from the subject of trusses, it is necessary for me to refer to a question suggested by the case of congenital hernia lately under your observation. The term congenital, is not, in this instance, to be taken to apply strictly to the hernia (which descended when the patient was arrived at mature years,) but to the condition of the parts, *i.e.*, to the unclosed condition of the tunica vaginalis, by which the hernia was encased, instead of being clothed with a separate serous membrane brought down at the time of its descent. This person had not worn a truss; and the important question suggests itself, What advice is to be given, as regards the use of that apparatus, when the testis has not reached the scrotum? In such cases it is desirable that there should be no impediment by band or truss of any kind to the descent of the gland; on the other hand, it is of more importance that the greater risk of strangulated hernia should be guarded against. In our patient the testis on both sides had reached as far as the external abdominal ring. A truss might have been placed above the testis, and if so placed, it would have prevented the evils which occurred, without interfering with the gland. I have at present, under my observation, a little boy, who has had during four or five years a hernia, which, I have no doubt, is formed in the tunica vaginalis, the testis being, as I believe, close above the internal abdominal ring. The child suffered pain whenever the hernia descended into the groin, and it used to descend whenever he engaged in play with his brother and sisters. In this case I applied a truss, even at the risk of preventing the gland from descending, but I have done it with the view of avoiding the far greater evil of strangulated hernia. And I would act on the same principle, if hernia had formed the testis being in the inguinal canal,—modifying, of course, the truss, so as to avoid compression of the gland.

ORIGINAL COMMUNICATIONS.

ON THE PATHOLOGY OF THE UTERUS,
ITS ANATOMY AND PHYSIOLOGY.

By T. SNOW BECK, M.D. Lond., F.R.S.,

Fellow of the Royal College of Surgeons of England.
Physician to the Farringdon General Dispensary and Lying-in Charity.

[Continued from page 11.]

III. THE PATHOLOGY (CONTINUED.)

(c) *Disorder of the Digestive System.*—The tongue is usually pale, clean, and moist, or covered with its dirty white fur at the base; sometimes it is small, of a deep flesh red colour along the edges, at the tip and beneath the tongue, whilst the centre is of a dirty white colour, without being coated with distinct fur. Thirst is not usually present, though occasionally the patient suffers much from this feeling. The mouth is moist, though a disagreeable taste is much complained of, especially felt in the morning; the taste being a compound of a bitter, sour, and rottenness. The odour of the breath partakes of a similar character, and is, sometimes, exceedingly disagreeable. The appetite varies much; sometimes it is not changed from that of usual health; at other times there is no desire for food, which is only taken to relieve the sinking feeling at the epigastrium; sometimes neither pain nor inconvenience is felt at the epigastrium after taking food; whilst, at other times, great pain, fullness, and distension, follow each meal. Again, the appetite is not unfrequently perfectly voracious,—“could eat all day, and never feel satisfied;” and after a hearty meal the patient says, “she could sit down and eat as much more.” Some affections are attended with violent retchings, accompanied with the production of great noise; retching occurs chiefly in the morning after rising, and generally continues during the forenoon, or, it may be, during the whole day. It is, sometimes, only attended by the vomiting of a little white phlegm; at other times large quantities (a hand-basin full or more) of clear sour fluid are vomited, which, after standing a short time, becomes somewhat viscid, as if from an admixture of white of egg. It is not unusual for some bitter yellow or green fluid to be vomited, after retching for some time. The epigastrium is usually more or less tender. A feeling of fullness and distension of the abdomen is a very frequent feeling, although it may not be perceptibly enlarged, and may even be flat and excavated; very generally, however, it is more or less swollen, with much flatulent distension, which rolls about, but does not “break off.” The bowels acts regularly, or are confined; at other times they are alternately confined and relaxed; the relaxation now and then passing into a diarrhoea, and even into an attack of dysentery, with pain and tenderness along the course of the colon and rectum, with frequent loose motions, voided with considerable pain, and mixed with much mucus and some blood. The urine varies in the same patient; sometimes it is pale, clear, and abundant, at other times it is high coloured, thick, and scanty, causing heat and pain in passing, and being much loaded with lithates. These conditions, which alternate frequently during the disease, certainly do not depend upon the changes of diet, but upon the varying condition of the disease.

With so much derangement of the digestive system, it appears worthy of note, that the liver does not present any marked evidence of derangement of its functions. A slight yellow colour is sometimes present in the conjunctiva; varying quantities of bile are now and then vomited; and

the motions are dark-clay coloured. The dirty, muddy complexion already described, does not appear to depend upon disorder of this organ, seeing that the conjunctiva remains frequently clear and blue. The condition of the urine further appears to depend on derangement of the kidneys themselves, and not upon any disorder of the biliary apparatus. I am aware that cases of great enlargement of the liver have been described; but these, from their rare occurrence, appear to be accidental concurring diseases, and not to arise from uterine disorder, as their essential cause.

(d), *Disorder of the Circulating and Respiratory Systems.*—At first the pulse is not affected in frequency, in regularity, or in volume; yet it is soft, with an hesitating uncertain feel beneath the finger, and is temporarily excited from slight causes. When, however, the local disease materially affects the general health, then the pulse is considerably increased in frequency (to 120, or even 150 beats in a minute,) becomes very soft, slightly irregular in rhythm, and much diminished in size and in force. I am, however, unable to determine, from the data I at present possess, whether the very small pulse is not generally the effect of the combined existence of uterine disease and of phthisis pulmonalis. Palpitations of the heart are induced, with greater or less ease, by slight exertion, or by sudden emotion. Pains in both hypochondria, and in the region of the heart are often complained of; but these appear to belong to the class of reflected pains, and do not depend, as a general rule, upon any affection of the chest.

The respiration is at first unaffected, but becomes afterwards increased in frequency (about 32 in the minute), is then shallow, hesitating, and interrupted. Considerable shortness of breath is felt on exertion, and very frequently there is some cough, which appears to arise from the great susceptibility to “taking cold,” before alluded to. It is far from unfrequent to meet with phthisis pulmonalis, combined with uterine disease which has existed for some time, but whether this is only an accidental combination of two not uncommon diseases, or otherwise, I am unable to determine from the data at present in my possession.

(3) *Local Symptoms.*—In congestion of the vagina, the colour of the mucous membrane is deepened, and assumes various shades of red; it is also slightly warmer than natural, and a little more sensitive to pressure. The surface may be dry, or lubricated with an increase of the natural secretion, or with a varying amount of white mucous discharge. It is fair to conclude, that the condition of the membrane which causes a want of the natural secretion must be different to that which produces a flow of white mucous—an altered secretion. But whatever this difference may be, it is at the present time not clearly defined. In congestion of the uterus, uncomplicated with other changes, the lips of the organ present an increase of their natural colour, but without any further appreciable alteration. However, in women who have borne children, the organ may be considerably increased in size, and, as a consequence of this, descend in the pelvis and press upon the upper part of the vagina.

In acute inflammation of the vagina, the mucous membrane is exceedingly tender to pressure, very hot, swollen, smooth, and velvety to the feel, and the arteries of the part are felt, on the introduction of the finger, to pulsate quickly and strongly. The membrane lies in large smooth folds, the opposite surfaces being pressed together in consequence of the enlarged and swollen condition of the part, the surface being lubricated with a thin fluid, which on examination is found to be pus. The colour is usually that of a livid cherry-red; but this is liable to considerable variation

according to the temperament of the individual, whilst the perinæal muscles are strongly contracted, so as to narrow considerably the vaginal orifice.

When the vulva is implicated in the inflammation, the parts become hot, swollen, exceedingly tender, accompanied with an intolerable itching, and an unpleasant odour resembling that of decaying salt fish. The itching is sometimes so great, as to destroy all sleep, and to force the patient to rub herself in spite of the greatly increased suffering and irritation which this induces. Sometimes the nymphæ become greatly enlarged, and the glands on the surface opposite to the labia majora secrete an irritating white matter, which, being retained in the fold between the two organs, produces a superficial excoriation. In this condition the parts are acutely painful when touched.

The whole of the vagina is [not always implicated in the inflammation, or, if it be so, it may be unequally implicated. Sometimes the inflammation is almost confined to one side of the vagina; sometimes it is chiefly located at the lower part; sometimes chiefly at the upper part. In the latter case, it may extend to the mucous membrane covering the lips of the uterus, and even to the membrane lining the cervical canal. When this is the case, the portion of the mucous membrane covering these parts has a red, raw appearance, which is most marked near the orifice, and has been erroneously described as ulceration. This alteration in the appearance produced by inflammation appears to depend upon some anatomical condition of the part, perhaps upon the much smaller amount of submucous cellular tissue found here than in other parts of the membrane.

In chronic inflammation, the mucous membrane presents a great variety of appearances, according to the duration of the disease, the degree of congestion present, and the temperament of the individual. In virgin females it is hot, and more or less tender, sometimes acutely so, on the introduction of the finger. The orifice is narrowed by the contraction of the perinæal muscles, and the cavity of the vagina is also very small. The surface is rough and corrugated; it gives the sensation of being thickened, and may be dry, or lubricated with mucus, mixed with pus, or with a thin purulent fluid; the arteries beat perceptibly, but not strongly. In cases of severe inflammation, the membrane is much swollen, and thrown into strongly-marked transverse rugæ; while a portion of the mucous membrane protrudes into the vulva, forming a fringe of acutely tender membrane round the os externum. I have known this fringe mistaken for a hymen, in women who have previously borne children; it effectually prevents the introduction of any instrument. The colour of the membrane varies from a cherry red to a livid violet red, or to a deep livid mahogany red. In women who have borne children, the membrane is hot and tender; frequently lax and in ample folds, while the surface is bathed with a purulent secretion. Sometimes it gives the impression, that the finger is passing over a soft portion of skin, instead of a mucous membrane. The colour consists of various shades of red, which become dark and livid according to the accompanying congestion.

In acute inflammation of the uterus, the organ may be found in the natural position in the centre of the pelvis, or it may be retroverted, anteverted, or inclined to either side, with varying degrees of obliquity. The organ is distinctly hot, acutely tender to the touch, slightly swollen with a distended feeling, and the arteries pulsate with great fulness and force. The inflammation may be confined more to one part of the organ than to another; and, when this is the case, the symptoms enumerated will be most marked in the situation where the inflammation is most intense. The lips are slightly increased in size, are smooth, and usually have a soft, velvety feel when the finger is passed over them, but are otherwise unaltered. The orifice is natural, or it may be slightly decreased in calibre. When seen by the aid of the speculum, the lips have a smooth appearance, and are of a uniform deep-red colour. The orifice appears of the usual size, though surrounded by mucous membrane having a raw appearance, and it is usually filled with some transparent white-of-egg mucus. The appearance which the orifice of the uterus now presents is almost exactly typified by the orifice of the male urethra during an attack of acute inflammation.

In chronic inflammation the uterus may not be perceptibly hotter than natural, but it is always more or less tender to pressure. Sometimes it has a firm, hard, rather knotty

feel; but more generally it is enlarged and quaggy. It usually is altered in position, and most commonly is retroverted; it may, however, be anteverted, or inclined to either side. It is generally seated lower in the pelvis than natural, and the lips project considerably into the vagina. They are round, smooth, slightly enlarged, and in consequence of projecting, present a cup-like depression at the orifice, when the finger is passed over it. The orifice, however, is not only not enlarged, but it is smaller than natural, in consequence of the coarctation of the canal by the swollen tissues. The neck is enlarged, and surrounded by transverse folds of the mucous membrane of the vagina; and when the body of the organ can be felt, by reason of the alteration in the position, it is swollen, smooth, tender, and quaggy to the feel. The arteries of the part beat with varying degrees of force and quickness, but with much less violence than in acute inflammation. Viewed by the aid of the speculum, the lips are somewhat enlarged, and of a dull, dusky red colour, which is uniform, or mottled with varying shades of the same colour. The appearance of the orifice is altered as above described, and often contains some transparent, white-of-egg mucus. Sometimes the glands of the mucous membrane covering the lips of the uterus are enlarged, and appear as small, round, red granules, seated upon a circumscribed patch of red. The patches may surround the orifice, filled with transparent white-of-egg mucus, or they may be seated in any portion of the lips. So far as my observation has extended, I have never yet found the epithelium denuded, although I can readily believe, reasoning from the known effects of inflammation on other membranes covered by epithelium, that such desquamation of the epithelium may be found, occasionally, to take place. The circumscribed and defined character of the redness depends upon the vascular ring which surrounds each enlarged follicle. In women who have borne children, the changes produced by chronic inflammation are essentially the same as those already described; yet the organ is more swollen and more doughy to the feel. It also, usually, lies lower in the pelvis, and may assume various alterations of position; sometimes it is retroflexed, sometimes, even, anteflexed. The position, however, which it assumes depending, apparently, upon accidental circumstances.

9A, Langham-place.

[To be Continued.]

THE MARCH OF DEATH IN ST. GILES'S.

By DR. KING, M.D.

Medical Superintendent of Bilston and Darlaston, in Staffordshire, in 1832, and Superintending Medical Inspector of Lambeth, Newington, Camberwell, St. Giles', St. Martin's, and the Strand and Holborn Unions in 1849.

OLD AGE.

THE mortality of London has not hitherto been placed on a scientific basis. The drainage of the Metropolis, in a sanitary point of view, is a question still to be resolved. To the great store-house of the Registrar-General, ground hitherto unexplored, we can alone look for the laws necessary for this inquiry. Until this record of death has been arranged and classified, all reasoning is vague and valueless.

Hitherto, in the investigation of health, disease, and death, contradiction has followed contradiction. One set of facts no sooner suggested one theory, than another set of facts suggested another theory,—processes not only expensive in a pecuniary, but in a mortal point of view. For instance, the Central Board of Health of 1832 started with the theory that cholera was contagious; the General Board of Health of 1849, that it was non-contagious, and that diarrhœa was premonitory of cholera.

As the General Board of Health thought it right to express its opinion that the Central Board of Health was wrong in respect to the contagious nature of cholera, the General Board of Health of another epoch may think it equally right to say that diarrhœa is the twin sister, rather than the premonitory stage of cholera. That the movement of the General Board of Health was a retrograde step in regard to cholera, and that for a starting point in another epidemic

we must fall back upon the labours of the Central Board of Health, is the conclusion at which I have arrived.

Both the Central Board of Health and the General Board of Health gave me an opportunity to observe, on a most extensive scale, the epidemics over which they held the management. Six weeks incessant toil at Bilston and Darlaston, in Staffordshire, in 1832, and three weeks at Lambeth, Newington, and Camberwell, in 1849, led me to observe those phenomena which suggested to my mind the gaseous origin of cholera, which I communicated to the General Board of Health, in my Third Report on Lambeth, bearing date the 10th Sept., 1849; and on the 1st of Oct. I explained to Dr. Southwood Smith the reasons which led me to this conclusion.

Dr. Smith was of opinion that the phenomena I had discovered illustrated the fungous rather than the gaseous theory, and thus all hope of reaping good fruit was at an end, as far as my view of the epidemic of 1849 was involved. My schedule for recording the hour and precise room of attack was put aside, and by turning over the several district inspectors, by which means I exchanged Lambeth, Newington, and Camberwell, for St. Giles's, St. Martin's, and the Strand and Holborn Unions, I lost all trace of phenomena which, by day and by night, had been constantly before me.

Instead, therefore, of writing an octavo volume of argument in support of my theory, I bent my way to the cellars of the Registrar-General, and selected from the Bills of Mortality the mortal block represented by St. Giles's and St. George's, Bloomsbury. This block appeared to me to present all the features requisite for such an inquiry,—a locality in which the rich and the very poor resided, and in which there were many disturbing causes, such as the laying out of Seven Dials, and the cutting through filthy and worn out districts for the construction of better houses,—as New Oxford-street.

The march of death in St. Giles's for the whole period of registration is the first step of the vital statistical ladder which I consider it incumbent upon me as a sanitarian to climb, to get a comprehensive view of my subject; for it is evidence of undoubted authority tending to discovery of the most varied kind,—such as the origin and nature of disease, its primary, secondary, contagious, and hereditary character; whether the cause of death is to be sought for in the earth or its atmosphere; whether vaccination is really preventive of small-pox; and whether life is more or less valuable after an attack of measles, scarlet fever, hooping-cough, and the other diseases of childhood; whether diarrhoea and consumption are diseases *sui generis*, or the first and last stages of other diseases; whether the open sewer or the closed sewer, the churchyard or the Catchhold, (a) are the seats of disease; and whether the Thames is fit to be at one and the same time the great water supply and the great sewer outlet of this vast Metropolis.

The site of the model lodging-house, of the hospital, and of the workhouse, can scarcely be fixed until such an inquiry as I have proposed to myself has been completed; for if the poison is in the earth, the model lodging-house will still be the high road to the hospital and to the workhouse, and the hospital and the workhouse will still be charnel-houses, in spite of the medical treatment, the order and the cleanliness with which they may be associated.

As the standard of health, I give the mortality from old age, and then commence with the mortality from disease. The march of death from scarlet fever, for convenience, being the first step in that direction.

The statistical methods employed are, firstly, to fix each form of death as specified in the Registrar-General's returns to the house in which it occurred in each of the four quarters of the year; secondly to post the several forms of death into annual; and, thirdly, into the whole period of registration; fourthly, to survey each street, so as to determine how one house falls respectively to another, and form them into one general map; fifthly, to suspend to the houses on which the mortality fell a number denoting its intensity, and subtend the year or years when the mortality occurred. Then begins the generalization of the subject, and

in which I propose strictly to confine myself to facts. The argument will necessarily follow, but not at present.

The geographical distribution of Death in Old Age is recorded in Table I.; Castle-street, Compton-street East, Crown-street, Drury-lane, Duke-street, Lincoln's-inn; Eagle-street, Guildford-street, Holborn, High Holborn, Kingsgate-street, Sheffield-street, Tottenham Court-road, and West-street, being partly in other parishes; and Bainbridge-street, Peter-street, Buckeridge-street, George-street, Endell-street, and Middle-row, being wholly or in part pulled down are left out of the inquiry. Lawrence-street and Maynard-street, lately rebuilt on an improved scale, are retained, because they bear the same name, and occupy precisely the same ground now as formerly, and thus offer an opportunity of observing if in future they lose their old complaints.

No. 1.

Street.	No. of House.	Houses.	Deaths.
Abbey place ...	13, 6, 3, 2 ^a , 1	5	6
Alfred mews ...	11, 1 ^a	2	3
Alfred street ...	32, 27	2	2
Alfred place ...	25	1	1
Barley court ...	5	1	1
Bedford place ...	32, 17 ^a	2	2
Bedford square ...	39, 33, 29 ^a , 22, 5, 2	6	7
Bernard street ...	48, 38, 35, 19, 14, 10	6	6
Bloomsbury court ...	1	1	1
Bloomsbury market ...	11, 10	2	2
Bloomsbury place ...	3	1	1
Bloomsbury square ...	35, 30, 26, 8	4	4
Bloomsbury street ...	22, 15, 6	3	3
Bowl yard ...	7 ^a	1	2
Brewer street ...	2	1	1
Broad street ...	61, 44, 42, 12, 7, 1, 0	7	7
Brownlow street ...	{ 37, 36, 35, 31, 30, 26, 25, 12, 8, 6, 5, 1, } BL ^a H	13	14
Bull and Gate yard ...	11, 0	2	2
Burnett's buildings ...	4, 3	2	2
Bury place ...	5, 4	2	2
Bury street ...	23, 22, 12, 6, 4, 1	6	6
Carrier street ...	11, 3	2	2
Chapel place ...	20, 6	2	2
Charles street ...	47, 35, 30, 24, 23, 10, 2	7	7
Charlotte street ...	25, 23, 17 ^a , 11, 8, 6, 5 ^a , 3	10	10
Chenies mews ...	52	1	1
Chenies street ...	42, 12, 5, 2	4	4
Church lane ...	20, 9, 2	3	3
Church street ...	3 ^a	1	1
Clark's buildings ...	13, 9, 5	3	3
Coal yard ...	24, 22, 20, 12, 0, A8, H	13	13
Colonnade ...	34, 28 ^a , 27 ^a , 26, 22	5	7
Coram place ...	15, 10, 9, 1	4	4
Cross lane ...	7	1	1
Charlotte mews ...	1	1	1
Dudley street ...	{ 81, 77, 65 ^a , 63, 60, 59, 53, 45, 41, 37, } 36, 32, 30, 28 ^a , 25, 24, 21, 20, 17, } 10, 0	21	23
Dudley court ...	1	1	1
Denmark street ...	22, 17, 16, 10, 7, 4	6	6
Dolphin-place ...	2	1	1
Everett street ...	17, 16, 12 ^a , 11, 7	5	6
Fogerty's buildings ...	1	1	1
Gate street ...	7, 6	2	2
Gilbert street ...	10, 9, 1	3	3
Gower street ...	65, 63, 61, 53, 51, 13	6	6
Great Coram street ...	50, 45, 24 ^a , 17, 11, 6	6	8
Great Earl street ...	27, 5 ^a	2	2
Great Queen street ...	70, 66, 63, 54, 51, 49, 43, 34, 13, 12	10	10
Great Russell street ...	107, 55, 82, 43, 30, 21, 20, 18, 2, BM	10	10
Gt. St. Andrew street ...	38, 37, 23, 20, 9, 6	6	6
Great Turnstile ...	14, 13	2	2
Gt. White Lion street ...	8, 4	2	2
Great Wild street ...	{ 50, 49 ^a , 48, 43, 34 ^a , 33, 29, 23, 20, 17, } 13, 9, 6, 2	14	16
Hart street ...	42, 40, 11A	3	3
Henrietta street ...	25, 15, 8, 3	4	4
High street ...	67, 64, 48, 45, 33, 22, 6, 4	8	8
Hunter street ...	53, 44, 42, 11, 8, 1	6	6
Hyde street ...	27, 26, 18, 10, 1	5	5
Kennedy court ...	4, 1	2	2
Kenton street ...	42, 38, 34, 23, 4 ^a , 3	7	7
Keppel mews ...	38, 7	2	2
Keppel street ...	31, 28 ^a	2	2
King st., Drury lane ...	37, 36, 34, 28, 21, 18, 12, 10, 6	9	9
King street, Holborn ...	29, 20, 19	3	3
King st., Seven Dials ...	{ 63, 58, 46, 35, 29, 28, 20, 19, 18, 17, } 12 ^a , 7, 0	13	14
King's head yard ...	1	1	1
Lascelles place ...	14, 8, 6, 3	4	4
Lincoln court ...	21, 20, 11, 6, 5	5	5
Lincoln's inn Fields ...	53, 39, 6	3	3
Little Coram st. ...	31, 30, 28, 25, 21, 18, 11, 7	8	8
Little Denmark street ...	3	1	1
Little Earl street ...	35, 25, 4 (Three Tuns)	4	4
Little Guildford st. ...	38, 33, 32, 29	4	4
Little Queen st. ...	33, 21, 14	3	3

(a) Waste ground of that unmistakeable appearance which denotes the owner is in Chancery or in the Queen's-bench, and where one may catch a hold to deposit and sift from day to day every kind of dirt. A catchhold belonging to a large proprietary is as extraordinary an exhibition as the sanitarian has to study.

Street.	No. of House.	Houses.	Deaths.
Little Russell st.	{27, 24, 23, 18, } 17, 16, 11, 4 }	8	8
Little St. Andrew st.	22, 18, 5	3	■
Little Torrington st.	3	1	1
Little White Lion st.	4, 3	2	■
Little Wild st.	40, 23, 22, 20, 4	5	■
Lumbar court	20, 19 ^a	2	3
Marchmont pl.	16, 13, 9	3	■
Marchmont st.	59, 41, 40, 4, 2 ^a	5	6
Market street	3 ^a	1	2
Maynard street	8	1	1
Montague place	15, 3	2	2
Montague street	{28, 22, 18, } 11, 9, 3, 2 }	7	7
Museum street...	{46, 45, 44, } 40, 34, 28, } 24, 10, 6, 5 ^a }	10	11
Neal's yard	2 ^a	1	3
New street	0	1	1
Newton street	25, 22, 21 ^a , 12, 1	5	6
New Compton st.	{71, 65, 63, 57, } 53, 48, 45 ^a , } 37, 36 ^a , } 35 ^a , 30, 22, } 19, 18, 7, 5 }	16	19
New Turnstile	9, 5, 3	3	3
Nottingham ct.	13, 10, 8, 1	4	4
Parker street	51, 33	2	2
Phoenix street	13, 4	2	2
Pitt place	7, 1	2	2
Plummers court	4, 3	2	2
Portsmouth st.	14, 4 ^a	2	3
Princes street	19, 9, 5	3	3
Queen court	3	1	1
Queen street	24, 17, 16, 10, 9	5	5
Red Lion yard	4	1	■
Regent place	4 ^a	1	■
Russell mews	2, 0	2	■
Russell place	■	1	1
Russell square	61, 44, 41, 14, 10	5	5
Short's gardens	{35, 20, 14, 13, } 12 ^a , 11, 6, 2 }	■	9
Silver street	10, 2	2	2
Smart's buildings	6	1	1
South crescent	8	1	1
Southampton ct.	5	1	1
Southampton mews	10	1	1
Southampton row	{47, 43, 36, } 32, 14, 10, 6, } 1, Kent's- yard }	9	9
Stacy street	9, 3	2	2
Star court	8, 5, 1	3	3
Stonecutters' alley	3	1	1
Store street	38, 20, 4, 0	4	4
Tavistock mews	23	1	1
Tavistock street	5, 4	2	2
Titchbourn court	5	1	1
Torrington sq.	59, 42, 33, 28	4	4
Tower street	15, 7	2	2
Upper Bedford place	17	1	1
Upper King st.	15, 9, 8 ^a	3	4
Up. Montague mews	4	1	1
Upper Montague st.	4, 1	2	2
Whetstone park	36, 35, 32	3	■
Wild court	{37, 13 ^a , 12, } 10, 7, 5, 1 }	7	8
Wilmot street	18, 16, 13, 5, 6	5	5
Woburn court	1 ^a	1	2
Woburn place	49, 36, 34, 20, 11 ^a	5	6
Woburn square	22 ^a , 16	2	3
131		501	541

No. 2.

Street.	No. of House.	Houses.	Deaths.
Little Russell st.	{27, 24, 23, 18, } 17, 16, 11, 4 }	8	8
Little St. Andrew st.	22, 18, 5	3	■
Little Torrington st.	3	1	1
Little White Lion st.	4, 3	2	■
Little Wild st.	40, 23, 22, 20, 4	5	■
Lumbar court	20, 19 ^a	2	3
Marchmont pl.	16, 13, 9	3	■
Marchmont st.	59, 41, 40, 4, 2 ^a	5	6
Market street	3 ^a	1	2
Maynard street	8	1	1
Montague place	15, 3	2	2
Montague street	{28, 22, 18, } 11, 9, 3, 2 }	7	7
Museum street...	{46, 45, 44, } 40, 34, 28, } 24, 10, 6, 5 ^a }	10	11
Neal's yard	2 ^a	1	3
New street	0	1	1
Newton street	25, 22, 21 ^a , 12, 1	5	6
New Compton st.	{71, 65, 63, 57, } 53, 48, 45 ^a , } 37, 36 ^a , } 35 ^a , 30, 22, } 19, 18, 7, 5 }	16	19
New Turnstile	9, 5, 3	3	3
Nottingham ct.	13, 10, 8, 1	4	4
Parker street	51, 33	2	2
Phoenix street	13, 4	2	2
Pitt place	7, 1	2	2
Plummers court	4, 3	2	2
Portsmouth st.	14, 4 ^a	2	3
Princes street	19, 9, 5	3	3
Queen court	3	1	1
Queen street	24, 17, 16, 10, 9	5	5
Red Lion yard	4	1	■
Regent place	4 ^a	1	■
Russell mews	2, 0	2	■
Russell place	■	1	1
Russell square	61, 44, 41, 14, 10	5	5
Short's gardens	{35, 20, 14, 13, } 12 ^a , 11, 6, 2 }	■	9
Silver street	10, 2	2	2
Smart's buildings	6	1	1
South crescent	8	1	1
Southampton ct.	5	1	1
Southampton mews	10	1	1
Southampton row	{47, 43, 36, } 32, 14, 10, 6, } 1, Kent's- yard }	9	9
Stacy street	9, 3	2	2
Star court	8, 5, 1	3	3
Stonecutters' alley	3	1	1
Store street	38, 20, 4, 0	4	4
Tavistock mews	23	1	1
Tavistock street	5, 4	2	2
Titchbourn court	5	1	1
Torrington sq.	59, 42, 33, 28	4	4
Tower street	15, 7	2	2
Upper Bedford place	17	1	1
Upper King st.	15, 9, 8 ^a	3	4
Up. Montague mews	4	1	1
Upper Montague st.	4, 1	2	2
Whetstone park	36, 35, 32	3	■
Wild court	{37, 13 ^a , 12, } 10, 7, 5, 1 }	7	8
Wilmot street	18, 16, 13, 5, 6	5	5
Woburn court	1 ^a	1	2
Woburn place	49, 36, 34, 20, 11 ^a	5	6
Woburn square	22 ^a , 16	2	3
131		501	541

The March of Death in old age is shown in Tables 2—13. The arrangement is convenient to read at a glance the epidemic force in each particular year, and the local intensity attached to it through the subsequent years, and thus to fix the rise and fall, both in health and disease, of each street. The bottom or epidemic force line marks also the period when the streets first became subject to disease.

a denotes almshouses, b m British Museum, c n British Lying-in Hospital.

No. 3.

No. 8.No. 4.No. 9.

No. 5.

No. 10.

No. 6.

No. 11.

No. 7.

No. 12.

No. 13.

Of 4959 houses, (Census 1841) 501 furnished one or more cases of old age, in the following proportions:—

463 Houses	1 Case	463
36 "	2 "	72
2 "	3 "	6

501

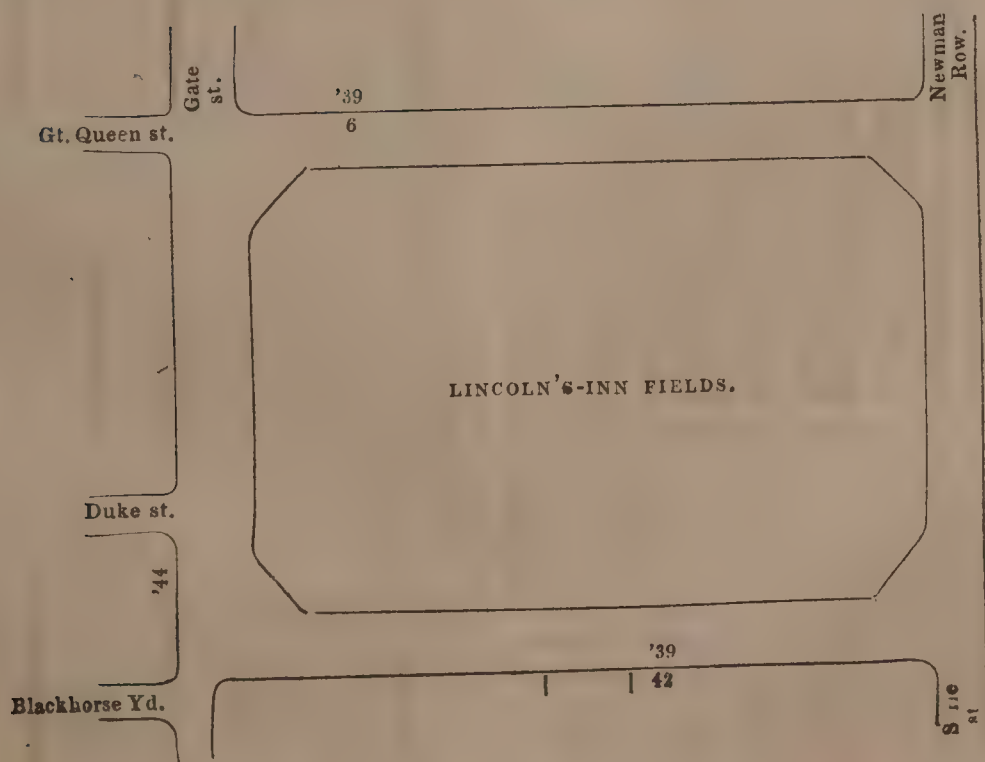
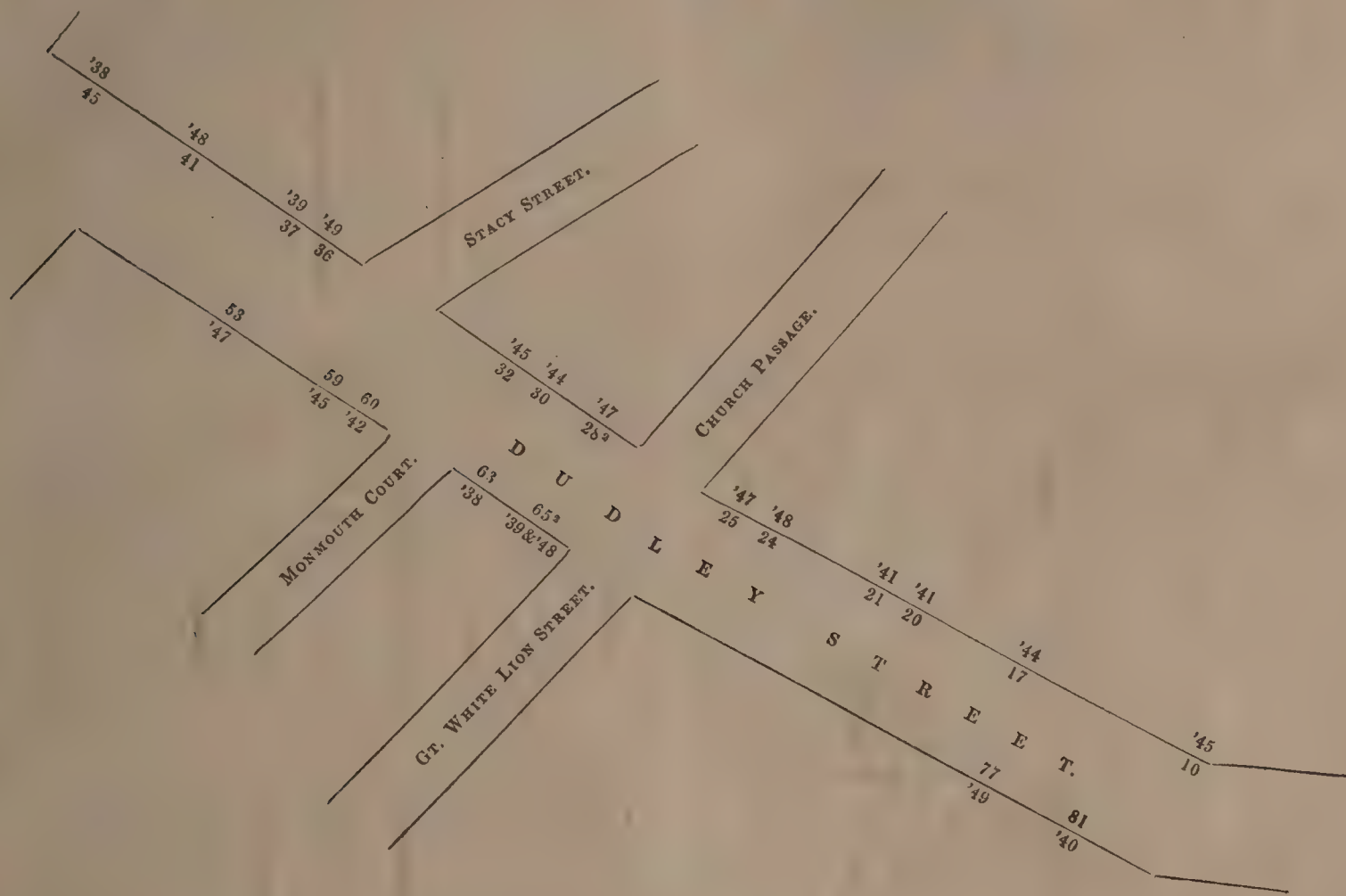
541

The 541 deaths were distributed in the four quarters of each year as follow:—

Year.	March.	June.	Sept.	Dec.	Total.
1838	18	24	12	16	70
1839	11	8	10	15	44
1840	6	11	12	11	40
1841	17	10	13	7	47
1842	15	9	8	9	41

Year.	March.	June.	Sept.	Dec.	Total.
1843	17	11	6	11	45
1844	10	10	8	19	47
1845	17	8	6	9	40
1846	6	10	1	8	25
1847	18	9	5	22	54
1848	17	11	7	8	43
1849	15	9	11	10	45
12	167	130	99	145	541

To illustrate the march of death in St. Giles's, I have chosen for publication, as a piece of economy, Lincoln's-inn-fields as a square, and Dudley-street as a street; for I have treated every street in a similar manner, so as to be certain that the illustration is not a mere matter of accident.



It will be seen that old age does not follow the law which cholera followed (see *Medical Times*, of 24th August, 1850), to express which I used the term "isolated groupe,"—a law which I know holds good in all fevers, and perhaps in some other diseases. The persistence of this law in some diseases, and the absence of it in others, will mutually tend to elucidate fixed principles for an investigation into the causes and treatment of disease.

—Although I am not justified at present in using any other term than that of "isolated groupe," I think I shall ultimately demonstrate, the mortality in certain diseases falls in circles, which at present would be difficult, owing to the arrangement of houses into streets, and the streets into right angles to each other. It is with this view that I have chosen a square as well as a street; and I regret that I am obliged to select Lincoln's-inn-fields as the square, because on one of the four sides there can be no record of death, as there is nobody, or next to nobody, to kill, the fourth side being the Lincoln's-inn Library and Garden. The other squares in St. Giles's, being rich in some diseases and poor in others, do not offer so general an illustration.

17, Savile-row.

ON HYPOCHONDRIASIS, AND OTHER FORMS OF NERVOUS DISEASE.

By H. HUNT, M.D.

INTRODUCTION.

It is my design, in the following observations, to treat of the causes of hypochondriasis, and of other nervous diseases, and to endeavour to show that, although the stomach, liver, and other organs may be concerned in the production of them, they are so but remotely, and that the direct *exciting* cause is a morbid condition of the blood. The exact chemical nature of the noxious principle from which that morbid condition proceeds, I do not pretend to explain.

As my subject is very obscure and difficult, I have found it necessary to describe very minutely the nature and symptoms of the malady,—the physiology of the various organs of animal life,—the causes that impede and modify their action,—their *modus operandi*, etc., so minutely, indeed, as to incur the risk of being charged with bringing forward, and dwelling too much on, what is generally known, and, perhaps, better understood by others than myself; but I could not explain my meaning and object in a sufficiently clear manner without this arrangement; I have endeavoured, however, to be as concise as possible.

I wish to express my obligation to the Works of the late Drs. A. Combe, Prout, Prichard, and others, for the assistance they have afforded me in elucidating my subject, and in proving the correctness of the theory which I have ventured to propound, *i. e.*, that hypochondriasis is caused by the *direct* influence on the brain and nervous system of some noxious matter in the blood.

Few diseases are the source of so much bodily suffering and so much mental distress as those in which the nervous system is especially implicated. Few diseases occasion more perplexity to the medical adviser, or require greater tact, firmness, and discretion in their management.

Among the causes which contribute to this difficulty, we may enumerate the following:—The infinite variety of the symptoms, which often have relation to other forms of disease; the fact, that the effects of the disease are commonly felt at a distance from its true seat; the absence of pain and uneasy sensations in the part or organ diseased; the rapid and frequent changes in the locality and character of the symptoms, and many other circumstances unnecessary to be specified here, but which will be considered in the course of this inquiry.

Perplexing and confusing as these various phenomena appear, at first sight, to be, yet a careful investigation of them will not fail to dispel much of the obscurity which envelopes them, and to show that they possess some characters in common,—characters which will tend to throw light on their nature, and lead to the discovery of their origin.

Every form of nervous disease is generally distinguished by some prominent feature, more or less constant and peculiar to itself: for instance, neuralgia, by pain of a specific kind; by the transition of the pain from one locality to

another; and, as I have before observed, by the freedom of the painful part from disease, and by the absence of suffering in the part or organ diseased, and in which the pain, in fact, originates.

The peculiar characteristics of hypochondriasis are, a desponding habit of mind, lowness of spirits, and an excessive anxiety and alarm on the subject of every bodily ailment, however trifling. But as these are, with some modifications, characteristic of a species of insanity, melancholia, it is necessary to state at the outset that I look upon and propose to treat hypochondriasis as a malady entirely separate and distinct from insanity. The following appear to be the main differences between these two diseases; viz., whilst melancholia is principally, if not purely, an affection of the mind, the morbid feelings of the hypochondriac arise from bodily disorder; they, therefore, have a real existence, and his fears lead him to apprehend the cause of the feelings to be of a more serious character than is actually the case. These disordered sensations are the constant object of his attention and anxious solicitude; he attributes the most trifling derangements of health, the slightest unpleasant feelings to some important disease, which, if not arrested, (and of this he entertains but little hope,) will terminate in some fearful and fatal manner. At the same time he is apprehensive that he will be considered fanciful, and that his ailments will be thought imaginary because his health is apparently good.

The catalogue of his miseries is endless; if encouraged by sympathy, he will describe as minutely as he observes them, every trifling change in his bodily feelings. He fears that each and all of them are pregnant with future, if not present danger. He is most anxious for relief; and, what is peculiar to the hypochondriac, he eagerly welcomes every new remedy, whether it be at the suggestion of the regular physician, or of the empiric, or the equally dangerous recommendation of the non-medical friend; whilst the listens to and adopts the advice of all in succession, he perseveres with none. This peculiarity in hypochondriacs is as striking as the opposite one in hysterical subjects; the confidence the latter place in their medical adviser and his remedies is steadfast and unbounded, whilst the former are a prey to doubt and distrust.

The hypochondriac continues in possession of his reason; the sufferings he describes, although exaggerated, are really experienced. He thinks and converses on all other subjects but those connected with the state of his bodily health, rationally and with cheerfulness. The melancholic, on the contrary, views all things through a medium of gloom and despondency.

Lastly, "the feelings and affections of the hypochondriac are not in that perverted and unnatural state which is one of the characteristics of madness in all its forms." (a)

The hypochondriac, although dejected, is ever anxious for relief, and regards with interest the means of attaining it; whilst the melancholic sinks into apathy and indolence, and is with difficulty roused to make the least exertion to obtain that or any other object; his future is wrapt in cheerless, hopeless gloom.

Such are the important distinctions between the mental condition of the hypochondriac and the melancholic.

There is usually one very striking feature in this disease, viz., the manifest difference between the physical symptoms of the sufferer and the exaggerated importance which his alarm imparts to them; they bear no relation to each other in amount. From the absence of prominent physical symptoms there may often be some difficulty in discovering the nature of the bodily malady; yet a careful examination will seldom fail in ultimately detecting it. The first interview is frequently embarrassing to the patient; he is generally nervously anxious to describe his feelings, and to convince his medical adviser that he is really ill, and that it is not a fanciful malady; but he fears he will not be believed. He endeavours to explain his morbid sensations and general illness; but after various attempts he usually fails, and concludes by saying that "he is really ill, but cannot tell what ails him, or how to describe it." However, a practised eye will generally detect unequivocal evidence of physical disease even in the countenance and aspect of the patient.

In the first place, the hypochondriac has an unhealthy aspect; there is a dull, leaden hue, not the sallow or yellow colour resulting from obstructed bile alone, or that peculiar appearance which denotes organic or malignant disease;

(a) Prichard.

there is a want of clearness in the complexion which is visible in the skin, but more especially so in the conjunctiva. The skin of the whole face has a peculiar dingy, almost dirty appearance; sometimes this is only seen in patches on the forehead, round the eyes or lips, on the cheek near the ear, with clear skin in the intervals. In general there is not much emaciation; the muscular development does not indicate weakness, although one of the great sources of complaint is loss of strength; it is a lack of energy or diminished nervous rather than muscular power. The tongue is usually coated, but not universally so, excepting at the back part; the pulse is commonly slow and languid, as if the heart propelled the blood forward with feebleness, and it often beats irregularly. The appetite is usually impaired, and if much food is eaten, symptoms of oppression and indigestion soon follow the meal. The eyes are dull and without lustre, and large tortuous vessels are often seen scattered over the conjunctiva, betraying a sluggish and impeded circulation. Uneasy, rather painful sensations are felt in the head; also a feeling of dulness and stupidity, a want of quickness of perception and clearness in thinking, which unfit the hypochondriac for mental, as the want of energy incapacitates him for bodily exertion. Generally, pains and indescribable sensations are complained of in the stomach and abdomen, sometimes of an extraordinary or even ludicrous description. (a) Also faintness and a sensation of sinking, as of dying. Various wandering pains of a neuralgic character are felt in the limbs and along the course of the principal nerves. Each day brings its peculiar miseries, which are generally most severe early in the morning; later in the day they usually diminish, indeed, occasionally during the excitement of the evening, so entirely cease as to induce a hope, if not a belief, in the mind of the patient that his malady has entirely left him,—an impression which is cruelly dissipated by a return of its symptoms in the morning in all their wonted severity. Sleeplessness is often a distressing accompaniment to hypochondriasis; the sufferer lies tossing about all night, or until towards morning, when he may, perhaps, fall off into a disturbed and unrefreshing slumber to awake in misery. This sleeplessness is so much dreaded, that bed is shunned; but the later the hour the patient retires, the more restless and wretched is he while in it, and the languor and weariness of the succeeding day is proportionately increased. Yet, with all this complication of wretched feelings, how often do we hear their source ascribed to a mere delusion of the mind or fancy of the patient; and find those, perhaps, nearest and dearest to him asserting that he might conquer them by exertion or energy, if he could only be persuaded to make the attempt, as if such torments would be courted or endured in order to excite sympathy and interest, or for any more unworthy purposes. Little can the strong, hale man understand the amount of misery resulting from shattered nerves and oppressed vital action, which can induce the unhappy sufferer to prefer the pains of tic (b) or the tortures of stone (c) as a relief from this worse agony of the mind.

To return, however, to the symptoms of the physical part of the malady. If the secretions be examined, clear indications of a disordered action will generally be traced; the skin will be found harsh and dry, or, if any perspiration be secreted, it is only partial, and of unhealthy and unnatural quality. The bowels are commonly irregular in the performance of their functions; more inclined to constipation than the opposite state, but sometimes confined or relaxed alternately. The evacuations are generally unnatural, either denoting an entire absence, or a vitiated state of bile; and the fæces are occasionally covered by a large quantity of mucus. At other times, though the evacuations may have been unhealthy, they have again become natural, showing a return of the action of the liver and other secreting organs sufficient to prevent an increase of the malady, but not to free the system from the previous accumulation of morbid matter, which, under the influence of the various causes to be considered hereafter, had been retained in the system. The

urine is perhaps the secretion which most frequently indicates the first deviation from health. On examination, it will seldom be found in a natural state; and there is one peculiarity attending it in this as in other forms of so-called nervous disease; namely, the frequent and sudden alternations in its appearance and quality. The urine which is passed first in the morning may be of a high specific gravity, deep-coloured, acid, and loaded with lateritious sediment. A "fit of horrors," or of nervous excitement coming on, the urine next passed will be pale, limpid, of a low specific gravity, and neutral; again, the next portion secreted may be high coloured, or perhaps of a natural quality; but, with all these changes, there is generally some predominant quality, showing the special diathesis of the system in each case, which should always arrest the attention of the medical adviser, as the knowledge it affords is often of value in determining, or rather modifying, the treatment.

Such is the physical condition of the hypochondriac in the early stages of the malady, under its most simple form, i.e., before it becomes complicated with local or organic disease; a condition which manifestly indicates its general nature, and points to a diseased state of the whole system, and more especially of the *circulatory fluids*; an opinion which will derive further confirmation from a consideration of the causes that produce it, of the various phenomena which arise during its course, and of the effect of remedies upon it.

Before I describe the various local disorders that are incidental to hypochondriasis, I propose to consider the causes of the disease, as they will go far towards determining whether the opinion of its general nature be correct or not. A clear understanding once established on this point, the treatment of the malady will be materially simplified.

CAUSES.

An inquiry into the habits and circumstances of life of the hypochondriac, previously to the accession of the disease, will often remove much of the obscurity in which the nature and causes of it are enveloped. A correct previous history will generally show that the patient has been subjected to the morbid influence of a combination of circumstances adverse to health,—circumstances which will always tend to the disturbance of some of those various vital processes, on the due performance of which the preservation of the health, as well of the mind as of the body, depends. They arise from two separate and distinct sources: one of a moral nature, the other physical. The moral causes act injuriously on the body through the agency of the mind; the physical agents operate more directly as impediments to the natural performance of the *functions* of the *various viscera*, by the action of which *HEALTHY BLOOD* is prepared for the renovation of the animal machine, and the *EFFETE MATTERS* are removed from the system. The primary result of the operation of both is the *disordered condition* of the *body* already described; the second, consequent on this *derangement* of the *body*, is the affection of the mind, the disease under consideration,—hypochondriasis. The moral causes of hypochondriasis include all emotions of the mind of a painful nature, such as long-continued anxiety, care, grief, disappointments, from whatever source arising; intense and unremitting application of the mental powers; especially when directed to one object, and at the sacrifice of the necessary exercise of the body, and sufficient sleep.

Experience proves, that vehement mental emotions are capable of interrupting the vital actions of the body so completely as to destroy life instantaneously; it may, therefore, be reasonably inferred that disturbance of the mind of a less powerful nature may be able to impede proportionably the due performance of those vital processes; and since such processes cannot be interrupted without producing an injurious effect on the system, it follows, as a necessary sequence, that disorder will be the result; that long-continued influence of such disorder will produce a corresponding amount of illness; and that it will be of slow or quick growth, according to the circumstances affecting each case, and the peculiar physical organization of each individual.

A question of much interest arises as to the *modus operandi* of these causes on the body in producing the effect of deranging the vital processes and inducing disease: a question well worthy of consideration, as a correct reply will afford great insight into the nature of the consequent disorders, and possibly indicate the surest means of prevention and cure.

(a) One gentleman, after endeavouring in vain to depict his feelings, described the sensation in the stomach as a "smoky pain."

(b) A gentleman consulted me last spring who was suffering intensely from neuralgic pain in his cheek and lip, also from hypochondriasis. He entreated me, if I could only cure one disorder, to relieve the latter, as the pains of the former were far more easily borne than the wretchedness of his mental malady.

(c) A case of a gentleman is on record who gladly welcomed the tortures of stone, as they invariably relieved the hypochondriasis with which it alternated.

There can be no doubt, that the mind exercises a direct influence over all the bodily functions; that a certain amount of nervous stimulus is necessary for their due performance; that changes in the quality and amount of this stimulus are capable of modifying them; therefore, whatever causes a diminution, alteration, or suspension of this nervous influence must necessarily diminish, derange, or arrest these important actions, and disorder the whole body. We all know, that pleasing excitement occasions a corresponding activity in every organ, and consequently facilitates the performance of their several duties; and, on the contrary, that a state of nervous depression impairs their tone and impedes their action.

Experience also proves, that sudden and intensely painful mental emotion will temporarily, and to a certain extent, paralyse the brain and nerves, and, as I have before observed, will sometimes destroy persons of feeble powers of life. But, though the effect will not be so great on the more robust individual, it will prevent the generation of the requisite supply of nervous stimulus; consequently, every part of the body will participate in this semi-palsied condition, so that all its functions will be imperfectly performed or partially suspended.

Thus, from this want of nervous energy, the heart failing to propel the blood with sufficient force, the circulation through the brain becomes languid, perhaps almost entirely arrested; hence the sudden giddiness, weakness, and faintness, and the other well-known symptoms of suspended nervous action. I have adduced this example, as these effects of suspended nervous action are visible externally; but similar and equally pernicious results, though internal and invisible, are produced on the other important organs of animal life, the stomach, liver, pancreas, the immense extent of secreting surface of mucous membrane and skin suffering alike from the absence of nervous stimulus, cease to perform their duties perfectly, and thus contribute to the general disorder.

An inquiry as to the action of the other causes of hypochondriasis, such as intense mental exertion, immoderate exercise producing exhaustion, indolent and luxurious habits of life, protracted lactation, &c., will show that, although they act in a different manner on the animal economy, the effect produced is the same.

I have already stated, that a certain amount of nervous stimulus is requisite to insure a healthy and natural performance of all the vital functions. I must now add, that in health an additional supply of it is always directed to an organ under active exertion; as the amount generated is limited, it follows that, if an excess be given to one organ, the other parts of the body must be deprived of their usual proportion. This loss of the nervous energy, however, is not felt whilst they remain in a state of inaction or quiescence, for it is not then required; but, supposing, whilst the nervous stimulus is concentrated on one—the brain for example, that a necessity for action were to arise in another set of organs—their functions must be necessarily imperfectly performed from the want of it. This is not only true, but of frequent occurrence, especially in the case of the digestive organs, and is a fertile source of dyspepsia. Hence, the frequency of indigestion in studious and literary men. The injury resulting from it is further increased by the circumstance, that as the system is exhausted by the excessive exercise of the brain, an attempt is generally made to replenish it by an increased quantity of food and stimulating drinks, in ignorance or forgetfulness of the fact, that the body is not nourished by what is eaten, but by what is digested. Thus, whilst an undue amount of labour is apportioned to the digestive organs, they are deprived of part of their power of performing it. Indigestion and all those other consequences, which it is my purpose to explain, must be the result.

Among the many other causes which tend to diminish the due supply of the nervous stimulus necessary to health, we may place the following. The sudden transition from habits of mental and bodily activity to those of ease and indolence, which we sometimes find to be the case in those who have realised a fortune in trade or by professions. The mortality observable in soldiers on returning from an active campaign to a life of indolence, apathy, and indulgence, is another example of the danger of a sudden alteration in the habits of life, especially from activity and privation, to indolence and plenty. The listlessness, lack of energy, and absence of interest in any pursuit, which we may frequently

observe in persons of affluent or easy circumstances. The influence, which low, damp, relaxing, or malarious climates, exercise on those residing in them—indulgence in a luxurious, indolent, or vicious mode of life. Again, on the other hand, habits of solitary bodily labour, without mental excitement, as in the case of the prisoner, and, according to Dr. Prichard, of the agricultural labourer; or of sedentary employment, as that of the artizan; long-continued labour in impure atmospheres, as in close, ill-ventilated manufactories; a poor innutritious diet, an excessive use of warm diluents; in short, all the innumerable combinations of circumstances, the luxuries of the wealthy, or the necessities of the poor, act alike in this respect; they tend to depress the nervous system, and check the generation of the nervous stimulus, on the due amount of which, as I have attempted to show, the perfect action of every part depends. As this want of nervous stimulus impairs healthy digestion and assimilation of new materials, it also prevents the excretion or removal of excrementitious matters from the system, —a function almost equally, if not more important than the others, for the interruption of it is more quickly felt than the suspension of nutrition. As it is to the interruption of this function that I principally attribute the production of hypochondriasis, I propose to consider it at some length. I shall also endeavour to show, that the blood is the part first affected by it, thus forming the connecting link between the primary disorder of the secreting organs on the one hand, and the secondary, whether local or general, physical or mental, on the other. No fact, in medicine, has been more fully established, than that the retention in the system of matter, which ought to be removed from it, is a certain cause of disease, in some cases even of speedy death. For example, the complete cessation of the action of the kidneys, as in suppression of urine, is quickly and invariably followed by drowsiness, coma, and death. Also, the imperfect action of them through an alteration in their structure, causing only a partial retention of urea, and other deleterious principles, explains a variety of disordered action before inexplicable, and is an evidence of the same fact, which it is impossible to controvert.

The following evidence, relating to the effect of disease and disordered function of the kidney on the urine and blood, appears to be quite conclusive on this point. Quoting Dr. Christison, Dr. Prout writes, at p. 142 of the 3rd Edition of his work on Stomach and Urinary Diseases, that, "In the earlier stages of the disease (Bright's disease of the kidney), the absolute weight of the other solid ingredients in the urine (on the separation of the albuminous matters) passed in twenty-four hours is very deficient. In the latter stages the deficiency is still more remarkable, so that the solid ingredients voided in a given time sinks to a fifth, even to a twelfth of the healthy average; of them, the lithates are most strikingly deficient, and next to them, urea and saline matters."

Here, then, we have positive evidence of the absence of various matters from the urine. The following is almost equally conclusive testimony, that, when absent from the urine, they exist in the blood; for Dr. Prout further observes, on the same authority, "that urea is found in the blood at an advanced period of the disease in greater or less proportion, and sometimes in remarkable quantity."

As another proof of the deterioration of the blood through a failure of the normal action of the kidneys, I may again cite Dr. Prout, who remarks, at p. 161 of the same work, that, "in the progress of the disease, the relative proportions of the different ingredients in the blood seem to undergo some changes. In the first place, as the proportions of albuminous and saline matters *diminish in the urine*, they apparently *increase in the blood*." It may, perhaps, be justly remarked, that the result of these researches only applies to the discerning apparatus of the kidney when damaged by organic disease. If, however, we may assume, that the description given by the same author of the functions of the kidney be correct, we shall see that a temporary suspension or interruption of them will produce similar effects as does organic disease on the urine, and consequently on the blood.

The functions of the kidneys are various: they eliminate from the blood the superfluous matters which may have been introduced into it, as well as those which are the product of the destructive assimilation. They have also another and a very important function, named by him "the disorganizing," by which they are enabled to disorganise various

matters existing in the blood, and to re-combine them into new substances, and thus prepare them for removal, as the albuminous into the lithate of ammonia. He also states, that this last function can be temporarily interrupted by various causes, "by an inflammatory condition of these organs, an attack of fever, by a state of pregnancy, by certain drugs; lastly, by violent mental emotions, under the operation of all which the urine has been proved to be albuminous."

If, then, one function of an organ can be thus temporarily suspended by extraneous causes, I think we may fairly assume, that other functions of the same organ may possibly be interrupted through the influence of the same or other causes. And though the presumption that the other secreting organs obey, under similar circumstances, the same laws, rests only on analogy, it is neither contradicted by reason nor facts.

All the arguments I have used in reference to the effect of organic disease and diminished nervous energy, and other exciting causes of disorder on the kidney, apply with equal force to the liver, mucous membrane, and skin; for they are all under the same nervous influence, and perform very similar functions.

To substantiate this analogy between the functions of these secreting organs and the kidney, I will consider, in the first place, the liver in health, disorder, and disease.

The importance which attaches to the perfect performance of the general duties of this viscus, is proved by the size of it, and its special,—i.e., its separating function,—by the peculiar arrangement of the portal system. The blood upon which it has to operate has been much deteriorated in quality by having been deprived of many of its materials, and, according to Dr. Prout, of a "portion of its vitality," in the fulfilment of its duty; and has received in return much effete and excrementitious matter resulting from the destructive assimilation, and also many impurities absorbed from the intestinal canal; altogether causing it to be more contaminated than any other portion of the blood supplied to an organ of secretion. The liver, like the kidney, is an excreting as well as a secreting organ.

It possesses, also, the faculty of separating effete and excrementitious matters from the blood, and of re-combining them into new forms, as from some of its materials the kidney produces urine, from others the liver forms bile.

Although we have not the same conclusive chemical proof of the presence of the elementary constituents of bile in the blood, when the action of the liver is suspended, as we have in the case of the torpid or diseased kidney, yet there can be no doubt that they must be retained in it. This is shown by the consideration of the effect on the liver of some of the causes which have the power of arresting the functions of the kidney. A gentleman, while in good health, received sudden intelligence that a considerable amount of his property had been destroyed by fire; the shock on the system produced a sensation of faintness and debility, which was followed by general *malaise*, throbbing head-ache, nausea, loss of appetite, occasional cold sweats, and sleeplessness. A diarrhœa soon followed, with an increase of the general disorder. On examination, the alvine discharges resembled white clay mingled with water, showing an entire absence of the colouring matter of bile; and, as they were not secreted, we may presume that the other constituents of it were, if not altogether absent, at least deficient. His countenance presented the peculiar dark and dingy aspect, and other indications I have described as diagnostic of impurity of that fluid, showing that they were retained in it. I may add, that this gentleman subsequently fell into a state of hypochondriasis, and was not relieved until the liver and other secreting organs had been stimulated to increased action, when they removed from the system the impurities which depressed it.

Although in organic disease of the liver a sufficient portion of it may remain perfect to secrete enough bile to prevent any alteration in the appearance of the alvine discharges, yet the aspect of the patient will clearly attest the presence of noxious matters in the blood, showing that the damaged apparatus of secretion is not able to eliminate the whole of them from it.

Again, if we take into consideration the effect of the same causes on the mucous membrane and skin, we shall find further evidence of the correctness of this analogy. Every medical man must have experienced in his own person the discomfort of heated skin; suppressed perspiration, and

other symptoms of what is called febrile excitement arising from over-exertion, loss of rest, especially if anxiety about the welfare of his patient is superadded to his exhaustion.

With all these morbid phenomena before us, all resulting either from mental emotion or physical causes, which primarily act upon the nervous system, and secondarily on the organs of secretion, we can scarcely refrain from drawing the following conclusions:—

1. That the effect of these causes falling on the brain and nerves is a torpor of them.

2. That the functions of the various viscera are consequently temporarily interrupted or suspended.

3. That the effete, excrementitious and other matter, which the welfare of the system requires to be removed, are not eliminated from the blood.

4. That the presence of these matters contaminates that fluid, deteriorates its quality, and renders it not only unfitted for its ulterior purposes in the animal economy, but also a fruitful source of disease.

(To be continued.)

KOUSSO IN TÆNIA.

By WILLIAM BROWN, M.R.C.S.E., L.S.A.

JANE L—, aged 23, married, and the mother of one child, which, however, she has dry-nursed. A tall, thin, very sallow-looking person, whose general appearance was startlingly expressive of ill-health. Had voided portions of a tape-worm for nearly five years; for years past she had never gone to stool without passing more or less of the worm. For the five years she had never felt well, suffering constantly from a sinking sensation at the epigastrium; was stooped, and would often have to grasp herself across the stomach, especially when the stomach was empty. The bowels were confined; sometimes she was filled out greatly; sometimes sick at the stomach, especially when cooking. She was generally applying to medical men during the five years spoken of. Had taken turpentine, she said, in large doses, but without much effect on the worm.

On July 2nd I gave her a dose of Dr. Boggio's koussou, obtained from Gale, Baker, Warde, and Oldfield, of Bouverie-street, London. I had given her an ounce and half of castor-oil on the previous morning, and had kept her on low diet during that day (July 1st.) She took the koussou fasting, the whole dose at one draught, a third of a pint; but had to exercise great resolution for some time in keeping her mouth violently shut, with her hand pressed upon it, &c., in order to keep the medicine from being rejected. She had taken the lemon juice immediately before and after the medicine as recommended. Four hours after the medicine, she ventured to take a little simple bread sops, but instantly became sick, though she did not bring up much of the medicine: immediately on the sickness occurring she had a motion, and evacuated a piece of the worm about half a yard long; in about ten minutes she discharged another such piece; eight hours after this, or about twelve hours from the taking of the medicine she had a third stool, when she discharged the remainder of the worm dead, with the head complete, this third part measuring five yards. She took another dose of castor-oil the following morning, but the stools contained no portions whatever of the worm. She has since felt and looked much better.

Callington, Cornwall.

BRITISH MEDICAL FUND.—The first annual general meeting of the members of this Society was held on Wednesday, the 30th ult., at the Offices, No. 28, Bloomsbury-square. Dr. Forbes having taken the chair, briefly addressed the meeting, after which the Secretary read the report, detailing the operations of the Society since July, 1850, from which it appeared, that since that period, many members had been added to the Society, and that, in other respects, considerable progress had been made. The Directors, in conclusion, that they confidently relied on the willing exertions of their brethren to aid them in bringing so valuable and necessary an institution into a state of thorough efficiency. The Secretary having then read a statement of the finances of the Society, several resolutions were passed, approving and adopting the report, and expressive of thanks to the Directors, for their past labours in behalf of the Society; and a vote of thanks having been accorded to Dr. Forbes, for the very great interest he had taken in the Society, and for his very able and gentlemanly conduct in the chair, the meeting separated.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

LONDON HOSPITAL.

By NATHANIEL WARD, Esq., F.R.C.S.,

Assistant-Surgeon to the Hospital, and Demonstrator of Anatomy in the School.

CASE OF ANEURISM OF POPLITÆAL ARTERY.—
SUCCESSFUL TREATMENT BY COMPRESSION
OF THE FEMORAL.

JAMES DRINAN, aged 45, a healthy-looking and temperate Irishman, lighterman by occupation, came under my care on the 6th of May. The right poplitæal space was occupied by a well-defined strongly pulsating tumour. It was about the size of an orange, and rendered the posterior boundary of the space convex and prominent, protruding also the integument internally and externally; in the latter direction forming a convexity in front of the tendon of the biceps muscle, and which was more marked than in the former. Its extent was easily defined by the fingers; its surface was smooth, and the sac gave to the touch no evidence of being otherwise than of uniform density. It expanded with each impulse of the femoral artery, and a loud "bruit de scie" was heard with each expansion. During the state of distension of the tumour, the right limb measured round the knee, immediately above the upper part of the circumference of the patella, $14\frac{1}{2}$ inches; during its contraction, when the current of blood had been stopped by pressure made on the femoral artery on the pubis, the measurement was $14\frac{1}{2}$ inches. The surface of the limb was warmer to the touch than the left, particularly in the neighbourhood of the knee-joint, and the upper part of the leg. The right leg was somewhat swollen, and round the calf measured $14\frac{1}{2}$ inches; the left leg $12\frac{1}{2}$ inches. The posterior tibial artery of the affected limb pulsated less strongly than that of the left. The anterior tibial arteries could not be felt beating over the ankle-joint from their being, in all probability, more than usually overlapped by the extensor proprius pollicis. The anterior malleolar branch of the fibular artery, in both limbs, was more than usually developed, and pulsated very distinctly, the right more than the left. Several small-sized superficial veins were observed in a state of distension around the inner part of the knee-joint, and the upper and inner part of the leg. Similar vessels were not remarked in the left limb. The pulse was 60, and regular, and the heart's sounds and action were normal.

The patient stated, that, about three weeks prior to admission, "he knelt down for about a quarter of an hour to clean about deck, and found that he could not get up without difficulty, and had a job in straightening his knee." On getting up he detected a small swelling in the ham, which was free from pain for about a week; pulsation in it did not attract his attention. He continued at work on board a lighter for three weeks after this, moving heavy weights, and for two or three days before I saw him had been more than usually occupied. His leg had now commenced swelling, and appeared red; and it was on this account that he consulted my friend Mr. John Hewitt, the tumour itself not appearing to have given the patient much anxiety.

Mr. Hewitt, detecting the nature of the case, sent the man to me for my opinion as to treatment.

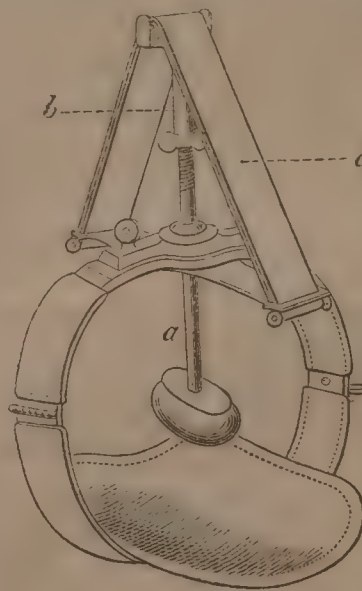
The patient was placed on the middle diet of the hospital, which consists of four ounces of meat with potatoes five days out of the week; on the remainder, of potatoes, soup, and vegetables; and he was requested to take as little fluid as possible. The beer usually allowed was omitted. He was kept perfectly quiet in bed for nine days, during which time an occasional aperient was given. A femoral truss was then applied to the artery on the groin, the pad of the truss being connected to the extremity of the bow by a screw which could increase or diminish the pressure exerted on the vessel. It acted, however, but imperfectly; and was laid aside for another, which fulfilled the indications no better. The result, however, of the slight pressure which had been exerted by the two instruments during a fortnight, was an evident diminution in the size, impulse, and throbbing sensation of the aneurism. Dr. Carte's new instrument (a full description of which will be found in Mr. Tufnell's recent work "On the Treatment of Aneurism by Compression")

was now had recourse to. The night prior to its application the groin was carefully shaved and dusted over with French chalk. The apparatus was applied, according to the directions given by Mr. Tufnell, on June 3.

The patient was ordered 3j. of acetate of potash three times a-day, and 3ss. of pulv. jalap comp. every other morning. The mattress on which the man was placed, was firmly fixed to the bed-frame, the sheets and pillows being also firmly attached by means of bandages. Prior to the pad of the instrument being applied to the groin, the leg was slightly flexed on the thigh, and the latter on the pelvis, and the entire limb somewhat everted and made to rest on the outer part of the knee-joint, on a square, well-stuffed pad, which was fixed so as not to slip. At the bottom of the bed a large pillow was fixed by bandages, and served as a *point d'appui* for the feet, so that by this means the man was unable to slip. A large cradle was placed over the body, in order to prevent the bed-clothes interfering with the proper action of the instrument. From June 3rd to June 15, Dr. Carte's instrument was made use of, and the femoral artery compressed on the pubis; the pressure, however, never being so great at any time as to stop the impulse in the tumour, and being entirely remitted when pain was complained of.

I have little doubt, that with the aid of a circular thigh-compressor, this instrument would have brought about a cure, but from the circumstance that the pelvic apparatus slipped somewhat, and the perpendicular side rod was rather too long, and not firmly grasped at certain parts by the pinching-screw, so that the pad could be kept adjusted but a short time without slipping. It was consequently laid aside for the requisite alterations. During its application, however, evident progress had been made, for on the sixth day after it had been used, the patient felt a burning sensation all down the thigh, and leg, and knee. The impulse of the tumour had sensibly lessened, and it felt harder and denser to the touch. These satisfactory symptoms continued till the day on which the instrument was laid aside, on the night preceding which, the man had experienced in addition a peculiar sensation over the lower and anterior part of the thigh, "like something hot thrown over him," and a crampy feeling in the tumour.

In the afternoon of June 15, a pressure of six pound weight (an ordinary meat weight, with a ring at the top) was applied to the femoral artery over the pubis, the skin over the vessel, which had become very red and tender to the touch, having been dusted over with French chalk, and covered with a piece of lint and a box-wood pad. The patient bore this weight without much inconvenience, and it, with a gentle application of the hand, was quite sufficient to check the sensible impulse in the aneurism. It was kept on the groin for an hour and a half, at the end of which time a circular thigh compressor, furnished by Biggs and Co., of St. Thomas's-street, Borough, was applied to the upper third of the thigh. This form of instrument, Dr. Carte informs me, was suggested by him some years back, and applied successfully. The following sketch by Mr. Brushfield, the house-surgeon, gives an accurate idea of its form and mode of action.



a, perpendicular rod working through a ball-and-socket joint, connected below with a pad, and above with a screw tube capable of being raised or lowered, by which means the vulcanized indian rubber bands, d, attached to the transverse bar, can be tightened or relaxed, and so the pressure increased or diminished.

The use of the weight at the groin and this instru-

ment were now alternately had recourse to; a four pound weight, however, now and then being substituted for the six, and applied at the same time as the aneurism compressor, which latter was then so arranged, as to exert but a moderate amount of pressure compared with that employed when acting by itself. The patient having been induced to take a personal interest in the principle and practice of the treatment, regulated the pressure himself without any difficulty. The circular compressor was employed more than the weight, but neither the one instrument nor the other was kept applied longer than one hour and a quarter at the outside. At night time, when the patient felt inclined for sleep, the compressor was in the first instance had recourse to, and when the application of the pad of this instrument caused uneasiness, and he happened to be dozing, he woke up and adjusted the weight to the groin, and then relaxed the compressor.

This line of treatment was kept up, without intermission, for five days, the aneurism having become consolidated on the third day after its application, pulsation having stopped, and the bruit being no longer audible. During this interval, the following symptoms were observed:—

June 16.—The tumour feels less in size, and much more solid, but is very tender on pressure. A small artery can be felt pulsating over the inner condyle of the femur. Temperature at the right knee 87°, at the left 86°.

June 17.—At twelve o'clock last night, a cutting pain in the shin-bone, lasting about two minutes. At two o'clock in the morning a sudden burning heat along the anterior and outer part of the thigh.

June 18.—Slept but little last night; pain in the shin came on, and lasted about an hour. Five in the morning felt a cramp about the knee, and six hours afterwards, the patient says, that all pulsation stopped. None can be detected in the tumour or in the posterior tibial artery. Two superficial vessels can be felt pulsating at the inner side of the knee, the one 2 inches, the other 2½ inches from the side of the patella.

June 20.—Another small vessel can be felt pulsating on the outer side of the knee-joint, one inch in front of the biceps tendon.

June 21.—A small artery can be felt feebly beating over the centre of the tumour, with about half the force of those by the side of the knee.

June 26.—Has had the sensation of a needle darting through the back of the thigh, one or two inches above the tumour. It occurred three or four times.

June 27 (nine days after the pulsation in the tumour had ceased).—The patient was permitted to get up from bed for a few hours; and on the day following he kept up for five hours, during this time walking at intervals on crutches, the leg being bent at an obtuse angle with the thigh, and the limb supported by a bandage passed round the neck and sole of the foot.

From this time the patient made rapid progress; the bandage was laid aside in a few days; he walked without difficulty, but slowly, in about a fortnight; the foot and leg, however, becoming swollen towards night, but subsiding to nearly their natural dimensions in the morning.

He left the hospital on July 19, the tumour in the ham being not larger than a lime, and so firm, that a gentleman who was unacquainted with the history and progress of the case, said that it gave him the idea of being a fibro-cartilaginous exostosis from the back of the femur.

The pulsation in the posterior tibial artery had returned, but was very feeble. The femoral could be traced beating as far as Hunter's canal. The patient was directed to remain quiet for a week, and then to resume his duties with caution.

Remarks.—The treatment of aneurism by compression having of late been so forcibly brought before the Medical public by the Dublin surgeons, and particularly by Dr. Bellingham, Mr. Tufnell, and Dr. Carte, and the amount of evidence adduced by them of the superiority of this method of treatment over deligation in the majority of cases of aneurism (particularly of the popliteal artery) being so great, there can be no hesitation in regarding the former as a well established line of practice. No one, in truth, acquainted with the facts and deductions connected with the compression treatment, would consider himself justified in having recourse to deligation before pressure had received a fair trial at his hands.

The above case calls for but little comment. The time occupied in the application of pressure was, in all, twenty-

nine days; but it was only on the three last that it could be said to have been continuously kept up, during the preceding period having, from imperfection in the instruments used, been carried out very inadequately. It will be remarked, however, that, prior even to the *continued control* of the force and volume of the current of blood, a very sensible effect had been produced on the aneurism, both in reference to its density and decrease of volume. This circumstance, then, forcibly illustrates the principle, which has been particularly insisted on by Dr. Bellingham, and which should be always kept in view when the compression treatment is undertaken, viz., that a complete stoppage of the current of blood is by no means imperative. The amount of pressure, in fact, should be modified according to the tolerance of the patient, and the patient, if possible, instructed to regulate it himself, his own feelings being the best criterion as to the degree required, and the length of time that it should be employed at one part of the thigh before using it at another. In the above case, the pain that the patient had during the use of the instruments was anything but great; and this I attribute mainly to my having previously instructed him in the nature of the treatment, and then placed the means of carrying it out under his own immediate superintendence.

THE MEDICAL TIMES.

SATURDAY, AUGUST 9.

THE PHARMACY BILL.

THE Pharmacy Bill is postponed till next Session, and as its provisions and tendencies are now well known, we hope, that during the recess, the several Medical Corporations will take it into their earnest consideration. That this Bill, if passed, would influence, and influence unfavourably, the interests of a large body of general practitioners, cannot be doubted; and if the College of Surgeons and the Apothecaries Company do not protect their Members and Licentiates, they may look forward to much future discontent and agitation. We have already explained, that we do not object to the registration and examination of chemists and druggists, but to the absence of any clauses prohibiting counter-practice and the unjust assumption by druggists of the functions of medical practitioners; and we also entertain grave doubts whether the Pharmaceutical Society should be entrusted with the duties prescribed by the Act. Next Session, however, we shall return to the subject, and we hope, by that time, the Profession will have maturely considered the subject, and determined how far their interests are compromised by Mr. Bell's proceedings.

In our view of this matter, we need hardly say that our sole object has been the interests of the Profession. Our objections to the Bill have been stated fairly and honestly, and any man may see what amount of force they carry with them. Instead of answering them, thus writes Mr. Bell, in the last number of the *Pharmaceutical Journal*:—

"The Pharmacy Bill has been favourably noticed in most of the medical journals. The *Medical Times* is an exception,—a circumstance easily understood. The *Medical Times* is a journal which aspires to rival the *Lancet*. Mr. Wakley, the editor of the *Lancet*, having declared himself in favour of the Pharmacy Bill, the Editor of the *Medical Times* of course cuts it up. The Publisher of this Journal is also the Publisher of the *Medical Times*, and naturally favourable to controversy as a stimulus to circulation. This *editorial status* does not affect the merits of the question at issue."

Mr. Bell's appreciation of our motives is a matter of perfect indifference to us. If Mr. Wakley believes that the

Pharmacy Bill will not affect medical men, he is right to support it; and if it turns out that he is wrong in this opinion, it will not be the first time he has mistaken the true interests of the Profession. We believe, indeed, that those who act in opposition to Mr. Wakley are generally in the right; but we have not yet taken this maxim for our rule of conduct; and had we adopted it, the demerits of the Pharmacy Bill are so conspicuous, that in this case it would have been unnecessary.

We cannot, however, pass over in silence Mr. Bell's allusion to the Publisher of this Journal. We are anxious that our readers should be made aware of the kind of reward that gentleman occasionally receives for his honest and earnest interest in the prosperity of our Profession. Mr. Bell will probably not believe us when we tell him, that the only rule by which we are guided is the good of our medical brethren, and that so far from controversy being attended with gain to our Publisher, its effect is generally the reverse. It is but lately that we had occasion to differ from that northern Achilles, whose vulnerable point is his excessive vanity and irritability. We laughed, too, at some of the sayings and doings of the *soi-disant* one pure surgeon of Scotland, and we expressed our doubts of the value of his operation for perineal section; but we did not think we were in anyway committing our Publisher, who knows little of the man, and happily nothing of the merits of his operation, either practically or theoretically. Yet, Mr. Syme, by way of showing that no revenge is too petty for so comprehensive a mind, has prevailed on his brother Editors to remove the publication of a Journal, devoted to the praise of himself, and to the condemnation of his rivals, from the publisher of the *Medical Times*!

The publisher of the *Medical Times* no more controls the opinions of that Journal than he does those of the *British and Foreign Medico-Chirurgical Review*, the *Journal of Psychological Medicine*, the *Pharmaceutical Journal*, the *Provincial Medical and Surgical Journal*, or the *Dublin Medical Press*—all of which bear his imprint. It may suit the unscrupulous and the envious to assert so monstrous an absurdity, which, however, may at once be traced to its true source—the love of detraction—by any one who will take the trouble to compare the opinions of the Editor with those of his brother of the *British and Foreign Review* on the merits of Mr. Syme; with those of Dr. Forbes Winslow on the Law of Lunacy; with those of Mr. Jacob Bell on the standing of Druggists and the Pharmacy Bill; with those of Mr. Walsh and Dr. Ranking on medical politics; and with those of Dr. Jacob on the Irish Charities—not to mention a host of minor matters on which their views are wide apart as Indus from the Pole. The fact is, that publishers, like doctors, are necessary evils, and those who are much in repute, whether as publishers or doctors, will have the greatest practice. Mr. Churchill publishes nearly three times as many medical works as all the London houses put together; and just as well might he be made responsible for the cruda indigestaque moles of authors as for the dicta of editors.

We do not fear that Mr. Bell will follow the magnanimous example of Mr. Syme, and do likewise. There cannot be many men who could be guilty of such consummate littleness; but we mention the fact, to show, that in speaking what we conceive to be the truth, we occasionally run counter to the interests of those who, after the Profession, we most wish to serve. We know, however, but one rule of conduct,—and it is the only one with which our Proprietors shackle us, viz., to take, as far as we can, an honest view of all events which concern the Profession, and,

no matter what interests are concerned, to express that view as forcibly as we can.

If Mr. Bell wishes for our support, he must forget he is a pharmaceutical chemist, and remember only that he is a legislator. Then he will discover that an arbitrary line cannot be drawn between the chemists of to-day and the chemists of two hundred years ago, who now bear the appellation of apothecaries. Their interests must be considered together, and any attempts to separate them must be attended with injustice to one or the other side. But, if Mr. Bell will take this comprehensive view, we will promise him our best aid to procure for the chemists and druggists all the rights and privileges claimed for them, which do not encroach on the domains of others.

THE ANNUAL MEETING OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

THE Annual Meetings of this Society ought to be something more than mere re-unions for gastronomy and gossip. Avoiding the dangerous quicksands of politics, on the one hand, and the barren wastes of tittle-tattle, tea-and-toast laudation on the other, there is a middle path which the members of this Society may occupy with credit to themselves and advantage to the Profession. It is within their province to distinguish true from false science, and to uphold the dignity of the one by exposing and repelling the fallacy and insolence of the other. Quackery, in all its shapes, should be emphatically denounced by a synod of the most enlightened and able Provincial Practitioners of this country. Their opinion will have weight with the public, and, if that opinion be supported by a lucid array of arguments, it will more enhance the respect of the community for our local brethren than any number of foolish panegyrics ejaculated over bumpers of champagne, when every speaker is expected to play the part of Munchausen for the nonce, and every hearer to applaud the farce.

There can be no doubt that the competing quackeries—homœopathy, hydropathy, mesmerism, &c., have largely taken possession of the credulity of the public, and have deeply injured the interests and prospects of the regular practitioners of medicine. Science, indeed, regards these systems as a spurious brood which she throws from her with contempt; but it is the privilege of the few to appreciate the claims of the legitimate offspring. The rigorous methods of true science are antipodal to those of the homœopath and the hydropath. She is indefatigable in the discovery of differences in phenomena,—they disregard all such minor details as extrinsic and unessential, and boldly apply their great principle to all conditions, however diverse. This has always been the characteristic of quackery. Inductive philosophy has been for its professors too painful a process; and, satisfied with a few superficial resemblances, they have presumptuously established laws for the entire universe, and have succeeded in imposing on ignorance, only until ignorance became enlightened enough to deride their folly and repent of its own. The Provincial Association would do a most beneficial service if, with zeal, it would undertake an analysis of the different forms of quackery of the present day, and expose the shameless frauds that have acquired the currency of truth in the popular mind. We could not recommend to it a more honourable duty, and we trust that it will receive the consideration of the meeting.

The members pay one guinea per annum to the Society for the maintenance of their interests; and how have those interests been maintained? It is true that political mani-

festoes have been promulged, in which general principles were adroitly made to serve special interests; it is true, that a journal has been printed, which caused the subscribers to blush for its shortcomings, and the abler members to shun its pages, that they might escape the responsibility of its failure; it is true that local meetings have been held, whose divisions threatened the dissolution of the Society; but, it is not true, that any earnest and persevering effort has been made to protect the real, material, monetary interests of the members. We believe that the plan we propose for the Society's adoption would prove most acceptable to the members. Such a service may be fairly expected from the Society; and it would be creditable, if properly carried out, to the character and status of the Society itself.

The above remarks were in type when we received the *Provincial Medical and Surgical Journal* of August 6. It contains an able letter from Dr. Cormack, of Putney, from which we extract the following appropriate paragraph, and heartily join with the writer, in urging upon the Association the step he recommends. We shall, next week, delay the delivery of our Journal until Saturday, in order to report the Brighton proceedings.

"Let the Association," says Dr. Cormack, "declare that the names of homœopathic practitioners, and of those who hold professional intercourse with them, cannot be on its list of members. The promulgation of this law would enlighten the public. It would also deter some too-facile consulting physicians from meeting the homœopathic quacks 'simply for diagnosis;' and it would make it impossible for operating surgeons to say that they did not mean to insult the Profession, 'that they only went to give a surgical opinion,' or 'perform an operation.' When it is known that such unworthy proceedings are of daily occurrence in London; and when we see Fellows of our Metropolitan colleges eagerly seeking as the patrons of their hospitals Lord Carlisle, Lord Robert Grosvenor, and other noblemen, who are notorious abettors of homœopathic charities, is it wonderful that the public mind has become poisoned, and unable to discriminate between legitimate medicine and fraudulent practice? When we see Fellows of both London colleges so demeaning themselves, how can the colleges serve the cause of truth? In these circumstances it is doubly the duty of our great Association to come forward; and when we meet at Brighton, let us make the fact of membership be a more distinctive test of professional morality than any now existing out of Scotland."

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF
MEDICINE AND SURGERY.

[TWELFTH NOTICE.]

In the preceding article we gave a detailed notice of the ingenious galvanic arrangement for medical purposes invented by M. Pulvermacher, accompanied as it was with a very sensible and unpretending account of his invention. On our last visit to the Exhibition, a printed announcement was placed in our hands, which we consider to be derogatory, if nothing worse, to the character of a scientific man, and which we have reason to fear will injure the reputation of the instrument in the eyes of the Profession, as savouring too much of quackery. We present our readers with a short extract, on which we shall offer no comment. "By means of this apparatus, all acute nervous pains, such as acute rheumatic pains of every description, and in all parts of the body, headache, toothache, ear-ache, etc., are removed instantaneously the moment the chain is applied."

One of the most important instruments in chemical research, on which so vast and important a part of our accurate scientific knowledge of the composition of the substances around us and within us, is a delicate balance. Balances have been constructed years ago of such delicacy as to be capable of turning with and indicating the addition or subtraction of $\frac{1}{1000}$ part of a grain; but such balances were incapable of carrying any large weights. Improvements have been made in the construction of these delicate

instruments, that they are now constructed to carry 1000 grains in each scale, and still turn with $\frac{1}{1000}$ of a grain; to carry one pound, and turn with $\frac{1}{100}$ of a grain; and to carry 56 pounds, or half a hundredweight, and turn with $\frac{1}{10}$ of a grain. These may be considered as triumphs of mechanism; but we have not yet arrived at the most delicate, if the statements of exhibitors are to be taken as absolute truth; for we find one exhibitor asserting that a balance he has constructed will turn with $\frac{1}{5000}$ of a grain, and carry a quarter of an ounce; and another, that his will turn with $\frac{1}{10000}$ of a grain. How the truth of the last statement is to be determined we are at a loss to imagine, since the slightest zephyr would possess sufficient force to turn the scale. Setting aside the last extravagant assertion, we shall notice the instruments.

It is well known that the assayers of gold require balances of great delicacy, because they have to determine, from a few scrapings, or filings, of the article to be assayed, the purity of the gold of which the article is composed. Messrs. De Grave, Sturt, and Fenner, exhibit a variety of balances for different purposes, among which are assay-balances of excellent workmanship, and, as far as we can judge without trial, of considerable delicacy, but accompanied by no statement of the fraction of a grain with which they are capable of turning.

The best balances, and, with two exceptions, the only instruments for purely philosophical purposes, are those exhibited by Mr. Oertling, of Store-street. One of these, as we have already remarked, is said to carry fifty-six pounds in each scale, and turn with a tenth part of a grain,—an extent of accuracy which we have never seen in so large an instrument. Another, of very delicate and beautiful workmanship, carries a pound, and turns with $\frac{1}{100}$ of a grain; while the third carries 1000 grains and turns with $\frac{1}{1000}$ of a grain: less than this cannot, we think, be determined with any degree of accuracy.

A very ingenious and cheap balance is exhibited by Mr. Marriott (Class 10, No. 341) the beam of which consists of a strip of fir, rather more than one eighth of an inch thick, of a very long diamond shape, eighteen inches in length, from the centre of which a considerable part of the wood is cut away, leaving braces, by which the strength and inflexibility of the beam are retained, while it is rendered less heavy by the removal of the central part. The beam is balanced on a column of wood grooved to receive the beam, which is supported on a knife edge, formed of a triangular prism of steel, resting on two ground and perfectly level metal plates. The scales are supported by curved pieces of wire, resting also on knife-edges, passed through each end of the beam, to which are attached other pieces of wire with an eye at each end, to the lower of which the threads are attached. At one end of the beam a horizontal piece of wire projects, which almost reaches the side of the case enclosing the whole apparatus, and on this part of the case a paper scale is pasted, by which the position of the beam is ascertained. We could not, however, ascertain by what means the whole balance is raised, or the supports for the scales lowered, to allow the vibration of the beam. The balance is enclosed in a glass case, which is levelled by a screw at each of the four corners of the base, and a spirit-level.

The other balance, invented by Mr. Fox, is called a magnetic balance, the substance being weighed against the attractive force of a magnet, or the scales are brought into a state of equilibrium by means of a magnet. The description in the Illustrated Catalogue is by no means clear, and as the chief portion of the arrangement is concealed in the case, it is impossible to supply the omission in the Catalogue. This balance is said to turn with a $\frac{1}{10000}$ of a grain by its inventor!

The assortment of purely chemical apparatus is very large; that by the well-known firm of Knight, Foster-lane, being the most extensive. We did not, however, observe anything very novel in design throughout the whole collection. Messrs. Knight have among their apparatus a portable laboratory on a rather extensive and expensive scale. It consists of a cabinet, the doors of which, when open, and the top raised, show a very neat arrangement, comprising all, or nearly all, the apparatus requisite for analytical operations. The lid of the table is moveable, and has a pneumatic trough fixed beneath it. An arrangement for a blow-pipe pleases us very much, serving the purpose of a table blow-pipe, but occupying a small space. Instead of the table the double bellows are fixed to the floor, and worked by a lever and

foot-board as usual. A tube of vulcanised India-rubber rises from the bellows, terminating in a jet, and is fixed to the table. This apparatus is easily converted into a gas blowpipe, by attaching another tube, conveying the ordinary coal-gas. The whole cabinet is very pretty, and fitted up with every attention to appearance; but we imagine that it would soon lose all this when in use. In short it is fitted only for a *dilettante* follower of that noble science who has great means at his disposal. Working men have small regard to appearances.

Messrs. Griffin exhibit a large case of chemical apparatus of all descriptions, and of excellent character. The glass apparatus is good, especially the graduated gas and other jars, eudiometers, alkalimeters, &c.; but, as we said of Mr. Knight's collection, we did not observe any particular novelty.

Mr. Statham has a number of chemical cabinets, of all prices, from ten shillings to as many pounds. Although these cabinets are, for the most part, toys for the amusement of young persons, they are not to be despised. Great ingenuity is shown in packing the largest quantity of apparatus in a small space, and converting one piece of apparatus to several purposes. Thus, a pneumatic trough is, at the same time, a gas-holder and a blow-pipe, by changes in the position of its parts. In chemistry, it is astonishing how much may be done with small means, provided the operator has a head as well as hands. Scheele, the celebrated Swedish chemist, who, in his day, made more striking discoveries than any other chemist, had only the facilities afforded by an apothecaries' shop; and many another man, with small means at his command, has become an accomplished chemist. We remember a statement of the late Professor Turner, that, when in Edinburgh, before he possessed a laboratory, the hob of his sitting-room grate served instead of a sand-bath for his evaporating vessels. Again, an accomplished chemist may well avail himself of these chests when travelling. Sir H. Davey had only a trunk as his laboratory when travelling on the Continent!

Before we conclude this article, we must notice, although somewhat out of order, a little instrument (placed, we know not why, among the philosophical instruments,) for enabling blind persons to print what they may desire. It is invented by Mr. Hughes, the Governor of the Blind Asylum, Manchester, and is called "the Typograph," and would appear to us to fully answer the purpose. Raised letters are placed around a circle, so as to be felt by the blind person; the desired letter is brought to a certain point, and the corresponding type is then depressed, so as to leave its impression on the paper. It is impossible to describe the whole arrangement in the small space we can allot to it here, but we have reason to believe, that this instrument will be extensively adopted.

REVIEW.

The Wisdom and Beneficence of the Almighty as displayed in the Sense of Vision. The Actonian Prize. Treatise for 1851. By T. WHARTON JONES, F.R.S. Churchill. 1851.

The managers of the Royal Institution selected as the subject for the Actonian Prize Essay, in 1851, its second septennial adjudication, "The Physiology of any one of the Senses illustrative of the Wisdom and Beneficence of the Almighty,"—prize 100 guineas—and the competition was determined in favour of the treatise before us. As a general principle we do not approve of pecuniary prize essays; even the Earl of Bridgwater's munificent bequest led only to the production of compilations which evinced no originality of thought or progress in science. The truly scientific man—the philosopher treading in the paths of Bacon and Newton—must feel himself accomplishing a higher mission than that of competing, under an anonymous title, for a crown, not of laurel, but studded with sovereigns. Still, we admit that, in these degenerate days, the prize-system excites competition, and "Mammon wins his way where seraphs might despair." We also, upon sound philosophical principles, object to prizes being offered to scientific men for the purpose of showing that the eye, the ear, the hand, and other organs of the body have been constructed in the only possible way that Supreme Wisdom could have devised to accomplish their respective functions. Derham, Ray, and Paley, in pursuing

this line of argumentation, appear to sit actually in judgment upon the works of the Creator, ascribing to him the same modes of thinking which would occur to a poor human artificer, as if it were impossible for the Omnipotent to act in any way otherwise than he has done, or to organize an eye or an ear upon any other principles than we now behold them. We recognise, truly enough, design in the exquisite organization of the eye, but to set about arguing, that, if the cornea had not been convex, the iris contractile, the crystalline lens spheroidal, that the whole dioptric apparatus would have been a nullity, and that the Deity could, in no other manner, have bestowed upon us the faculty of vision, must appear a monstrous assumption; yet it is an assumption constantly made when these philosophers sit down to compare the works of the Almighty with the inventions of man, and reason about the organization of the body as a watchmaker would about the construction of a watch, or an optician would about adjusting the different parts of a telescope. Nevertheless, many excellent and pious persons, like the Earl of Bridgwater, conceive they are benefiting the cause of religion by bequeathing prizes to those who will dedicate their abilities to proving the goodness and wisdom of God in his creation, as if, indeed, our hearts were not already profoundly impressed with that conviction.

We are, however, indebted to the Actonian prize for a treatise on the Structure and Functions of the Eye, by Mr. Wharton Jones, which is philosophically and admirably written; and we are glad to observe that he has not handled the subject in the spirit which we have so strongly condemned. We are not told by Mr. Wharton Jones that the Creator could in no other way have conferred upon us the faculty of vision; he contents himself with describing the intricate structure of the eye, and the mode in which its several parts concur in conveying the impressions of external objects to the mind. There is no cant or pretension about his style; he has thought and written like a philosopher thoroughly acquainted with his subject; and, in touching upon natural theology, he has not presumed to say more than is becoming a man deeply imbued with religious feeling. We need not here recapitulate the description given of the structure of the eye, which, for the popular reader, is exceedingly clear and intelligible, and illustrated by diagrams which cannot fail to be understood. The account of the provisions made to obviate optical aberrations merits attention, placing in a clear light one of the many obscure points in the physiology of vision. The fact is well-known, that convergent lenses with spherical curvatures have the defect of not bringing all the rays of light which pass through them to one and the same focus, the result of which is that the object is not distinctly and well defined. To protect the eye from this inconvenience, the following provisions are described:—

" SPHERICAL ABERRATION.

"Great as is the excellence of the end attained of preventing spherical aberration in the eye, equally great is the excellence of the means by which that end is brought about. Three principal means are found to be adopted.

"1. The surfaces of the dioptric parts of the eye are not spherical, but those of the cornea and posterior surface of the crystalline lens are hyperbolic, and that of the anterior surface of the lens elliptical—configurations found by theory to prevent spherical aberration. This discovery was made at a time when it was not known that the dioptric parts of the eye had spherical surfaces.

"2nd and 3rd. But as if the surfaces of the dioptric parts of the eye were not sufficiently removed from the spherical to obviate all aberration, we find other two contrivances in this organ which are fitted, the one to diminish, and the other to obviate, the aberration even of spherically curved lenses. The provisions referred to are, —1. The stop or diaphragm to cut off the circumferential rays which we have in the iris with its pupil. 2. The diminishing density of the crystalline lens from its centre to its periphery, whereby the circumferential rays are less refracted than they would have been by a homogeneous lens with similar surfaces. This elegantly simple contrivance has been hitherto inimitable by human art."—Pp. 50-51.

It is very obvious that chromatic aberration would prove even more detrimental to the distinct definition of images than spherical aberration, had not the dioptric parts of the eye been so organised as to correct any such aberration; but the principle upon which the achromatism of the eye depends has not, Mr. Wharton Jones allows, been sufficiently determined, because we do not yet know the relative refrac-

tive and dispersive powers of the cornea and the different humours. The adaptation of the eye to the different distances of objects, has been a problem which physiologists have long since endeavoured to resolve. Upon this subject Mr. Wharton Jones observes:—

DISTANTIAL ABERRATION.

"The mode in which it is considered most probable that the eye is adjusted for vision at different distances is by a change in the position of the lens,—perhaps, also, a change of its form. By a slight movement of the lens forwards, with a slight increase of its convexity, rays of light from near objects could be brought to foci on the retina; a cessation of these changes, or opposite ones in a slight degree, would suffice. And to effect these changes, we have mechanism enough, if we could fully understand it, in the ciliary body which forms the anterior part of the choroid coat, and which, by the ciliary processes, is dovetailed with the corresponding processes of all the ciliary zone,—a peculiar construction, which the hyaloid membrane of the vitreous body presents all around the circumference of the fossa in which the lens is set. Whatever be the mechanism by which the eye is adjusted for seeing objects distinctly at different distances, it cannot but be of the most perfect nature to effect the purpose for which it was designed so completely as we all know it does. In this excellence of the end attained we recognise a manifestation of Almighty Wisdom; and not less of beneficence also, for without the power of adjustment the advantages which we derive from vision would have been much circumscribed. Though for want of more accurate knowledge we can thus only admire the excellence of the means as indicated by the perfection of the end, there are certain changes concomitant with the adjustment of the eye sufficiently patent to our observation, viz., changes of the size of the pupil, and variations in the direction of the axes of the eyeballs. These changes, however, are not essential conditions for the adjustment, though they are auxiliary; contraction of the pupils and convergence of the axes of the eyeballs accompanying the adjustment for near vision, expansion of the pupils and parallelism of the axes when the objects are very remote."—Pp. 61, 62.

Upon the *questio vexata*, how it happens that we see objects erect, although they appear, as the sagacious Kepler discovered, inverted upon the retina, Mr. Wharton Jones contends that we, in reality, see objects upright as they exist, notwithstanding the impression on the retina is inverted; and that this depends on an original cognate law of the animal economy, which he thus explains:—

ERECT VISION FROM INVERTED IMPRESSIONS.

"Our seeing objects upright as they are, notwithstanding that the impression on the retina is inverted, we must conclude is independent of all experience; but depends on an original cognate law of the economy,—the same law as that on which our visual perception of outness depends,—the law, viz., of *visible direction*. In obedience to this law the mind, in referring a sensation excited by an impression on the retina, to without and to some distance from the eye, does so in a direction more or less nearly perpendicular to the surface of the retina where the impression is made,—in the direction, viz., of the axis rays of the cones of light which made the impression, and this although on account of the oblique position of the object the axis rays may not themselves fall on the retina. The mind, in short, refers its perceptions resulting from an impression on the retina; if on its lower part, *outwards* and *upwards* to the object whence the rays making the impression come; if on its upper part, *outwards* and *downwards*; if on its temporal side, *outwards* and *towards the nose*; if on its nasal side, *outwards* and *towards the temple*. Erect vision, though retinal impressions are inverted, appears to have proved difficult of comprehension, only from its not having been considered in conjunction with the faculty of referring visual perceptions to without and to some distance from the eye. Had we no such faculty, but had we by virtue of an original cognate law of the economy referred our visual perceptions to the surface of the retina, as we refer our tactile perceptions to the surface of the skin, it would indeed have been difficult to conceive why we do not see objects inverted. No anatomical arrangement of the fibres of the optic nerves would have solved the difficulty. It would not have been accounted for by supposing the fibrils of the optic nerve which terminate in the upper part of the retina to have their central ends in the lower part of the optic lobes, and *vice versa*; and the fibrils which terminate in the outer part of the retina to have their central ends in the inner part of the optic lobes, and *vice versa*; for it is not to the central ends of the nerves that the mind in any case refers its sensations."—Pp. 75, 76.

This "Law of Visual Direction," as Mr. Wharton Jones

designates it, was long ago fully recognised by Dr. Reid. In his "Inquiry into the Human Mind," this eminent metaphysician remarks, that "the phenomena of vision lead us by the hand to a law of Nature, or a law of our constitution, of which law our seeing objects erect by inverted images is a necessary consequence. For it necessarily follows, from the law we have mentioned, the object whose picture is *lowest* on the retina must be seen in the *highest* direction from the eye; and the object whose picture is on the *right* of the retina must be seen on the *left*; so that if the pictures had been erect in the retina we should have seen the object inverted."—*Inquiry into the Human Mind*, Chap. VI., sec. 12.

Another phenomenon of vision which still puzzles the most acute metaphysicians and physiologists, is the fact of our seeing objects single with two eyes; the opinions relative to which may, says Sir William Hamilton, in his Notes to Reid's Collected Writings, "be reduced to two supreme classes. The one attempts to show that there is no difficulty to be solved; the other attempts to solve the difficulty which is admitted. Under the former class there are three hypotheses; the first supposes that we see only with one eye—that man is, in reality, a Cyclops; the second supposes that the two impressions are not, in fact, made at the same instant on both eyes, and consequently that two simultaneous impressions are not conveyed to the brain and mind; the third supposes, that although a separate impression be made on each retina, yet that these several impressions are as it were fused into one before they reach the common sensory, in consequence of a union with the optic nerves. The hypothesis of the latter class also may be reduced to three; all admit that there are simultaneous impressions on the two retinæ, and that these impressions are separately conveyed to the termination of the organic apparatus, but still hold, that in the mind there is determined only a single perception. One opinion allows the perception to have been originally twofold, and saves the phenomenon by supposing that it became single through the influence of custom and association. Another explains it more subjectively by an ultimate and inexplicable law of our constitution; and the last more objectively on some intelligible principle of optics." Hitherto the most favourite of these theories has been that of the rays of light impinging on corresponding points of the two retinæ, and producing only one impression; but it has been recently shown by Mr. Wheatstone, that in viewing an object of three dimensions while the optic axes converge, *dissimilar* perspectives of it are projected on the two retinæ, so that the impressions are *not* made exclusively on corresponding parts, and yet the mind does not perceive two, but only a single image. Here, then, is a difficulty which Mr. Wharton Jones candidly admits; therefore, he has recourse to the same "cognate law of visible direction," under which he accounts for other mysteries connected with the organs of sight, such as erect vision from inverted images on the retina, the outness of visual perceptions, &c. It is obvious, however, that this is only escaping the difficulty under a vague notion of a law which amounts only to a simple recognition that such is the fact; it is summarily cutting but not untying the gordian knot—disposing of the problem without solving it.

The object, however, of Mr. Wharton Jones in competing for the Actonian prize, was not to enter into any abstruse disquisitions respecting the theory of vision, but to produce a popular philosophical essay. In this he has succeeded; and, upon the principle of *Palmarum qui meruit ferat*, the managers of the Royal Institution have awarded to him, deservedly, the prize.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

ANALYSIS OF LIQUOR AMNII.

By Professor SCHERER.

The earliest observations upon the liq. amnii were made by Vogt at different periods of foetal life. He found albumen, extractive, lactic acid, soda, chloride of sodium, and the sulphate and phosphate of lime, but urea, benzoic, and hippuric acids were wanting. Wöhler, however, found urea in one instance. Mack could find neither urea, phosphoric, or hippuric acids. The following are the results of the

analyses made by Prof. Scherer of the liq. amnii of a full-timed and of a five months child:—

		Full Time.	At Five Months.
Water	.. ..	991.474	975.84
Solids	.. ..	8.526	24.16
Albumen	.. ..	0.82	7.67
Extractive	.. ..	0.60	7.24
Salts	.. ..	7.06	9.25

—Schmidt's *Jahr.* Vol. LXVII. p. 7.

ON THE PATHOLOGICAL ANATOMY AND CLASSIFICATION OF DISLOCATIONS OF THE HUMERUS.

Professor Gunther, of Leipsic, as the result of a critical and anatomico-pathological investigation of this subject arrives at the following conclusions;—1. In all complete luxations the capsule is torn to a great extent, commonly to one half; so that a narrowness of its aperture, with few exceptions, is not a cause of difficult reduction in recent dislocations. 2. In all recently examined cases (even in *L. dorsalis*) the anterior part of the capsule has been the part found torn. 3. In all but one case some of the muscles have been found torn, and especially the subscapularis. 4. The large tuberosity is often in part or wholly torn off, and sometimes the glenoid cavity is broken; both circumstances inducing crepitation, and the latter rendering support necessary to prevent a redispacement of the reduced bone. 5. The commonly termed *luxation into the axilla* may also be termed *subcoracoid*, which need not therefore be considered as a separate species. 6. Whether the head lies externally or internally to the subscapularis can only be determined during life, when it is far removed from the scapula towards the clavicle. The *L. subpectoralis* of Velpeau may sometimes appear as *axillary*, sometimes as *subclavicular*. 7. The head having passed through the rent in the capsule, proceeds straight on, and remains where it is dislocated to, unless new external causes act upon it, so that the idea of secondary dislocation must be rejected. 8. This observation applies also to *L. subclavicularis*, which is apparently always primary, but only producible by great force, the rupture of the supraspinatus, and fracture of the tuberosity, and is always very difficult to replace. 9. Incomplete dislocation may occur for a short period, but it is very improbable that it should so continue for long. The diagnosis during life is very uncertain, and the preparations intended to demonstrate it exhibit, by reason of the absorption of bone, appearances very similar to those of complete dislocation. 10. The bones that are brought into abnormal contact after luxation, in consequence of their partial absorption, the deposition of osteophytic masses, and the formation of new ligamentary apparatus, form a kind of new joint, which fulfils tolerably well the functions of the normal one. 11. The attempt to reduce a dislocation that has continued for more than three weeks is highly dangerous, with the exception perhaps of the *L. dorsalis*, and, if it can be certainly made out, the *L. subscapularis*.

In the classification of these dislocations, Professor Gunther observes, that authors have followed different principles, and have confounded these with each other. The older surgeons and Desault fixed upon the direction which the head takes, and distinguish dislocations forwards, backwards, and outwards. Later they were called, as by Boyer, Cooper, &c., after the bones with which the head came into contact, or the vicinity of, as ascertained by experiment and *post-mortem* examination, whence the names subclavicular, subscapular, &c. Still later they were named, as by Sedillot, Velpeau, &c., according to the relations the dislocated bone bore to the muscles,—as *luxatio subpectoralis*, &c. The requisites for the classification of dislocations in general, and of the humerus in particular, are—1. They must agree with experience, and no species can be otherwise than hypothetically received that has not been confirmed by dissection. 2. Determinate principles must be observed, so that one and the same luxation be not referred to two different species. 3. Those species can only be received that can be recognised and distinguished during life. 4. The classification must be such as to admit of definite rules of treatment being laid down. The following are the chief forms of humeral dislocation. 1. On to the *dorsum scapulae*. Of this only one dissection has been made, but this, as well as 29 cases observed in the living, render the dislocation indubitable. 2. On to the *lower border of the scapula*. The dis-

location directly under the scapula can only occur if the long head of the triceps is pushed back or torn, and only one case of it has been demonstrated by dissection. Formerly this dislocation was believed common, but all recent observations show the contrary, and that in the so-called axillary the head is thrown more towards the anterior edge of the scapula. 3. On to the *anterior border* of the scapula, either upwards or downwards, and in immediate contact with the scapula, or separated from it by the subscapularis. This is the most frequent form, and of which several modifications exist; but as they are not essential, they do not form grounds for classification. In the commonest, the head is directed to the anterior and under border of the scapula, constituting the *axillary* dislocation. More seldom it may be found placed higher, or in contact with the coracoid process. In both these forms the head may be placed either between the scapula and subscapularis muscle, or between the latter and the thorax, and may thus raise the pectoralis more or less forwards. It has, therefore, received the various names of partially downwards, axillary, subcoracoid, subscapular, subpectoral, and intercostal. In most cases the head is placed between the scapula and subscapularis, whereby this is always torn; but the head seldom passes through it so as to become placed under the pectoralis minor. 4. *Under the clavicle*, or towards it, and consequently removed from the scapula. This luxation, termed subpectoral by Velpeau, subclavicular by Sedillot, intracoracoid by Goyrand, and luxation forwards and upwards by Desault, can only happen if the head has penetrated the supra spinatus, or if the connexion with the tuberosity is separated. As this form is rectified with difficulty it is most commonly found in very old dislocations.—Schmidt's *Jahresbuch.* Vol. LXVII.

BICHRIMATE OF POTASS IN SYPHILITIC VEGETATIONS AND CONDYLOMATA.

Syphilitic vegetations do not always require active treatment. If condylomata are protected from friction by lint, moistened in diluted chlorine, they often gradually disappear. Syphilitic vegetations sometimes increase as long as they are treated, and disappear when they are let alone. When, however, either increase much, treatment must be had recourse to, and M. Ricord, after washing them with 1 pt. sol. chlor. sod. to 4 of water, applies calomel, and others use nitrate silver. M. Puche effects a very rapid cure by touching the places with a saturated solution of bichromate of potass, which is better even than the application (alum and savine equal parts) used so successfully by Valleix. It is, however, more painful than that powder, and may give rise to some induration of the skin.—*Bull. de Therap.*

BRUCINE IN PARALYSIS.

It has been said that brucine is possessed of little efficacy, and is a faithless agent, compared to strychnine. M. Brichetau's experience leads to a different conclusion, and, as it can be given in far larger doses than strychnine, it is a more manageable medicine. Commencing with pills, containing two or three centigrammes, he has, in some cases, gone as high as 80c.; but it is rare for such doses to be required. At the dose of from 10 to 15c. slight jerks and prickings are felt in the limbs, and at from 20 to 25, the jerks are stronger, and are accompanied by rigidity of the limbs, which assume a forced extension when the patient tries to walk. There is no cephalalgia or disorder of the mind produced.—*Ibid.*

DISGUIISING TASTE OF MEDICINES.

Dr. Polli recommends a means founded on the physiological fact, that a strong impression on the nerves (whether of vision, hearing, or taste) renders that which follows less perceptible. Instead of applying to the mouth, therefore, agreeable substances after swallowing nauseous medicines, we should prepare it before, in order that the taste of the medicine may not be perceived. Aromatic substances, chewed just before, as orange or lemon-peel, etc., effectually prevent castor-oil, etc., being tasted. In preparing the mouth for bitters, liquorice is the only sweet that should be used, the others creating a peculiar disagreeable compound taste.—*Rev. Medicale.*

BORAX IN EFFLORESCENCE OF THE FACE.

M. Vanoye, in these cases of red spots or efflorescence of the face, so often seen in the young otherwise in good health, states he has found washing them several times a day with Hufeland's formula a most excellent remedy. It consists of

borax 2 parts, orange-flower and rose-waters of each 15 parts.—*Bull. de Therap.*

TRACHEOTOMY IN CROUP.

M. Guersent has now performed this operation fifty-one times in private practice, and of this number eight have recovered, the canula being retained in each of these for eight days.—*Gaz. des Hôp.*

CARBONATE OF AMMONIA IN CHRONIC PSORIASIS.

M. Cazenave has for many years past employed carbonate of ammonia in squamous diseases of the skin. He prescribes 10 parts of ammonia to 250 of simple syrup, the patient taking from six to twenty-four grains of the salt daily.—*Ibid.*

THE PUBLIC AND THE INSANE.

"While the public often considers as mad persons at large who are somewhat eccentric in their actions, by a deplorable inconsistency, it considers as of sane mind a great number of those who are sequestered in establishments for the insane."—*Dr. Verga. Annal. Omed.*

RECURRENCE TO INOCULATION.

"We believe the power of vaccination is expiring. We are certain that, before another half-century has elapsed, recourse will have been again had to inoculation. Day by day, the period during which vaccination affords immunity is diminishing; so that, in a few years, it is highly probable that, to act as a preservative, it will be required to be renewed every year, and, when this point is reached, inoculation will be revived."—*Trousseau, L'Union Medicale.*

FOREIGN CORRESPONDENCE.

FRANCE.

PAYMENT OF MEDICAL FEES.

In a former letter allusion was made to a trial which has excited considerable interest among the Profession here, turning, as it did, on a knotty point of law, and being calculated to effect a very sensitive part of the practitioner, *viz.*, his pocket. I am glad to say, that Dr. Boullard, efficaciously backed by the Medical Association, which bore the whole expense of the trial, carried the day. The Supreme Court, after a most careful examination, decided, "that the fees due to a medical man for attendance during the final illness of a deceased patient should take precedence of the landlord's claim for rent." In the case alluded to, the value of the deceased's furniture was barely sufficient to pay the doctor's bill, and the furniture had been seized by the landlord for payment of rent due. The law, you see, is not altogether devoid of "bowels," although landlords be so. However this may be, a new career is opened to our practitioners—an indigenous California as it were—if they only have the sense and courage to take advantage of it. Here is the copy of an advertisement which has been extensively distributed, and probably, ere this, has seduced some pennyless professor of our divine art:—

"The famous white lady of Catillon (Banlieue of Paris) has a vacancy for the office of physician attached to her house; she is in pressing want of a duly-qualified medical man to replace him. It is a jewel worthy of the most aristocratic finger, for the fees amount to 25f. or 30f. a day, and often reach 50f. (2l.) The first-comer, if possessed of a regular diploma, who has not practice enough to live in an honourable manner, will receive a cordial welcome from the white lady."

The above respectable dame is a mesmeriser; and the idea of thus working in company, if not new, is, at least, honestly expressed. Besides, all the work consists in standing by while your principal delivers her oracles. The distinction, also, between those who can live "honourably" and those who cannot, is of a most delicate kind.

THE SWEATING SICKNESS.

No wonder that we should have the sweating sickness, cholera, and other fluxes denoting disgust. The former, I regret to say, prevails with great intensity in the Department of Orne and other localities. At Charenton the number of deaths has exceeded six in the day, and the inhabitants have nearly all abandoned the village. A medical staff has been despatched to the spot. We are, however, still without news from the men sent down to the south some time since. They will, I suppose, turn up some day or another before the Academy.

DR. QUAIN AND DR. M. HALL.

Apropos of the latter, Dr. R. Quain presented a short memoir last week to the Academy of Medicine, on his stethometer; and Dr. Hall an equally brief notice of the different states of muscular irritability in cases of paralysis. The learned physiologist has probably his eye on the Institute; and it must be confessed that the best way of insuring the high honour of membership is to show that one deserves it.*

THE STAFF OF THE HOTEL DIEU.

M. Husson, senior Physician to the Hôtel Dieu, has retired from practice, and his retreat has given rise to numerous changes in our hospital staff. Thus, M. Piedagnal goes to the Hotel Dieu; M. Nonot to La Pitié; M. Barth to St. Antoine. There is likewise vacant the office of Physician to the Enfants Malades, and to the Female Venereal Hospital, besides the Presidency of the Faculty of Medicine, vacant by the resignation of M. Bérard, who has been quarrelling with his confrères.

GENERAL CORRESPONDENCE.

TRANSFUSION OF BLOOD.

[To the Editor of the Medical Times.]

SIR,—If you think the following unique case of successful operation of transfusion of blood,—unique, I mean, as it regards the simplicity of the instruments used for its performance—worthy a place in your journal, you will oblige me by inserting it. The case is translated from the *Gazette Medicale de Paris*, for July 5th, 1851.

The case is given in the words of the operator, Dr. Marmonier.

Case.—"Jan. 3, 1851.—At six o'clock in the morning I was called to a woman named Mallet, of Lancey, aged 30 years, of a lymphatic constitution, somewhat weakened by many pregnancies occurring in quick succession, by previous difficult labours, and by moral and physical trials. The labour pains on my arrival had nearly ceased. The patient was weak and exhausted from long-continued and useless efforts, which were unable to cause the expulsion of the child, on account of a very decided anteversion of the uterus. I performed the operation of turning and extracting the child by the feet; unusual hæmorrhage supervened, which forced me to extract the placenta rapidly, and to excite the contraction of the uterus, which was in a state of collapse. This plan succeeded, the discharge being arrested in a few moments.

"In three-quarters of an hour I withdraw, leaving her to the care of the midwife; but in half an hour after my departure, the discharge reappeared in great abundance; this was stopped by syncope. The hæmorrhage again returned; and, on this occasion, left the patient in a long-continued state of very great exhaustion and syncope.

"I was again called, and returned at the moment of the first discharge. The attendants believed her dead, and indeed she was in a state of hopeless exhaustion; she had extreme pallor, with cold extremities, pulse almost, and sometimes altogether, imperceptible, obscurity of vision, and repeated syncope. I had recourse to astringent and refrigerant applications—a concentrated infusion of ergot of rye—a cordial potion, dry frictions over the skin with a brush and with flannel, at the same time applying hot cloths to the limbs. I persevered in this manner for three quarters of an hour, without obtaining the least melioration, the state of the patient, on the contrary, gradually becoming worse, and I foresaw the inevitable approach of a fatal termination. At this moment the recollection of a case by M. Nelaton decided me to attempt the transfusion of blood, although alone, and without any of the usual instruments for the performance of this delicate operation.

"I found in the house a small child's syringe, which would hold about 70 grammes of blood, having ordered in readiness hot water, vessels, and linen; a neighbour of the patient, a girl named Faget, was kind enough to consent to allow the necessary quantity of blood to be taken from her arm. Everything being arranged, I made an incision three centim. in length over the basilic vein in the right arm of the patient, in the direction of its course. I then completely isolated the vein for the extent of two centim., and passed below it a ligature to enable me to raise the vein, and to tie it upon the point of the syringe. I then divided the coats of the vein for a demicentimètre in length: two or three drops of blood only escaped. I then compressed the vessel above and below. Having bled Faget, and the blood being received in a cup, placed in a vessel full of water sufficiently hot to preserve it at its ordinary temperature, I quickly took the syringe, previously warmed, and filled it completely with the blood, forcing forward

the piston so as to be quite certain that it did not contain any air, the tube of the syringe being inserted into the opening in the vein, and, having tied the ligature lightly around its point, I slowly and with care injected the blood into the vein; after having forced the piston through one-third of its course, I felt a sudden resistance, which showed me that the blood no longer penetrated the vein, either from coagulation having taken place, or from some other cause; I, of course, immediately ceased to press forward the piston.

"In re-commencing the operation I enveloped the syringe with linen thoroughly moistened with hot water, and this time nearly all the blood which the syringe contained was injected into the vein. The whole quantity of blood introduced by the two attempts might be calculated to be about ninety grammes, (a) without any subsequent pain or inconvenience.

"Immediately after the transfusion respiration became more regular, the pulse stronger, the tendency to syncope suddenly ceased, and the obscurity of vision, which had been a permanent symptom, rapidly subsided.

"To keep up this improvement, after having dressed the little wound, I re-commenced the use of frictions and hot cloths, besides again having recourse to rhatany and ergot of rye.

The circulation and animal heat returned by degrees, and two hours after the operation the patient was so well that she slept for a short period, and to this sleep succeeded an unexpected melioration, which put an end to this alarming crisis.

"From this time her convalescence was rapid; the secretion of milk took place regularly. Ten days after the patient was able to rise for an hour in the day; on the twentieth day she was completely well, and at the end of thirty days she was able to follow her usual occupations."

The Editors of the *Gazette Médicale* greatly eulogise Dr. Marmonier for the performance of this operation, justly remarking, that his conduct is highly calculated to inspire practitioners with confidence in regard to this particular point of surgery; as, they also remark, it is generally supposed, that transfusion of blood, to be successful, requires special dexterity, a complicated apparatus, and skilful and attentive assistants; but he performed it with a fortunate result, alone, in the country, without any instruments but those in his pocket-case, and without other assistants than the inexperienced villagers. I so fully agree with the remarks of the Editors, that when my friend Dr. Speer pointed out the case to me, I could not resist the wish of placing it (through the medium of your valuable Journal) before my professional brethren in this country, feeling assured that every one who reads it will award the full meed of honest praise to our skilful and firm-minded continental brother, M. Marmonier.—I am, &c.,

AUGUSTUS EVES, M.D., F.R.C.S.,
Surgeon to the Cheltenham General Hospital.

Cheltenham.

A SCHEME OF MEDICAL REFORM.

[To the Editor of the Medical Times.]

SIR,—The cause of medical reform seems to be in a state of hopeless inactivity at present, and we sit and look tamely on the manufacturers and dispensers of the medicines we prescribe, while they make efforts for their own exaltation at our ultimate expense. All seem agreed that the cause of this apathy is to be found in the selfishness of the various diploma-granting corporations, who, instead of labouring with each other to improve the status of our medical aspirants, strive rather, like so many rival traders, to gain customers to buy their wares. I speak in general terms, and am happy to say, that to this state of matters there are some honourable exceptions; but still the rule is notorious. But what can we do to promote this needed reform? Why, nothing, till some expedient be hit upon, which shall in some way respect all these claims. This probably is difficult to accomplish, but I do not think it impossible, and, like other doctors, I would venture to give my prescription for this chronic disease, though I fear the greatest difficulty will be, to get my patients to swallow it. What I have to propose may be considered in a few sections.

1. That there be examining boards in the Three Kingdoms, for the convenience of those residing therein, and that these three grant one uniform qualification, conferring a right to practise in any part of the British dominions.

2. That this qualification be double, and consist: 1st, Of an examination in surgery, anatomy, and physiology (like the present one in the London College of Surgeons), and that the holders of the diploma granted after such examination, be styled members of

the Royal College of Surgeons of England, Scotland, or Ireland, as the case may be; and, 2ndly, Of an examination in medicine, midwifery, etc., or of those branches of study omitted in the surgery examination, and that the holders of the diploma granted be called Members of the (Royal?) College of Medical Practitioners of England, Scotland, or Ireland. The fees paid for these diplomas to be uniform in the Three Kingdoms. Now, with respect to the surgeon's examination, the present Colleges of Surgeons in London, Edinburgh, and Dublin, would conduct them as heretofore, confining the examination to those subjects only, which are now the basis of the London College examination. And then for the second or medical examination, we must put in use those institutions already in existence, by changing their names, and to a certain degree their constitution, so as to render them uniform. What I propose for England is, that the Apothecaries' Company of London should undertake this duty. In Ireland, that the Irish Apothecaries' Company should do the same. And for Scotland my plan is, to confer this honour on the Glasgow Faculty of Physicians and Surgeons, seeing that there is no distinct Scotch Apothecaries' Society; and this would destroy the rivalry between the Glasgow and Edinburgh surgeons. Each of these corporations to change its name to that of a College of medical practitioners or such-like appellation.

3. That none be allowed to practice, without possessing this qualification, and that their names be annually registered, and a licence to practise given them. This regulation would prevent all the illicit practice, now too prevalent throughout each kingdom, and the licence test would be a ready mode of trying the pretensions of such intruders.

4. With regard to the Fellowships of the Colleges of Physicians and Surgeons of the three kingdoms, and the Degrees of M.D., M.B., and Magister Chirurgiæ of the Universities, I propose no alteration. They would only be supplementary and indicative (as at present) of lesser or greater advance in medical learning, and the titles and rank they confer, may be borne in addition to these necessary to procure the licence.

5. The course of study requisite to be the same in each kingdom, and the schools to be recognised by all the Colleges. The surgical examination to be undergone, six or twelve months before the medical one. The study required for the Degrees and Fellowships (sec. iv.) to be as the bodies granting them may choose to ordain, as most conducive to their dignity and standing.

6. All now in practice who have undergone a successful University, College of Surgeons, or Apothecaries' Hall examination, to be admitted, without further examination, to the status of Licensed Practitioners, and diplomas granted to them accordingly; but all afterwards commencing the study of medicine to be subjected to the double examination after the manner proposed.

I deem the admission of all gentlemen now in practice to be indispensable, as it will disarm them of a large amount of opposition; for without some concessions, and perhaps large ones, at first, we will never have any medical reform. And now, with regard to those magnates who practice pure medicine and surgery, they must bow to receive the qualification, and then labour in any portion of the medical field they choose to select; and, as the higher title borne by some of our peers swallows up their minor ones, so can F.R.C.P., or F.R.C.S., eclipse the humbler M.R.C.S., and the new M.C.M.P.! But then they are but a fraction of the Profession, and, of course, will not unreasonably set up their wish and will as a barrier to the interests of the majority; but, unfortunately, we have never yet had an opportunity of gaining a true expression of the wishes of the majority. There are great obstacles in the way of forming a Medical Reform League, chiefly arising from the varied interests which are to be considered. If, however, some definite scheme of reform were drawn out, and one or two gentlemen, of high standing in the Profession, and suited to the duty, were sent on a tour through the islands, to hold meetings of the medical men of each town and district, to explain and enforce the plan, and then bind them into one common league to accomplish the work, it would quickly be done; let, then, our motto be "Union," for "union is strength." If such a scheme of reform as I have briefly proposed should, in any way, conduce to the settlement of conflicting claims, and the advance of the needed reform, I shall have great cause to rejoice that I am the humble means. I am, &c.

Crieff, Perthshire.

W. DEAN FAIRLESS, M.D.

THE new Bill for amending the Metropolitan Interment Act, besides providing for a loan of 137,000*l.* to the Board of Health out of the Consolidated Fund, declares that the bodies of persons dying in a parish in which interment has been ordered to be discontinued, shall not be buried in other parish burial-grounds within the district.

(a) About twenty-two drachms Troy weight.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. HODGSON, Esq., F.R.S., President, in the Chair.

CASE OF EPILEPSY TREATED BY TRACHEOTOMY.

By W. H. CANE, Esq., Uxbridge.

[Communicated, with Observations, by Marshall Hall, M.D., F.R.S., etc.]

Dr. Marshall Hall had suggested on several occasions, and especially in conversation with Mr. Cane, that as the attack of epileptic or other convulsion implied closure of the larynx, with expiratory efforts, the attack of convulsive epilepsy would be prevented by tracheotomy. Mr. Cane was summoned, on Feb. 1, 1851, to a boatman, aged 24, who had become subject to violent fits of epilepsy, one of which had just occurred in so extreme a form as to leave him in a state of deep apoplectic coma and asphyxia, inspiration being performed only "by seldom and short catches, whilst the veins of the head and neck were everywhere visible and greatly distended." This state had continued nineteen hours. "Feeling convinced," Mr. Cane observes, "that the patient must shortly expire, and that the root of the evil was in the closure of the larynx, I at once proceeded to open the trachea, a matter of no small difficulty, on account of the twisted state of the neck, the engorged state of the vessels, and the constant action of the muscles. The operation of tracheotomy was performed, and the tracheal tube is kept in the trachea to the present time. The relief to the patient was immediate; the air passed into the lungs, the state of spasm subsided, with the turgid condition of the head and neck, and the patient soon recovered his sensibility. This was not the only gratifying result: although the poor man had experienced his epileptic seizures in increasing violence during seven or eight years, and recently thrice a week, he had not had, up to April 1,—a period of two months,—any return of them. More recent accounts of the patient, who is now in Staffordshire, confirm the former report; the tube is still kept in the trachea, and the epileptic seizures have not recurred."

CASE OF ORGANISED POLYPUS OF THE HEART.

By THOMAS BELL ELCOCK FLETCHER, M.D., Physician to the General Hospital, Birmingham.

The patient in whom this morbid appearance was formed was a female, thirty-four years old, admitted under the author's care, at the General Dispensary, in October, 1842, with symptoms of heart disease of some years' duration. She had had rheumatism when eight years old, and her health had since been always feeble. Examination of the chest showed that there was considerable enlargement of the heart, and its action was violent; its beat was audible at some distance from the patient. The first sound was prolonged, but of a sharp tone, and was heard most intensely at the level, and two inches to the left side, of the left nipple. There was dulness on percussion, and bronchial respiration at the base of the left lung anteriorly; elsewhere respiration was natural. The liver appeared to be enlarged. The patient was relieved by elaterium, in various combinations, and afterwards took steel and digitalis with advantage, and in a month was dismissed from her attendance at the dispensary. Early in December she relapsed, and died in the course of a few days. The sound of the heart for the last few days was audible at four yards' distance; her friends stated they could hear it in the room below. It appeared to the author to be superficial, inducing the belief that it depended upon the doubling of an adhesion of the pericardium. After death, fluid was found in the right pleura, and in each lung there was a patch of hæmorrhagic deposit. No adhesions of the pericardium existed. There was considerable dilatation of all the cavities of the heart, especially on the right side. The foramen ovale admitted the point of the little finger, and about half an inch below its orifice in the left auricle, there was attached, by a narrow pedicle, a polypus, two inches long and three in circumference, which projected through the mitral orifice into the left ventricle. This polypus appeared to be covered by a membrane continuous with the endocardium, and had a cavity in its centre, the size of a small nut, containing bloody serum.

REMARKS

ON A PECULIAR APPEARANCE OBSERVED IN THE GUMS OF CONSUMPTIVE PATIENTS.

By THEOPHILUS THOMPSON, M.D., F.R.S., Physician to the Hospital for Consumption, &c.

The author, after glancing at the risk of allowing the study of

auscultation to supersede attention to general symptoms, refers to the discovery communicated to the Society by the late Dr. Burton, of a blue line at the edge of the gums, as indicative of the presence of lead, and thence derives an encouragement to the examination of this part of the system, when there is reason to suspect any poisoned or morbid condition of the blood. He then presents the results of his observations in reference to this inquiry in cases of consumption, and avows his conviction of the frequent existence in phthisical subjects of a mark at the reflected edge of the gums, deeper in colour than the adjoining surface; in some patients a mere streak on a raised border; in others, a margin more than a line in breadth, of a vermilion tint, inclining to lake; the mark being most distinct around the lower incisors, but usually observable in both jaws, and often around the molar, but modified in its situation by the form of the mouth. The author has examined some hundred cases in the course of the investigation, and gives the analysis of 102, of whom he has full records. In forty or forty-eight women the gingival margin is present; and in fifty-four phthisical men, although in a few the line is so faint as to be open to question, there is only one in whom it can be considered decidedly absent. He has reasons for suspecting that the same condition of the system which produces this state of the gums tends also to produce clubbing of the fingers; but he considers that the change in the extremity of the fingers rarely occurs till some time after the streak is manifest in the gums. Of seventy-six patients, forty-five were found to have clubbed fingers; of these forty-five only one had gums free from the characteristic margin; twenty of the seventy-six had marginated gums, but no expansion of the extremities of the fingers. The Author discusses the effect of various modifying influences, such as hereditary tendency, catamenial disturbances, and habits as respects cleanliness, but cannot connect the presence of the symptoms in question with any of these circumstances; but he is of opinion that causes which irritate the mucous membrane tend to accelerate and increase the manifestation of the margin. He suggests this as an explanation of the more frequent absence of the line in women than in men, and dwells on its practical importance, as indicating, in such cases, the use of refrigerants, as preliminary to the introduction of tonic remedies. The Author canvasses the question whether a similar line exists in any other disease; he allows that M. Fredericq may be correct in the opinion that certain changes in the gums occur towards the close of various chronic diseases, but he has never yet observed the peculiar margin described in this communication, without detecting other indications of consumption, although frequently only incipient. As respects prognosis in phthisis, he proposes the general rule, that cases in which the streak is observed early, or is broad or deep coloured, tend to proceed more rapidly than those in which it is absent or slight; while freedom from the streak, even in the third stage, affords encouragement in treatment. In reference to diagnosis, the author believes,—1st. That the absence of the streak in men affected with inconclusive symptoms of phthisis, may incline us to a favourable interpretation of any such suspicious indications; but that in women, rather less weight is to be attributed to this negative sign. 2nd. That the presence of the sign in women is almost conclusive evidence of the presence of the tubercular element in the blood. The paper concludes with the remark, that the symptom therein described is one of many proofs that consumption is not exclusively a local disease, but rather a constitutional condition, requiring for its elucidation and treatment far more than an acquaintance, however exact, with the phenomena of auscultation.

The President, finding that the reading of these papers in abstract had not occupied the entire time of the meeting, invited the Fellows present to open up a discussion upon some one or other of them; but, failing in this, he closed the session, first of all observing, that a special general meeting of the Fellows would be called during the recess, when plans and specifications would be laid before them for their approval or otherwise, with a view to the enlarging the meeting-room, and making it more commodious, and he hoped that their next session would be held in a room much better fitted for that purpose. He thanked the Fellows for their attendance during the then closing session, which he considered to have been as successful as any he had ever attended. The papers that had been read were of exceeding value, and he trusted to them (the Fellows) to render the succeeding session of equal, if not greater interest and importance, to the Society and the Profession.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 30th ult. :—

ANDREWS, JAMES, Pershore, Worcestershire.
DALE, JOHN, Yarm, Yorkshire.
DODD, JAMES SHERWOOD, Notting-hill.
MARTIN, FRANCIS, Brighton.
SALUSBURY, JOHN, Denbigh, North Wales.
SMITH, WALTER, Caistor, Lincolnshire.
TOVELL, CHARLES JOSHUA, Hadleigh, Suffolk.
WRIGHT, JOHN FREEMAN, Edward-street, Portman-square.

The following gentlemen were admitted on the 31st inst. :—

BLAKE, ROBERT HOWARTH, Birmingham.
BUCKALL, EDWARD CHARLES, Brighton.
CHAVASSE, WILLIAM BOYLE, Birmingham.
DOUGLAS, JAMES RICHARD ALEXANDER, Arundel, Surrey.
EVEZARD, EDWARD D'ARCY, York-buildings, Regent's-park.
HARDEY, KEY, Great Carter-lane, Doctor's-commons.
JONES, DAVID, Liverpool.
RHYS, WATKIN, Aberdare, Glamorganshire.
WILES, JULIUS, Hitchin, Herts.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Aug. 1 :—

BAYNE, ALEXANDER FRAZER, Reading.
SEATLE, HENRY, Ulverstone, Lancashire.
WILES, JULIUS, Hitchin, Herts.
PACKMAN, FRANK JAMES WILSON, Puckeridge, Herts.

APOTHECARIES' SOCIETY.—Mr. Edward Tegar, and Dr. King of Savile-row, have been elected to the Court of Examiners of this Society. The former gentleman was one of the Court two years ago; and the election of the latter is an act of homage to talent which reflects credit on the Society. Dr. King is at present Physician-Accoucheur to St. George's and St. James's Lying-in Charity; Physician to the London and Provincial Joint-stock Life Office; late Physician-Accoucheur to the Blenheim-street Dispensary; Medical Officer to the North Polar Land Expedition in search of Sir John Ross in 1833-4-5; Founder and Member of the Ethnological Society of London; Member of the British Association for the advancement of Science, and Fellow of the Medical Society of London. Author of—1. "Narrative of a Journey to the Arctic Ocean;" 2 vols. 8vo. 1836; 2. "Exposition of the Chief Cause of Mortality in Still-born Children." 1847. We may also mention the following contributions from Dr. King's pen to our Journal :—"The Locality of Cholera in St. Giles's in 1832 and 1849"—Aug. 1850; 2. "The Epidemic of 1849, illustrated by St. Giles's, and suggestive of the Gaseous Origin of Cholera"—Aug. 1850; 3. "The March of Death in St. Giles's," commencing with our present Number.

THE COLLEGE OF SURGEONS AND THE MANCHESTER MEMORIAL.—To the Right Honourable Sir George Grey, Baronet, Her Majesty's Secretary of State for the Home Department, the humble Memorial of the undersigned Members of the Royal College of Surgeons of England practising in Manchester and its vicinity sheweth, That while your Memorialists express their pleasure at the concessions recently made by the Council of the College to its members, they cannot allow the opportunity to pass without testifying their dissatisfaction at the position in which your Memorialists will be placed by the carrying out of the Charter of 1843, as at present proposed. That the denying to your Memorialists the privilege of being admitted to the Fellowship after the proposed term of membership, without examination, while it is granted to all gentlemen who have been fifteen years members of the College, and whose diplomas dated as such previous to the granting of the Charter of 1843, will operate upon your Memorialists with manifest injustice, since your Memorialists, for several years previously to that time, entered upon a much more extensive curriculum of surgical education, in the hope of holding a guaranteed position in the College, and of which position your Memorialists will be unjustly deprived by being placed in a lower grade in the Profession. That this retrospective operation of the Charter is contrary to the usual practice of the College, since students registered as such, and preparing for examination, have never been made amenable to laws passed after the commencement of their studentship; and your memorialists beg to assure you, Sir, that they have no objections to the examination as a test of merit for the fellowship, simply considered as such; yet, if this distinction is to be granted to any

gentleman without examination, after a certain term of membership, your memorialists believe that their claim to that privilege, upon every ground of equity and fairness, is unanswerable. Your memorialists, therefore, respectfully beg you, Sir, in any measure which you may be pleased to propose on behalf of Her Majesty's Government, to allow all gentlemen who commenced their surgical studies before the grant of the Charter of 1843, and who have subsequently been admitted Members of the College, to be admitted to the Fellowship upon the same terms as those gentlemen who were Members of the College at the period of the promulgation of the Charter. Your memorialists also beg to state, that they will have no objection to pay such fee as the Council of the College may think necessary; and your memorialists further desire to assure you of their continued attachment to the College, and of their wish for its prosperity and dignity, and to manifest their repugnance to the establishment of any rival body; yet at the same time, with every feeling of respect to express, that your memorialists can never rest satisfied that justice has been awarded to your memorialists, unless their prayer be approved and granted. And your memorialists will ever pray. Peter Royle, 21, Lever-street, Manchester; John Walsh, 36, Oldham-road; Joseph M'Keand, 107, Grosvenor-street; George Morley Harrison, 59, Dale-street; George M. Burton, 83, Grosvenor-street, Chorlton on-Medlock; R. Bellhouse Midwood, Grosvenor-square; James Rhodes, 61, Dale-street; James Ogden Fletcher, 24, Dale-street; George Vause Birks, Grosvenor-square; Joseph Edmund Royston Nadin, 14, Vine-grove, Hulme; John Wells Wainwright, Burlington-street; Robert Manners Mann, 9, Tonman-street, Haymarket; Edmund Lund, 22, St. John's-street; John Shepherd Fletcher, 27, Lever-street; William Hall, 7, St. Stephen's-street, Salford; Thomas Kay Holland, 101, Greengate, Salford; Alexander Somers, 27, St. Stephen's-street, Salford; Henry Winterbottom, 66, Great Ducie-street, Strangeways; Roydon Jackson, 270, Great Union-street, Manchester; Samuel B. Bennett, 182, Oxford-street, Chorlton-on-Medlock; Henry Merrill Williamson, Dispensary, Chorlton-on-Medlock; James Jodrell Cooke, Hope-street, Piccadilly. (The signatures to the Memorials have been restricted to those gentlemen alone who commenced their studies previous to, and who have passed the College on or since November, 1843.)

NAVAL APPOINTMENTS.—Surgeon George Rae, M.D. (1850), to the Calypso, 18, at Chatham. Assistant-Surgeon John M'Swiney (1847), formerly serving in the Rattler steam-sloop, on the West Coast of Africa station, to the Calypso.

MILITARY APPOINTMENTS.—16th Foot: Surgeon John Drope M'Ilree, from the 97th Foot, to be surgeon, vice Reade, who exchanges. 97th Foot: Surgeon Henry Cooper Reade, from the 16th Foot, to be surgeon, vice M'Ilree, who exchanges.

MEDICAL APPOINTMENTS AND VACANCIES.—The office of Resident Physician to the Woodhall Spa is vacant. The amount of salary is not stated.

EPIDEMIOLOGICAL SOCIETY.—The last meeting of the first session of this Society was held on Monday, August 4, at the house of the Royal Medical and Chirurgical Society, 53, Berners-street, Dr. Babington in the chair. After the usual routine of business, the President announced to the meeting, that the Report of the Common Lodging-houses Committee had been presented to the Council, and received by them, to be made such use of as shall seem best to the President and Members of that Committee. During the meeting the President stated, that, although there would be a cessation of the ordinary meetings of the Society till November, yet the various Committees would continue in active operation, and invited communications from Members and others on the subject of epidemic diseases generally, to be forwarded for the Society to the Honorary Secretaries, 38, Berners-street. The paper announced to be read at the re-assembling of the Society, on the first Monday in November, is "On Epidemic Diseases in Iceland," by Dr. Robert Gordon Latham. At the usual period of the meeting, Dr. McWilliam, one of the Honorary Secretaries, was called upon by the President to read Mr. Grove's paper, "On the Nature of Epidemics." Mr. Grove commenced his paper by quoting a saying of the Rev. Sydney Smith, that "words are an amazing barrier to the reception of truth;" which he applied to miasmata, mephitic vapours, morbid poisons, and their synonyms, remarking, that they were words in common use, but that they conveyed no definite meaning to the mind. He then said, that the object of his communication was to elucidate that view which held that the poisons inducing epidemic, endemic, and infectious diseases must be ranked among the things endowed with life. He argued that the faculty of reproduction was a distinctive mark between animation and mechanism, or between living and inanimate matter. That it was

during the reproductive period of existence that the most energetic operations of the vital force were manifested, and that it was during the reproduction of the poison-germs within the body that the force of diseased action called for our special attention. He called attention to the fact, that, whether we examine an epidemic or infectious disease of plants, of animals, or of man, we find that the essence of the affection is a something which has the power of reproducing its species. Taking, then, this faculty of reproduction as indicative of the existence of a germ, the author classed the agents of disease among living things, and regarded reproduction as the primary law. He then argued, that if this were a correct interpretation of nature, the germs of disease ought to acknowledge obedience to the same subsidiary laws which regulate or influence animate existences. He divided these laws into the objective and subjective, the former referring to faculties or properties inherent in the germ, the latter referring to the action of external agents and influences upon them. The laws named, ten in number, are not intended as absolutely definite expressions of a comprehensive idea, but merely as the readiest approximations:—Objective laws: 1. The diffusion or dispersion of germs: 2. Their static existence; 3. Duration of active existence; 4. Period of development; 5. Intermittent reproduction. Subjective laws: 1. Season of activity; 2. Climatic influence; 3. Relation to latitude; 4. Subjection to physical forces; 5. Influence of locality. The application of these laws to the agents of disease was demonstrated, and their analogies traced in the vegetable and animal kingdom. He further showed, that upon this mode of explaining the phenomena of infectious diseases little else was required to solve some of the most difficult problems connected with them. Having shown the impossibility of accounting for epidemics and infection upon the chemical basis, seeing that in no purely chemical process was there any multiplication of the agents, and that, as far as the physical forces were concerned, one always increased at the expense of the other, as heat increases by the chemical change taking place in combustible bodies, the Author concluded by drawing attention to the Registrar-General's Return of Deaths for the year 1847, by which it might be seen, that, as 97,924 deaths were due to epidemic, endemic, and infectious diseases, nearly one-fourth of the total mortality was attributable to causes especially demanding the attention of this Society; and, if we were allowed to include consumption, considerably more than one-third, the numbers being of the diseases mentioned, 151,241, and the total mortality for the year, 453,723. Dr. Babington, Dr. Silvester, Dr. Snow, Mr. Charles Cochrane, and Dr. McWilliam took part in the discussion. A vote of thanks was accorded to Mr. Grove, in his absence from the meeting, for his highly interesting paper.

CHARING-CROSS HOSPITAL MEDICAL SCHOOL, WEST STRAND.—The annual distribution of prizes and testimonials of honor to the students most distinguished for their acquirements in the various branches of medical study at this Institution, took place on Wednesday, July 30, 1851. The Rev. H. Mackenzie in the chair. The following were the successful competitors:—Chemistry: silver medal, Mr. Robert Fish, St. John's Wood, London; 1st certificate, Mr. F. Dalton, Doughty-street, London; 2nd certificate, Mr. J. W. Barnes, Bath. Materia Medica: silver medal, Mr. Thomas Terry, Bath; certificate, Mr. F. Dalton, Doughty-street, London. Anatomy: silver medal, Mr. John Williams, Cardiff; senior, book and certificate, Mr. D. T. Morris, Carmarthen. Anatomy: bronze medal, Mr. F. Dalton, Doughty-street, London. junior, certificate, Mr. J. W. Barnes, Bath. Midwifery: silver medal, Mr. T. W. Goldsboro, Welsh Pool; senior, 1st certificate, Mr. J. King, Newbury; 2nd certificate, Mr. Alfred Harvey, Blakesware. Midwifery: bronze medal, Mr. J. D. Tucker, Sheep Wash, Devonshire; junior, certificate, Mr. Thomas Simpson, Bishops Stortford. Physiology: silver medal, Mr. John Williams, Cardiff. Physiology: bronze medal, Mr. R. Fish, St. John's Wood, London; junior, certificate, Mr. F. Dalton, Doughty-street, London. Medicine: silver medal, Mr. D. T. Morris, Carmarthen; senior, book and certificate, Mr. John Williams, Cardiff. Medicine: book and certificate, Mr. John Williams, Cardiff. Medicine: bronze medal, Mr. John D. Tucker, Sheep Wash, Devon; junior, certificate, Mr. Alfred Harvey, Blakesware. Surgery: senior, silver medal, Mr. H. B. Lingham, Brixton; book and certificate, Mr. W. H. Folker, Oxford. Surgery: junior, bronze medal, Mr. J. W. Barnes, Bath; book and certificate, Mr. J. D. Tucker, Sheep Wash, Devon. Botany: silver medal, Mr. Thomas Simpson, Bishops Stortford; book and certificate, Mr. Chas. Ewington, London. Medical Jurisprudence: silver medal, Mr. J. W. Goldsboro, Welsh Pool; certificate, Mr. Alfred Harvey, Blakesware. Clinical: silver medal, Mr. W. H. Folker, Oxford; certificate, Mr. Charles Rickets, London. General Proficiency: gold medal, Mr. John Williams, Cardiff.

silver medal, Mr. D. T. Morris, Carmarthen. Diligence and good conduct: honorary testimonials, Mr. J. W. Goldsboro, Welsh Pool; Mr. W. H. Folkes, Oxford; Mr. Henry George, Kirton Linsey, Lincolnshire; Mr. Charles Rickets, London.

THE BOARD OF HEALTH AT GIBRALTAR has imposed a quarantine of fifteen days on all vessels arriving from Oran, in consequence of the cholera having made its appearance there.

CHOLERA IN THE GRAND CANARY.—This fearful epidemic continues to spread in this island. It raged with undiminished violence, and has extended to almost all the other towns in the island, where it causes an amount of mortality unwitnessed, it is said, under similar visitations in other parts of the globe. The deaths in Galdar, where there are only 2500 inhabitants, range from 40 to 50 daily. In numerous instances death follows in three hours from the commencement of the attack; if the patient, says the report, survive the third day, there is hope of his recovery. Many families have entirely perished, and others are fearfully reduced. Of four medical men in the city three have already died; they were unable to classify the disease,—for it is not the ordinary cholera,—the patients, previous to death, being spotted with purple and much swollen, as well as the corpses, with the eyes starting out of the sockets. It is by some called a "typhoidal cholera." Its origin has been referred to the importations of wool from Africa in January last, since which time mortal sickness has prevailed in the Grand Canary.

THE VEGETARIAN SOCIETY.—These harmless monomaniacs held a *soirée* a few nights since, under the chairmanship of Mr. Brotherton, M.P., who 'recommended their peculiar mode of diet from the experience of forty-two years.' He made, however, several erroneous statements with respect to the physiology of the human frame, and the nutritious properties of vegetables, which should not pass unchallenged. For instance, he stated, that there was much more nutriment in two pennyworth of peas, than in one shillings worth of beef; and, again, that there is three times the quantity of nutriment in the vegetable than in the animal kingdom; and that the anatomy of man showed that he should be a vegetarian. All these are fallacies: man was intended to live on both animal and vegetable food, and in proof thereof, we find that those who live on vegetable food alone, are not so powerful in their muscles, nor so capable of resisting the ravages of disease, as are those who use the flesh of animals, to sustain the vigor of their frames. Of this fact the Hindoos afford ample proof, while daily experience shows that the two pennyworth, nor even two shillings worth of peas, are not equal, in nourishing qualities, to 1 lb. of beef. There is, besides, the fact, that peas are of difficult digestion. It is, however, as we have said, an innocent monomania, and one that even a despotic Government, like that of the truculent King of Spain, could not interfere with.

DEATHS in the Metropolis for the week ending

Saturday, August 2, 1851.

CAUSES OF DEATH.	August 2.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	541	269	196	1010	10278
SPECIFIED CAUSES	541	269	196	1006	10246
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	259	49	25	333	3604
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	11	17	19	38	440
3. Tubercular Diseases	77	100	5	182	1807
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses, ...	48	22	37	107	1125
5. Diseases of the Heart and Blood-vessels	3	19	14	36	268
6. Diseases of the Lungs, and of the other Organs of Respiration ...	11	14	28	84	748
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	30	23	18	71	744
8. Diseases of the Kidneys, &c. ...	1	2	2	5	89
9. Childbirth, Diseases of the Uterus ...	...	10	1	11	79
10. Rheumatism, Diseases of the Bones, Joints, &c.	5	2	1	8	67
11. Diseases of the Skin, Cellular Tissue, &c.	2	...	...	2	11
12. Malformations	1	...	...	1	22
13. Premature Birth and Debility ...	32	2	...	34	251
14. Atrophy	22	2	...	24	238
15. Age ... ..	...	...	41	41	432
16. Sudden	1	...	1	2	63
17. Violence, Privation, Cold, and Intemperance	16	7	1	27	258
Causes not Specified ... ..	...	...	...	4	32

TO CORRESPONDENTS.

OUR readers and ourselves having been much inconvenienced by the irregularity of the appearance of serial papers in the Journal, gentlemen must for the future understand, that we can commence no such communications until the *entire manuscript* is placed in our hands.

[To the Editor of the Medical Times.]

SIR,—I have just perused your account of an action brought in the County Court, Shoreditch, by Mr. Hooper, against the Gresham Life Assurance Society, and I hardly know which to admire most,—the simplicity of the judge, or the absurdities of the Society's solicitor. Mr. Hooper's oath—swearing that he is a qualified man, in the absence of any evidence rendering his veracity questionable,—was all the proof legally required. The law gives the judge the power to examine all the parties upon oath, and he is bound to accept their evidence. Not so in the superior Courts, in which, as the law stands, neither plaintiff nor defendant can be examined. Proof of qualification of a different character is necessary.

The solicitor is represented as having next contended that there was no legal contract. It is to be hoped that this honest and honourable Assurance Society will avail themselves of the legal acumen displayed by their solicitor when he applies for his costs. What absurdity to say there was no contract. We may plead against our bakers and butchers—"no contract;" they were not bound to send their loaves or their sirloins.

The dismissal of the summons or plaint, in my opinion, is both unjustifiable and contrary to law. It will be questioned, then, what is the remedy? That is, perhaps, a point exclusively for the lawyers. But I apprehend a "rule nisi" might be obtained, calling upon the judge to show cause why he should not reverse his judgment, and enter a verdict for the plaintiff. The Profession should subscribe, to furnish the funds to enable a spirited individual like Mr. Hooper to bring such questions before a competent tribunal. One or two instances of this kind would go far in preventing those quibbles and quirks with which the just claims and rights of the Profession are invariably met and opposed.

It was expected that the County Courts, disencumbered of legal absurdities and technicalities, would be guided by law and justice, aided by common, or rather good, sense. Some recent animadversions, however, in the Courts above shown, indeed have proved these expectations vain. If any doubt should exist as to the feasibility of the plan proposed, in relation to the case of Mr. Hooper, I have only to refer, in reply, to some late proceedings in the Court of Queen's Bench, before Lord Campbell, in which a rule was applied for, calling upon a judge to show cause why a criminal information should not be filed against him,—and one "nisi" was granted. With such facts before us, can there be a doubt that if the decision in the case of Mr. Hooper be contrary to law, that it would be set aside, and a legal and just verdict directed. The thing is worth the trial; and although the question is not one to affect myself individually very much, still I shall be most happy, if occasion offer, to contribute my mite.

I am, &c.,

Επιδικαλούμενος.

[To the Editor of the Medical Times.]

SIR,—I am glad to read in your last Number that you intend to collect and edit the writings of Dr. Knox. It is an undertaking in which every old pupil will no doubt feel interested; and I am sure there are also many others, like myself, who would welcome such a volume as a most valuable collection of anatomical and physiological papers.

I enclose my name and address as a subscriber, if you think it necessary, to adopt that method, and trust you will speedily set about the undertaking.

Edinburgh.

I am, &c.,

S.

AGE ASSURANCE COMPANY.

[To the Editor of the Medical Times.]

SIR,—My attention has been called to a list of Assurance Companies paying Medical Fees, given in the "Medical Times" of the 26th inst., and which you state you believe to be an accurate list, but from which the name of this Company is omitted. I beg to inform you that this Company always pays the fees of medical gentlemen to whom it refers, and I enclose you one of the circulars sent to them with the questions.

I am, &c.,

F. HOARE, Secretary.

A. B.—The peculiar appearance observed by A. B. in the blood-corpuscles, which has been described by Simon and others as an abnormal, can always be produced by pressure. If a small quantity of blood be placed on a slide, a piece of thin glass laid over it, and firmly pressed for a moment, a very large porportion of the corpuscles will be altered in form, and the margins will appear beaded. A facetious friend of ours, when conversing on this subject with a very timid man, mentioned this appearance as one for which he could not account. The gentleman desired that he would examine his blood, fearing that it might present this abnormal condition. He did so, and applied pressure, when the unfortunate gentleman was horrified at seeing his blood in this peculiar state. Nor was his anxiety relieved until our friend had explained and demonstrated to him how the change was produced.

Z. S. A.—There will be no medical reform this year, and perhaps not next year. It is useless to trust to Colleges or Governments.

G. L., Liverpool.—We understand that there is at the present time less than usual difficulty in procuring an appointment in the East India Service. Young surgeons, instead of waiting several years, are drafted to regiments very soon after they arrive at the Presidency. We do not think that officers abroad have much influence. You must look after your friends at home.

S. T.—Emigrant vessels take surgeons, but the payment is small. It is not often that an agreement can be entered into for a passage out and home, but we have heard that such agreements have been lately made, and if S. T. can find no better employment, he will not have much difficulty in getting a ship. It is not improbable that at Sydney or Port Phillip he may discover an opportunity of settling in practice, but he must not be too sanguine.

Dr. Massey's paper will appear in due course.

Dr. Barrat, of Ross.—From any London bookseller.

Dr. H. Hastings, of Cheltenham, has been privately written to.

Mr. Hewitt, of Clapham.—The subject is not worth resuscitation.

Professor Lizars' communication "On Hæmorrhage,—the Occurrence and Cause of it, from the Perineal Section," is in the hands of the Printer.

Mr. Walker.—We have not lost sight of our friends in Ireland.

Inquirer.—(1.) The anti-scorfulous qualities of certain plants such as the cress (*Veronica Phellandrium*), the nasturtium (*Nasturtium Officinale*), and others, depend upon the presence of iodine. (2.) Plants growing in running water, or on the borders of lakes which are largely agitated by winds, contain more iodine than those of stagnant waters.

A Candid Inquirer.—It is quite true that a fête on behalf of the funds of the Royal Orthopædic Hospital was given at Vauxhall Gardens; but we have not heard that another for the same purpose is to take place at the Piccadilly Saloon or the Argyle Rooms.

Mr. Edwards will obtain the information he requires by application to the Secretary, Somerset-house.

Vulcan.—Enclose eight stamps to our Printer.

Istologos.—The questions have been answered more than once in this Journal.

Mr. Gibbons' paper is in the hands of the printer.

The woodcuts for Dr. Lightfoot's paper have not been received.

We regret much we have no funds at our disposal, and no means of otherwise assisting three distressed medical applicants.

In answer to several Correspondents, we have to observe that the *Bebeeru tree*, the bark of which forms the basis, it is said, of the Warburg fever-drops, bears also the name of *Sipeeri*, given it by the Dutch colonists of Demerara, and is also known by the common name of *Green-Heart*. Bebeeru is the Indian name. The bark has a bitter taste, and contains a vegetable alkaloid, *bebeerine*, first discovered by Mr. Rodie, Surgeon R.N., who also prepared a sulphate of the same alkaloid, and used it successfully as an anti-periodic in the treatment of agues. The bark occurs in large flat pieces, from one to two feet long, and varying in breadth from two to six inches, being about a third of an inch in thickness. It is of a cinnamon brown colour, without aroma, pungency, or acrimony; but it possesses a strong persistent bitter taste, with considerable astringency. The fruit is a nut, with two plano-convex cotyledons, of the size and shape of a walnut. The timber is much used by ship-builders. By Dr. Lindley and Sir W. Hooker, the bebeeru is supposed to belong to the Lauraceæ. Schomburgk describes it as a species of *Nectandra*; and calls it, from its discoverer, the *Nectandra Rodiei*. Dr. MacLagan, of Edinburgh, has discovered a second alkaloid in the bark which he named *sipeerine*, besides the bebeerine, the existence of which had been previously ascertained by Mr. Rodie. Both alkaloids were also found by Dr. MacLagan in the seeds of the tree, and both the seeds and bark contain in addition a crystallizable diluquescent acid, differing from all known vegetable acids, which he called *bebeeric acid*. Tannin was also found in both bark and seeds, resembling that obtained from cinchona. Dr. MacLagan considers the "fever drops" to be a tincture of the seeds. It is reported that, in addition to the bebeerine, they contain morphia. The sulphate of bebeerine,—which Dr. MacLagan says can be sold for 6s. an ounce,—is said to be equal to quinine as an anti-periodic. Dr. MacLagan has tried it in agues and in intermittent headaches with great advantage. His papers were read before the Royal and the Medico-Chirurgical Societies of Edinburgh. The preparation used by him was a sulphate of bebeerine and sipeerine. It has also been used extensively in the West Indies. In India several practitioners found it of service: one only, Dr. Godfrey, of Bellary, reported against it. The following is Dr. MacLagan's summary of the cases of fever treated with it: "The cases of fevers treated with bebeerine with which I am acquainted, amount to about forty. The bebeerine has been tried in various climates, including Edinburgh, Canada, and West and East Indies, in all the various forms of remittent and intermittent, and at all ages, from 12 to 74. In all of them it appears to have manifested more or less of an anti-periodic action. In six cases, or nearly one in seven, it does not seem to have acted satisfactorily. Of twenty-six cases, five only suffered from any unpleasant effect, and this seems not to have gone beyond a little tinnitus aurium. It appears, therefore, entitled to a fair trial, especially in the public services, where alone such cases can be found and properly observed, and where its cheapness, contrasted with the price of quinine, might be a matter of importance." Some cases of periodic neuralgia were also cured by it. Dr. Gardner, of Edinburgh, subsequently confirmed its utility as an anti-periodic in the treatment of a case of intermittent headache, which it perfectly cured in three or four days.

COMMUNICATIONS have been received from—

Dr. BENCE JONES, of Lower Grosvenor-street; Mr. NEALE, of Fazeley, Staffordshire; Mr. JEFFREYS, of Wisbeach; Dr. LIGHTFOOT; Dr. EVES, of Cheltenham; Dr. MASSY, of Worcester; Mr. GIBBONS, of Liverpool; VULCAN, of Sunderland; A STRUGGLING INDIVIDUAL; A SUBSCRIBER, Stoke-on-Trent; ISTOLOGOS; Mr. CHARLES BUTLER, formerly of Cheap-side, and Regent-street; Mr. ROBERTSON, of Charing-cross Hospital; Mr. PARKER, of Birkenhead; Mr. ROYLE, of Manchester; H. R.; INQUIRER; A CANDID INQUIRER; S. T.; G. L., Liverpool; L. S. A.; A. B.; Mr. HEWITT, of Clapham; Dr. BARRAT, of Ross; Dr. HASTINGS, of Cheltenham; Mr. WALKER; Mr. EDWARDS.

ORIGINAL LECTURES.

LECTURES

ON

DIGESTION, RESPIRATION, AND
SECRETION.GIVEN AT THE ROYAL INSTITUTION,
TO THE MEMBERS, AND TO THE PUPILS OF
ST. GEORGE'S HOSPITAL.

By H. BENCE JONES, M.D., F.R.S.,

Physician to St. George's Hospital.

[Continued from page 116.]

ON RESPIRATION.—ON THE AIR; AND THE
ACTION OF OXYGEN OUT OF THE HUMAN
BODY.

In my lecture to-day, gentlemen, my chief object is to bring before you the composition and properties of the air, and the action of the oxygen of the air, first out of the body, and afterwards in the body.

First, What is the air which surrounds us? You, probably, all well know that it is not a chemical combination of oxygen and nitrogen; but that it is simply a mechanical mixture of these two gases.

The chief Constituents of the Air.

100 parts of dry air contain, by weight,

Oxygen	..	..	..	23·01
Nitrogen	..	..	..	76·99
				100·00

By measure.

Vols. oxygen	..	..	..	20·81
" nitrogen	..	..	..	79·19
				100·00

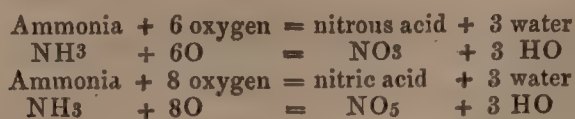
There are mixed with the air many other substances, which I shall not now dwell upon. For example, there is the vapour of water, a small quantity of carbonic acid, ammonia, and nitric acid, and all substances that can rise in vapour. In my lecture, to-day, I shall only dwell upon the oxygen and nitrogen which form the chief constituents of our air. There is, as I have said, no chemical combination of these gases; but they are mixed together just as spirit of wine and water might be mixed. The properties of this mixture I shall best be able to illustrate by showing, first, the properties of the two gaseous substances separately.

If I take some pure oxygen, or even the oxygen as it exists in the air, and bring it into contact with very finely divided metal, if the latter is perfectly dry, an inflammation will immediately take place, and an oxide will be produced. (Experiment with finely-divided lead.) If iron is struck against a very hard body, small particles are separated, and, as they combine with the oxygen of the air, sparks are produced, heat and light are evolved, and an oxide of iron is formed. (Experiment with flint and steel.) This effect is owing to the intense action of the oxygen of the air upon the metal, aided by the heat which is produced by the friction. Even when in combination with other elements, the iron may be acted upon by oxygen. If I take, for instance, finely-divided iron, and cause it to combine with sulphuric acid, so as to produce a sulphate of the protoxide of iron, and then leave this latter in contact with the air, it combines with the oxygen, and a sulphate of a peroxide is produced. I have here a solution of a protosalt of iron, and if I mix it with sulpho-cyanide of potassium, which gives an intense red as an indication of a peroxide, I shall find no reddening produced; but if I agitate it in contact with the air for a few minutes, the action of the sulpho-cyanide of potassium becomes apparent, showing that a peroxide has been formed; or, if I add any oxidizing agent, (as a drop of nitric acid, which easily gives oxygen,) an intense red colour will instantly ensue. (Experiment.) It is not on metals alone that this action of the oxygen takes place; almost every other substance can be acted upon with energy.

If I bring a small portion of heated charcoal in contact with oxygen gas, you know the beautiful action that ensues. If I bring hydrogen in contact with oxygen, when heated the combination is still more instantaneous, giving rise, as you know, to water. This combination of oxygen and hydrogen deserves your attention for a moment. You may have seen in our lecture-room, animals living in an atmosphere consisting only of oxygen and hydrogen gases, the hydrogen being substituted for nitrogen, and the animals appearing to live as well in such an atmosphere as in common air. But very different, indeed, would be all the circumstances around us if, instead of nitrogen, hydrogen were present in the air. In fact we could not, in that atmosphere, exist for any length of time. No candle could be lit, no fire could burn, no thunder-storm could take place, without the instant destruction of the whole of the atmosphere of the world; the oxygen and hydrogen would combine with intense violence, and all life would be at once destroyed.

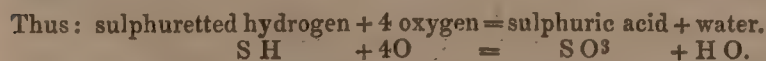
This instantaneous combination, then, of oxygen and hydrogen would render life impossible; the whole atmosphere would be destroyed, and water would be formed. Hence, then, hydrogen could not be substituted for the nitrogen of the atmosphere. It is the energetic action of oxygen which renders all gases except nitrogen inadmissible. Whether the action of oxygen take place quickly or slowly, or whether there be a combustion of iron, of carbon, or of hydrogen, the quantity of heat produced by the combination is distinct and definite. Whatever the circumstances, the amount of heat produced is the same, provided the quantity of oxygen, carbon, &c., is the same. Oxygen acts, as I have said, upon almost every substance which is in contact with it. It even acts upon nitrogen, though this substance is less readily attacked than any other gas. If in the air I set fire to hydrogen gas, that is, cause it to combine with oxygen, I shall not only have water produced, but nitric acid also; for it must be remembered, that in the air the hydrogen does not burn in pure oxygen, but in a mixture of oxygen and nitrogen; and by the action of the oxygen upon the nitrogen, I shall get a small quantity of nitrous and nitric acids formed, in addition to water. M. Saussure, early in this century, found this to be the fact, and I have repeated his experiments, and am convinced that he is right. This oxidation of nitrogen comes before us far more remarkably in the oxidation of ammonia. Ammonia is a body which consists of hydrogen and nitrogen combined together. If I have ammonia in contact with any substance that is burning in oxygen, or even in atmospheric air, I shall always find it so acted upon as to produce nitrous and nitric acids—oxides of nitrogen. Thus, if I take this spirit-lamp, and put in the alcohol the smallest quantity of ammonia, and then light it, I shall have produced, in addition to the ordinary products (water and carbonic acid) nitrous acid, a combination of oxygen with the nitrogen. That nitrous acid is actually produced in this way I can show you by distinct and positive experiments. You will remember that I have shown you a most delicate test for starch. The mixture of iodide of potassium, nitrite of potash, and starch water, produces an intense blue colour. If I have the starch present and the iodide of potassium, I can by this blue colour detect nitrous acid; if I have the iodide of potassium and the nitrous acid, I can always detect starch; and if I have the starch and the nitrous acid, I can always look for iodide of potassium. I will now mix a little starch with iodide of potassium, and you shall see whether nitrous acid is produced by the combustion of some ammonia which I will mix and burn with common coal-gas. To the thin liquid containing the starch and iodide of potassium, I add a few drops of very dilute hydrochloric acid, and put it in a Wolfe's bottle, through which I can cause the products of combustion to pass. In another bottle I put a little ammonia; over this the coal-gas passes previous to its being burned; so that the coal-gas will carry over a small quantity of vapour of ammonia with it, and we shall see when the coal-gas is burnt, whether the ammonia is also oxidized. I will examine the products of combustion, and if nitrous acid is produced it will act upon the mixture of iodide and starch, through which it must pass, and the intense blue will be produced, which you have seen in an early lecture. [Experiment.] I will now light the gas, which differs only from other coal-gas in containing rather more ammonia than is generally present. By means of an aspirator, the products of the combustion will pass through the bottle containing

the starch and iodide. If you will watch the bottle containing the test-liquid, you will see; that gradually on the upper surface a blue colour will appear, and in a few moments the whole will become perfectly blue from the nitrous acid which has been produced. [The liquid, gradually, in a few moments, changed in colour, until it became intensely blue.] This same oxydation of ammonia can be produced by heating oxygen gas and ammonia gas on platinum. A combination takes place between the elements of ammonia and oxygen, and nitrous and nitric acids are thus produced. The following diagram will make this reaction clear:—



You might perhaps suppose, that the combustion of the coal-gas had some effect in causing a similar action to take place on the ammonia mixed with it, and when I burnt the ammoniacal alcohol, you might think that the contact of the alcohol with the ammonia caused the same oxydizing action in both substances. But the combination of oxygen with ammonia may be made to occur without any other substances taking part in the combustion. Thus, if I take gaseous ammonia, and pass it through a heated tube which contains an oxygen-giving substance, (as peroxide of manganese,) I shall find that the ammonia combines with the oxygen, and I shall have nitrous acid and nitric acid produced according to the quantity of oxygen present in the tube. A much slower, but not less decided action of oxygen upon ammonia has led to the formation of the so-called nitre-beds or nitre-wells. Places are chosen where ammonia can be oxidized by the action of the air. Any nitrogenized animal-matter mixed with lime, magnesia, or potash, kept in a moist atmosphere, at a temperature between 60 and 70 Fahr., will become oxidized if the air has free access, and the result will be the production of nitric acid, which will combine with the bases present, and slowly, but surely, nitre will be formed. My time will not permit me to enter into the subject of the nitre cultivations or the saltpetre plantations, as they are called, but you will find admirable descriptions of this process in Dr. Pereira's work on *Materia Medica*.

The oxydation of ammonia leads also to the production of nitric acid on newly-plastered walls near sewers; in fact, wherever ammonia is produced, and can come in contact with moist air and alkali. On newly-plastered walls, when the temperature and moisture are sufficient for the purpose, on the surface a distinct efflorescence of nitrate of potash, or nitrate of lime, is slowly formed; long crystals may occasionally be found. The same oxydizing action produces the nitrates which have been found so frequently in the water of wells near churchyards, and in large towns. These nitrates have been constantly detected in the water used for drinking; and there is no doubt whatever that they proceed from the ammoniacal impurities which have been filtered through the soil, and have therein been acted upon by the atmospheric air, and, in place of the ammonia, nitric acid has been produced. Not only can ammonia be thus oxydised by the action of the oxygen of the air; but, if I take sulphuretted hydrogen in water, and allow it to filter through any porous substance, I should find that the sulphuretted hydrogen gradually disappears, and in its place I should get sulphuric acid produced. The sulphuretted hydrogen exposed to the action of the oxygen undergoes a change; the hydrogen combines with the oxygen to form water, and the sulphur combines with the oxygen to form sulphuric acid.



This process of purification, which takes place in all soils and in every atmosphere in which ammonia and sulphuretted hydrogen exist, is a most important use of the oxygen of the air; for example, it purifies the water which we drink, removing the ammonia and sulphuretted hydrogen, and giving us the comparatively harmless nitrates and sulphates, which are far less injurious, and far more agreeable than the sulphuretted hydrogen or ammoniacal substances, which our drinking water otherwise would too frequently contain.

Not only does this oxydation take place out of the body, but there is every reason to believe, as I shall have occasion to show you, that it also occurs in the body. Within us, as

well as around us, the purifying action of oxygen continues without intermission.

Thus much for this important action of the oxygen of the air. The other substance which I have mentioned, as constituting the principal part of the atmosphere, is nitrogen, a body which, in chemical properties, may be called the reverse of oxygen. The one is the most energetic substance in nature; the other the most inergetic. I have shown you, that in all cases of combustion in the air, the nitrogen of the atmosphere will be oxydised to a slight, but perceptible extent; that a small quantity of nitrogen will combine with oxygen to form nitric and nitrous acids. Cavendish long since proved, that this takes place when hydrogen and atmospheric air are exploded by an electrical spark. Saussure proved it when a jet of hydrogen was burnt; and I have already stated to you, that I have obtained the same result with hydrogen and other combustible bodies. The characteristic of nitrogen, nevertheless, is its indifference to the action of oxygen; though it is acted upon by it, as we have seen, yet it is so only in a slight degree. The latest and best experiments have confirmed the fact, that the mammalia and birds in respiration are always exhaling small quantities of nitrogen. They give out rather more than the quantity they take in. This seems to show, that the nitrogen of the atmosphere has no very important action in the body; one can hardly resist the conjecture, that, ultimately, the nitrogen of the atmosphere will be found to be as important for vegetable life as oxygen is for animal existence. The nitrogen which is expired by animals may be no less important to vegetables than the oxygen which is evolved by vegetables is beneficial to the animal creation; at present, however, this is not proved. The nitrogen serves chiefly to dilute the oxygen of the air; it serves as a negative body, which cannot be energetically acted upon, and which renders the action of the oxygen less energetic than it otherwise would be. As regards the action of oxygen out of the body, there is no doubt of the importance of this dilution of the energetic agent in the atmosphere, but, as yet, this cannot be proved by experiments made within the body. I shall, in my next lecture, state to you what is known on this subject.

Having thus dwelt on the atmosphere and its action out of the body—upon the energy of oxygen and the negative property of nitrogen—I come to the question, how this air passes into the body for the purpose of producing its actions there. The air, as you know, passes down the trachea and the bronchial tubes into very fine vessels, and through the fine membrane of the air vesicles, at the end of the bronchial tube, into the blood. Thus, on one side of the membrane of the air-vesicle is the atmospheric air, and on the other side is the blood. The process by which the air passes into the blood has been compared to the process which you see going on before you here. I have here a jar containing hydrogen gas, covered by a membrane. Thus, on one side of the membrane is atmospheric air, and on the other is hydrogen gas. The hydrogen has a great tendency to pass out of the vessel and to mix itself with the atmospheric air; so much more rapidly does it pass out than the air passes in, that a vacuum is formed within the jar, and the atmospheric air in consequence presses down the membrane into the jar. I have here another vessel containing atmospheric air, and it is surrounded by hydrogen gas, which is prevented from escaping into the external atmosphere by a gas jar. Here the effect is, of course, the reverse; the hydrogen passes so rapidly through the caoutchouc, that the membrane is forced outwards, distended like a blown bladder. This has been called endosmosis. It has been said that a similar process takes place in respiration,—that atmospheric air is diffused into the blood, which is loaded with carbonic acid, while carbonic acid escapes, at the same time, through the membrane of the air-vesicles into the bronchial tubes. Now, the jars before you cannot be taken to represent the air-cells of the lungs. Free air does not exist on each side of the membrane of the air-vesicle, but there is blood on one side, and air and the moisture of the air-vesicle on the other. The blood contains air in solution, truly; but gas on one side of the membrane and liquid containing another gas on the other side, may give totally different results from those which you see here.

The process of respiration might be compared, though not with perfect accuracy, to that which is going on in these other vessels. I have here two solutions of different densities separated by a membrane. The interior solution is of great density like the blood—it is a strong solution of syrup. The outside solution is distilled water. The membrane,

which is tied over the bottom of the lower jar, prevents the mixture from taking place rapidly. The upper part of the lower jar is furnished with a tube, in which the syrup will rise if any of the distilled water should pass through the membrane. We will pour in distilled water until the outer fluid and the inner one are of the same height, and then we can observe what happens.

It is found by this experiment, that the power of one solution to pass into the other is so great that it resists the pressure of the atmosphere, and the water rises as you see it has done in this experiment, which has been continued for some hours. By having a narrow tube, the syrup of course rises more quickly. The force which sends it up is the concentrated solution inside drawing in, so to speak, the water which is outside; or, if you represent it otherwise, it is like the hydrogen which was without passing in rapidly through the membrane into the heavier atmospheric air, and distending the membrane. The water, which is the lighter fluid (corresponding to the hydrogen), passes into the concentrated solution within. I have here another instance of a similar kind, but instead of syrup I have taken salt. In this case, by adding a little finely divided colouring matter you can watch the currents. The distilled water, which is without, corresponds to the light hydrogen, which, in the gaseous case of endosmosis was without also. The syrup, or salt and water, will rise until the specific gravity of the fluids on both sides are equal, or until the pressure is so great from the height of the column of liquid, that the endosmosis is stopped. The rise is more rapid the greater the difference of the densities of the two solutions; and the more dilute the denser solution gets by water going in, the slower the process takes place. This may possibly represent the flow of sap, but it does not actually represent the way in which the air passes through the air-vesicles into the blood. It has been said to represent it, but it does not actually do so any more than the diffusion of gases does. It truly represents the manner in which the purification of the blood takes place during the foetal period. During that period there is liquid on both sides of the membrane. In the purification of the blood of the foetus, infantile blood is on one side, and the maternal blood on the other; and the interchange between the two may take place exactly as you see in the instance before you. But when the animal is born, and the air passes into the bronchial tubes, you have liquid on one side and air on the other. The power of one gas, then, to pass into the other, may explain the mixture of gaseous substances in the bronchial tubes, but it does not, to me at least, appear to explain the change which takes place in the air-vesicle between the air on one side and the blood which lies on the other. The laws which regulate the endosmosis of fluids are at present very far from a satisfactory explanation; but here I have one of Mr. Graham's beautiful experiments, by which he is investigating the laws which regulate the intermixture of two fluids, when no membrane exists between them. A small inner vessel contains a solution of nitrate of copper, for example, and in the outer and larger vessel there is distilled water, which rises over the mouth of the vessel containing the solution of nitrate of copper. Thus the distilled water can pass into the solution of nitrate of copper, and the latter can pass into the former.

Mr. Graham finds that each substance has a peculiar power of passing into another, even when there is no membrane present. It is found that the power of one solution to pass into another varies exceedingly with solutions of different substances. I have here a diagram which represents the diffusibility of some liquids, and shows how they may be arranged in classes according to their equal power of diffusion:—

*Diffusion of Salts of Potash and Ammonia—Time, 7 days;
Mean Temperature, 64.5°.*

I. NITRE CLASS.

Solution—100 Water to 1 Salt.

Nitrate of potash	3.72
„ ammonia	3.75
Chlorate of potash	3.66
Chloride of potassium	3.88
„ ammonia	3.89

3.78

II. CARBONATE CLASS.

Solution—100 Water to 2 Salt.

Carbonate of potash	5.45
Sulphate „	5.52
Sulphate of ammonia	5.58
Bichromate of potash	5.66
Chromate „	5.77
Bicarbonate „	5.81
Acetate „	5.85

5.63

This other diagram represents very different substances:—

Diffusion of 20 Salt to 100 Water, at 60.5° in Eight Days.

Name of Salt.	Density of Solution.	Anhydrous Salt Diffused.		Ratios.
		In Grains.	Means.	
Chloride of sodium .. .	1.1265	58.5	58.68	100
„ „ .. .	„	58.87	58.68	46.73
Sulphate of magnesia ..	1.185	27.42	27.42	87.86
Nitrate of soda .. .	1.120	52.1	51.56	118.13
„ „ .. .	„	51.02	51.56	45.50
Sulphate of water .. .	1.1080	68.79	69.32	44.66
„ „ .. .	„	69.86	69.32	45.91
Cr. cane sugar .. .	1.070	26.74	26.74	55.47
Fused cane sugar .. .	1.066	26.21	26.21	22.56
Starch sugar (glucose)	1.061	26.94	26.94	3.03
Treacle of cane sugar ..	1.069	32.55	32.55	
Gum arabic .. .	1.060	13.24	13.24	
Albumen .. .	1.053	1.78	1.78	

You will see in the last column that which is most important, the relative power of diffusion possessed by each substance. Thus, if the solution of chloride of sodium passes into distilled water at the rate of 100, the solution of albumen would pass at the rate of 3.03; or if 100 parts of chloride of sodium would pass in a certain time, in the same time only three parts of albumen would pass. Other substances, you find, are mentioned as possessing different ratios. But the tendency of a solution of albumen, as you observe, to mix with other liquids, is much the slightest. This, perhaps, may explain the fact, that the albuminous liquids do not pass out of the body through the membranes, for the mixture of one solution with another must apply to all cases where membranes intervene, as it does where none are present. This property of the solution of albumen not to pass into other liquids may be one of the safeguards, preventing a most important ingredient of the blood from passing off in the excretions; as, for instance, in the urine, the saliva, and the bile, diffusing itself out as it might do if the power of diffusion were equal to that of dilute sulphuric acid.

The diffusion of gases, then, may be the active cause of the mixture of the air in the bronchial tubes; but it cannot be the cause of the passage of the oxygen into, nor of the carbonic acid out of, the blood. This must depend on some other cause; and one cause of the passage of oxygen in, may possibly be the attraction of the oxygen of the air, for the iron which exists, as I showed you, in the blood-globules,—that intense attraction which exists between the oxygen and the iron. This may possibly be one cause assisting the passage of the air through the membrane of the air-vesicles into the blood; but chemical attractions take place at insensible distances only, and hence we have as yet to discover the cause of the passage of the air through the air vesicles. The object obtained by the action of the air when it has entered the blood will be the subject of the next two lectures which I shall deliver here. The change of colour produced in the blood does not depend on any decided chemical change taking place. It is found in late experiments, performed by Magnus, of Berlin, who has devoted his attention more especially to this subject,—of the gases which exist in the blood,—that when calves' blood is first shaken with atmospheric air, and then agitated with carbonic acid, oxygen is given out and carbonic acid is taken in, and the colour of the blood is changed. He found that blood, shaken with carbonic acid, gave out 11.6 oxygen and took in 154.9 carbonic acid. If he then acted upon that blood with atmospheric air, imitating the process which might be supposed to take place in the lungs, the

blood which was loaded with carbonic acid took in oxygen and gave out a quantity of carbonic acid. He then agitated the oxygenated blood again with carbonic acid, and he found that it gave out oxygen and took in carbonic acid,—not to the same extent as before, yet still distinctly and decidedly. The numbers he obtained are represented in the following Table:—

On the Absorption of Oxygen and Carbonic Acid by the Blood.

	Oxygen, per cent.	Carb. acid, per cent.
Blood with carbonic acid gave out..	11.6	Took in.. 154.9
" " atmospheric air took in..	15.8	Gave out 138.4
Again, with carbonic acid, gave out..	9.9	Took in.. 92.1

These experiments show that no very decided chemical change takes place immediately by the action of the oxygen or the carbonic acid upon the blood. If there had been any decided action when the oxygen was made to act on the blood at first, this could not have been undone by the agitation with carbonic acid so as to admit of a repetition of the action of oxygen which the second absorption may be supposed to indicate; and certainly the second time, when treated with carbonic acid, the liberation of oxygen cannot be accounted for if any chemical action of the oxygen had previously occurred. It is not, then, a distinct chemical change that gives rise to the changes of colour, or constitutes the first portion of the process of respiration, for we cannot suppose that the carbonic acid in these experiments could deoxidise the blood, and leave it free to be acted upon by the oxygen again. We know of no such property as this belonging to carbonic acid. It cannot, I say, be admitted, that the first action of the oxygen on the blood is an intense chemical change. A chemical change does no doubt take place, and that rapidly, in the finer vessels of the circulation; but there is no proof of intense and immediate chemical action in the lungs themselves. Certainly the chemical action in the lungs is not greater than in the rest of the system.

It was my intention, in this lecture, if time permitted, to have shown you one of the last discovered actions of oxygen in the human body; but I must leave such actions to my next lecture, in which I purpose dwelling upon the action of the inspired oxygen on nitrogenous substances in the body; and also upon its action on carbon and on hydrogen.

ORIGINAL COMMUNICATIONS.

HÆMORRHAGE.

THE OCCURRENCE AND CAUSE OF IT FROM THE PERINÆAL SECTION.

By JOHN LIZARS,

Late Professor of Surgery to the Royal College of Surgeons, and Senior Operating Surgeon to the Royal Infirmary of Edinburgh, etc.

THE history of the perinæal section, from the period when Roux operated in 1829, and a branch of the internal pudic artery required to be secured after the operation, to the case of Cree, in 1850, in the Royal Infirmary of Edinburgh, in whose wound a plug had to be applied, (a) affords undeniable evidence that external division of the urethra by the knife is accompanied or followed by hæmorrhage to an alarming extent, and requiring means to control it neither as a novel nor unfrequent occurrence. Any attempt, indeed, to prove that great loss of blood occasionally occurs from wounds or injuries of the urethra, whether occasioned by external injury, the use of the armed stilette, the application of caustic, or the forcible introduction of the catheter, would be an act altogether of supererogation. The facts themselves are not the less undoubted, although the supporters of such operations may content themselves with remarking, that they are at a loss to account for them.

(a) *Vide* Appendix to my "Practical Observations on Stricture of the Urethra," Second Edition, pp. 79 and 116.

So lately as in the number of your Journal of 17th May last, a most instructive case is given by Mr. Henry Smith, of the Westminster Hospital, in which that gentleman candidly confesses (p. 532) that a boy, on whom he had operated for stone, had nearly sunk of exhaustion from loss of blood. "I have little doubt," he says, "that the source of hæmorrhage was the artery of the bulb; for, while performing the operation, I hit the groove in the staff somewhat high, and must have cut through the bulb." If every operator was equally candid in admitting "unpleasant occurrences," how many operative causes of danger might be prevented and avoided!

Mr. Wade's testimony on this point is quite conclusive. "That hæmorrhage," he says, "may sometimes occur to a great extent, and even cause death, we have evidence in some cases operated on by Mr. B. Cooper, which have been recorded in Guy's Hospital Reports. In the first case, the man bore the operation well, but secondary hæmorrhage occurred to an extent that had nearly proved fatal. In the second case, there was considerable bleeding during the operation and afterwards; but it was eventually stopped by pressure on the pudic artery. In the third case, hæmorrhage proved fatal a day after the operation. In the remaining case, it is stated, that a considerable quantity of blood was lost during the operation." Mr. Wade cites another fatal case of Mr. Cock where "the patient was taken to bed in a singularly depressed condition. The loss of several ounces of blood increased the prostration, from which he never rallied." (a)

In Nos. 553, 556, and 557 of the *Medical Times*, are eleven cases recorded by Mr. Henry Smith, in which four were fatal. Indeed, Mr. Guthrie himself acknowledges, in the third conclusion drawn from his own cases, "that the operation of dividing the perinæum and urethra is sometimes attended by severe hæmorrhage." He also adduces "fever and fistulous openings, giving rise to much inconvenience," as following the operation; and among his first conclusions this position is stated—"that the division of an old, hardened, or elastic stricture through the perinæum, is not usually followed by a permanent cure, although it is always attended by immediate relief,—the disease being apt to return, unless a solid sound or catheter is occasionally used to prevent it."

This communication has been undertaken, not for the purpose of substantiating my opinion, that the operation of the perineal section, is not only a painful, but an extremely hazardous, as well as unsuccessful, and therefore uncalled for substitute, for the old mode of treating stricture of the urethra by dilatation through the medium of the silver catheter; but has been in some measure imposed on me, in consequence of an anatomical statement made by Mr. Guthrie, sen., of London, in his lectures on "Strictures of the Urethra," just published, wherein he says, "the bulb of the urethra, in all or any of these operations, must be divided, and has sometimes given rise to a dangerous hæmorrhage. This has never occurred in my hands," he continues, "which may, perhaps, be owing to the care taken to divide the bulb exactly in its central part, where the two portions of which it is composed meet each in its sheath, thus forming a double partition between the highly vascular structures."

For many years I taught anatomy, but never saw nor heard of such a partition. In the work of anatomical plates, which was published by me in 1825, I described the corpus spongiosum as consisting of a cellular structure, (in modern anatomical language, of trabeculæ,) encased in condensed cellular substance, and that the cells, when injected, are found to be formed of a net-work of arteries and veins, the latter being the more numerous, and considerably dilated; and that the bulb is merely an enlargement of this spongy cellular tissue." Again, in my communication to the *Medical Times* of the 26th October last, I state, "What anatomist has not found the corpus spongiosum fully injected, by inserting one pipe into one of the internal pudic arteries, so that the mesial line, cut into, will pour out as much blood as a wound in either lateral aspect? That the corpus spongiosum consisted of a congeries of arteries and veins,—that it was so highly vascular, that if the lithotomist

(a) *Vide* *Medical Times*, Nos. 47, 49, and 51, New Series.

wounded the bulb, he must anticipate hæmorrhage, which, if neglected, would prove fatal; and that he must, therefore, secure the artery leading to the bulb, and stuff lint round the elastic gum tube;—that the importance of these facts was the more impressed on my mind, as I had witnessed, when a student, the corpus spongiosum intentionally wounded by the knife or gorget, and the patient die of hæmorrhage."

On referring to Maclise's plates on "Surgical Anatomy," we find a beautiful representation of a section of the penis, plate 27, Fig. 2, where the divided urethra is marked B, surrounded by the corpus spongiosum, having no septum, like the septum pectiniforme of the corpora cavernosa, D. D. And in his commentary on plate 28, he merely says, "the bulbous urethræ being a median structure, is occasionally found notched in the centre, and presenting a bifid appearance. Quain, in his "Elements of Anatomy," edited by Sharpey, 5th edition, page 1220, gives a section of the penis in Fig. 313, in which the septum pectiniforme of the corpora cavernosa is distinctly delineated, but no septum of the corpus spongiosum is represented. When describing the septum pectiniforme, says he, "there are numerous clefts and fissures extending from the dorsal to the urethral edge of the septum, and admitting of a free communication between the erectile tissues of the two sides." Under his description of the corpus spongiosum, p. 1223, he says, "this projecting part of the bulb, exhibits more or less distinctly a subdivision into two lateral parts or lobes, between which, a slight furrow externally, and a slender fibrous partition internally, extends for a very short distance forwards." Here I may ask, why not delineate this partition in the preceding diagram, if such does exist? Again, in page 1224, he states, that the "trabeculæ of the spongy tissue are finer and more equal in size, and the veins form a nearly uniform plexus between them," than in the corpora cavernosa.

Within these few days, I have had an opportunity of examining the corpus spongiosum of two recent bodies, and made several sections near the bulb, but could perceive no septum whatever, even when held under a stream or pipe of cold water. From one of these I took the accompanying sketch.



Drawing of the penis, in its healthy state, to show that there is no septum in the corpus spongiosum, like the septum pectiniforme between the corpora cavernosa. The letters *k*, the corpora cavernosa. The letters *m*, the corpus spongiosum. The letter *g*, the bulb. The letters *a*, *d*, the corpus spongiosum, nearly bisected across, to show that there is no septum even at *d*, close to the bulb, *g*. The letters *a*, the mucous canal of the urethra. The letter *b* is the membranous portion of the canal. The letter *s*, the prostate gland. Sections were made through the bulb *g*, from the letter *d*, to the membranous portion *b*; but no septum was perceptible.

It was found quite impracticable to make a section so as to submit it to the microscope. In investigating the structure

of the bulb, if the corpus spongiosum is held on the stretch by two hooks, a septum may apparently be made by stretching the trabeculæ, so that it may represent either a transverse or perpendicular septum, but of so delicate a web, that the finest edge, even of the thinnest cataract knife, could not split either of them into two. I may state, that, if a *cadaver* be secured, as in lithotomy, and a common anatomical injecting pipe be inserted into each internal iliac artery, and warm water be injected, no operator will divide the corpus spongiosum urethræ in its centre without being deluged with water. In the same manner would the operator be deluged with blood in the living subject, or hæmorrhage to a dangerous extent take place on reaction supervening.

Mr. Guthrie's operation on the living body differs *toto cælo* from that on the dead body. In the living body he says, "The patient being placed as in the operation for the stone, a straight-grooved staff or sound is to be passed down to the stricture, and held steadily against it." "The surgeon taking the grooved staff or sound in his right hand, while the forefinger is applied to the upper surface of the rectum, moves the point steadily upwards and downwards, so as to convey to the forefinger of the left hand a knowledge of the situation of the extremity of the instrument." "The next step is to divide the skin, cellular membrane, fascia, muscular, and tendinous fibres." "This is to be done by a straight, blunt-backed, narrow, sharp-pointed bistoury, the point of which is to be placed a little above the verge of the anus, the cutting edge upwards,"—"the knife to be carried inwards for an inch, then carried upwards, and brought out in the exact median line, making an external incision of at least an inch and a half to two inches." "The surgeon may then deepen the cut and lay aside the knife, and feel for the urethra, keeping the end of the staff steady against the stricture, which will be readily felt, and through which the instrument will now sometimes pass with a little pressure. If it should not do so, the knife is to be resumed, and the forefinger being placed in the wound, on the outside of the rectum, which is to be depressed as much as possible, the back of the knife is then to be turned to it, and while the patient strains, the point should open the urethra, which it can do very easily as far back, if required, as the apex or transverse portion of the prostate. It will not be necessary, however, to go so far back, and the membranous portion may be opened at its middle or anterior part with perfect safety. A probe should be introduced into it while the urine is flowing."

Mr. Guthrie's operation on the dead body is as follows: "The operation," says he, "I have thus recommended, and I believe I may say, introduced into the practice of surgery, should be frequently done by the student on the dead body, after a small grooved sound or staff has been passed into the bladder."

It will appear at once evident to the most inexperienced operator, that Mr. Guthrie's operation on the living body is what has been practised by every surgeon, when he met with an impermeable or impassable stricture, or what has been named the *boutonnière* of the French; only Mr. Guthrie cuts in his *septum corporis spongiosi*, in which invisible septum the knife of the perineal sectionist seems bloodlessly to have moved, like the air-drawn dagger of Macbeth.

Having shown that there really exists no septum to guide the knife of the operator, for the purpose, as has been asserted, of diminishing one of the sources of hæmorrhage from extensive division of the urethra, I have nothing more to add, as it is equally beyond my province and inclination to enter into the disputed claim of originating the perineal section. I may be permitted, however, to say, that in my opinion it had been well if the operation, for the sake of suffering humanity, had been restricted to the dead body, upon which it was practised by Mr. Guthrie, and had never been attempted on the living, except in those very rare and exceptionable cases of imperative necessity which I have described. It is gratifying, besides, to find, that the profession all but unanimously have recommended its adoption to be confined to such cases, in place of being kept as it were a *champs de mars* for the pure surgeon, and resorted to on the mere ground of expediency, as a curative means of relief. I have said, that the indiscriminate application of the perineal section would convert the operating theatre into a *champs de mars*, and make its infliction a mock fight with disease.

36, Charlotte-square, Edinburgh, July 8, 1851.

THE LONDON PRACTICE OF MEDICINE AND
SURGERY.

KING'S COLLEGE HOSPITAL.

By HENRY SMITH, Esq., F.R.C.S.
(Formerly House Surgeon to the Hospital.)

ENCHONDROMATOUS TUMOUR.

THAT form of tumour described and denominated by Müller as enchondroma, is every now and then met with in surgical practice, and there is especial interest connected with cases of this affection, inasmuch as an operation is necessary for their cure, and when properly and effectually put in force, there is no fear of a return of the disease, unlike what is to be expected in some other species of persistent morbid growths; the true enchondroma, however, must not be mistaken for a form of tumour sometimes designated by the same name, osteo-sarcoma, there being some cases of the latter disease of a more or less malignant nature; moreover a much larger quantity of bone enters into the structure of the latter than in the former. The true enchondroma mainly consists of a material very similar to cartilage in its appearance—its entire structure, however, differs as to its situation;—if it is in connexion with bone, a thin expansion of the latter covers it, like the shell of an egg; but it is sometimes found in the substance of a gland, the parotid most frequently perhaps, and then there is no bony structure. When looked at under the microscope, the minute structure of the cartilaginous tissue is by no means dissimilar to that of bone in its early stages of development.

The most frequent situation where we have observed this morbid growth representing the true form of enchondroma has been in the hand. One or more of the fingers has been generally implicated in the disease, and the mass or masses have been closely connected with the bony structure; in fact, may have been considered as a sort of offshoot from the bone. In Mr. Fergusson's "Practical Surgery," two very beautiful specimens of this variety of tumour in connexion with the fingers are delineated.

For the cure of enchondromatous tumour, it is necessary to extirpate the whole of the disease with the knife, otherwise, if a portion be left behind, it will have a tendency to return in the same situation. Thus, when the disease is in connexion with the finger, it will for the most part be found necessary to remove it, even though the tumour itself may be well defined. To show the necessity of doing so, we shall mention a case which has lately been in the hospital under Mr. Fergusson.

The patient was a young Irishman, who presented himself among the out-patients with a round, well-defined tumour in connexion with the ring finger of the left hand. It was perfectly circumscribed, and, though evidently firmly attached, there was some mobility in it when handled, which led some present to the supposition, that it might be removed without extirpating the finger. The patient had noticed it to grow first about nine years ago, and it had gradually increased to its present size, that of a large duck's egg; it so much injured the use of his left hand that he became very anxious to have something done. Mr. Fergusson, on first seeing, supposed it to be an enchondromatous tumour, and determined upon its removal, which he effected on Saturday, March 8. He first attempted by making an incision over its base, dissecting aside the skin, and getting at the connexion of the tumour with the finger, to remove it without taking off the finger; it was, however, so very firmly attached to the first phalanx, that on using some force with the saw through its base, that bone gave way. Mr. Fergusson, therefore, at once removed the finger and tumour together, by cutting through the metacarpo-phalangeal joint. On examination, the mass was found to consist of the true enchondroma within a thin expansion of bone from the first phalanx, to which it was so intimately attached that it was difficult to observe the separation of the structures.

ANEURISM BY ANASTOMOSIS.

Observation has been drawn, from time to time, in some clinical lectures lately given by Mr. Fergusson, and published in the *Medical Times*, to a case of unusual interest and character. I allude to the instance of aneurism by anastomosis, involving the right leg of a young man named Slade. The case has excited an unusual amount of attention

among those who have had opportunities of seeing it; and the treatment which has been put in force, and has been lasting over a period of three months, has been watched with care and interest; and, although many features of the case have been brought prominently forward and dwelt upon by Mr. Fergusson, in the excellent clinical remarks to which we would refer those who are anxious to follow it out, we nevertheless think that a void would be left if a somewhat more detailed and connected narrative of this unusual and interesting case were not given. We shall, therefore, give as many of the particulars as may show the main features of the history and treatment of the case, avoiding minutiae, which may be of no essential service.

The patient was admitted into the hospital in the first week of December last. The pressing and immediate cause of his entry was the circumstance of a very free bleeding having taken place from a vascular tumour situated on the right foot. It appears, that soon after birth, a small vascular spot had shown itself under the right heel; this continued to increase in size until the tumor became of a pulsatory character. Still little notice was taken of it, as it gave the boy no inconvenience until about two years ago, when ulceration took place about it; and a few months after this breach in the integument had occurred, the tumour bled somewhat; the flow of blood, however, was slight, and it was checked with ease. He went about his daily occupation, and did not feel much incommoded with the disease; and it was not until a few days before his admission into the hospital, that he was forcibly reminded of its dangerous nature by a sudden and spontaneous hæmorrhage taking place from the tumour, which was ulcerated on its surface. The bleeding was very free, and it was necessary to apply very forcible compression, which had the effect of stopping it. Mr. Fergusson had been called into consultation, and had advised the transmission of the patient to the hospital.

On the 4th of December, two days after his admission, the compresses and bandages were removed from the foot, and a large quantity of coagulated blood was found in them, but the bleeding had entirely ceased. A tumour was found to be occupying the posterior half of the sole of the right foot, extending as far outward as the external malleolus. It was soft and elastic, and of a very vascular nature, appearing to consist almost entirely of the ramifications of enlarged vessels, mainly subcutaneous; pulsation distinct in it. An ulcer, nearly the size of a crown-piece was on its surface; this was the seat of the bleeding which had lately taken place. On examination of the corresponding leg, it was found to be much larger altogether than that of the left side, and its superficial vessels were much dilated. It was at once seen that this was an instance of aneurism by anastomosis, and it was very evident that the disease was not confined to the spot at which it was at first thought to be, but that the leg was affected to a great extent as well. As bleeding so recently had occurred, and there was an open ulcer still on the surface of the tumour, Mr. Fergusson thought it wise to keep the patient perfectly quiet for a time, and deferred a more minute examination until a further period.

13th.—There has been no return of the bleeding, and the ulcer is healing up in a healthy manner. Mr. Fergusson has made a more minute examination of the limb, and has had accurate measurements of the relative size taken. The leg and foot are very much larger in size than the other, their dimensions being as follow, according to Mr. May, the dresser:—Circumference of diseased leg, 6 in.; below knee, 13½ in.; while that on the opposite side is only 10½ in. from the heel across the instep. The right foot measures 14½ in.; while the other in the same measures only 12½ in. Thus, it is very evident to what an extent the diseased limb is larger than the other. At first sight, it would be difficult to account for this increase in size, and to what to attribute this apparent hypertrophy. On closer examination, however, it is distinctly seen that it depends upon an exaggeration in size and number of the vessels of the limb, all the way from the knee, and even above, down to the foot. All the superficial veins are much enlarged, and vessels which in the natural condition are not perceptible can be distinctly seen, and felt pulsating. The anterior and posterior tibial arteries can be seen to beat distinctly. A distinct bruit is audible along the course of the main vessel from above the knee, and when the finger is placed upon it a very decided thrill is felt. Pressure applied at the groin causes a considerable amount of pain in the corresponding foot; but the most remarkable

phenomenon observed when this is applied, is a sudden and immense increase in size of the lower limb; directly the thumb is applied upon the vessel, the calf of the leg swells out visibly, just like a sponge would on imbibing a quantity of fluid. When it is taken off, however, the limb returns to its usual size; not only is the leg affected in this manner, but the tumour increases greatly in size. The question now is, what is to be done. Mr. Fergusson had thought of placing a ligature upon both anterior and posterior tibial arteries, and then attacking the tumour in the heel, if necessary, by needles or ligatures; but a closer examination into the case has led him to view it as one in which this treatment would not be applicable, inasmuch as these vessels themselves are probably diseased. Pressure upon the femoral artery has been discussed; so, also, has amputation of the limb; but Mr. Fergusson has determined to apply a ligature to the superficial femoral artery.

January 11, 2 p.m.—The patient was brought into the operating theatre to-day, and placed under the influence of chloroform. Mr. Fergusson proceeded to tie the superficial femoral artery in Scarpa's triangle; the operation was performed low down in this space, and it was concluded in a very short time, and not attended with any peculiar circumstances.

It was immediately followed by a sensible diminution in size both of the tumour in the foot, and the enlarged vessels of the leg. Pulsation in the tumour was stopped, and it became soft and flaccid. In the evening the temperature of this limb was somewhat exalted; but there was a sensation of cold and numbness in the foot.

Next day he was suffering from a good deal of pain, which had prevented him from sleeping. The foot felt cold and numbed, and there was a peculiar burning sensation felt every now and then from the knee down the middle of the front of the leg; in the wound itself there was no pain. This pain continued in the toes and foot, and at times these parts were hot and sometimes cold, although the limb has been well wrapped up in flannel. On the 14th, the great toe and the next were discoloured, and curiously mottled patches of a livid colour were scattered here and there over the front of the leg and on the dorsum of the foot. On the 16th, these patches of discoloration were more marked, and as for the toes which were observed to be affected, they had become black, and evidently mortified. The patient suffered from constant and severe pain along the leg and in the foot, and his constitution began to feel the effects of the disorganising process going on.

On the 26th, fifteen days after the femoral artery was tied, a sudden gush of blood took place from the wound whilst the patient was straining on the night-pan,—it did not amount to more than about four ounces; but Mr. Luxton, the house-surgeon, found it necessary to bind up the wound firmly with compresses and plaister, which checked the hæmorrhage; it was thought advisable not to undo these dressings for some days, when, on taking them off, the ligature separated from the artery without further bleeding. From this period the gangrenous destruction of the parts went on with rapidity; all those parts which had, at first, been so curiously discoloured, were in a complete state of sphacelus. The poor fellow suffered constantly from the most excruciating pain night and day. The constitutional symptoms were very severe, and it was found necessary to support him well with powerful stimuli and nutritious food. Mr. Fergusson determined upon amputating the limb through the thigh, as the mortification was limited to the upper edge of the patella. This operation was performed on February 11, just above the knee, by the double flap, a long flap being made from behind the knee, and extending to the commencement of the calf of the leg; there was an immense flow of venous blood during the operation, and the stump appeared to be one large mass of vessels. Mr. Fergusson dissected away a portion of the popliteal vein, and found it so large as to admit with ease his little finger.

From the time of the operation the patient experienced great relief from his severe suffering, and his constitution slowly rallied, although healing action was slight. A small portion of the anterior flap sloughed, and consequently there was some protrusion of bone; great care was taken in dressing the flap to cover this portion well; nevertheless, it was found necessary, a month after the amputation, to remove this portion of bone, which had become necrosed; since this, the case has done well, and the stump has healed.

We shall not describe the appearances of the limb after it

had been dissected and the vessels injected, as they were mentioned in the clinical lecture of Mr. Fergusson to which we would refer for this information, and for the remarks which were made upon this case, and upon the treatment which had been pursued.

PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

LIVERPOOL INFIRMARY.

By F. D. FLETCHER, Esq.,
House-Surgeon.

FRACTURE OF BOTH OLECRANONS.

THOMAS CHEEVERS, aged 16, admitted under Mr. Halton, Sunday, May 19, 1850. On admission, he stated, that a short time previously he had fallen forwards, over a piece of timber and hurt both his arms. On examination, it was found that in each arm the olecranon was broken off. The fragments were separated from the shafts of the ulnæ by about a finger's breadth in both arms, and, on placing the finger in the interval between the fractured portions, the sharp edges of the shafts and the broken olecranons could be distinctly felt. The swelling was not great, and the fragments, although not drawn up the back of the arm to the extent that often occurs, were completely loose, and could moved in any direction. The treatment consisted simply in keeping both arms fully extended by means of straight splints. After remaining in this position for the usual time, the stiffness of the elbow-joints was gradually overcome by gentle passive motion, and the patient left the infirmary cured on July 2, 1850.

He was re-admitted under Dr. Dickinson, on January 24, 1851, with symptoms of typhus, from which he rallied; but when convalescence appeared to be commencing, it became too evident that his lungs were unsound. In a short time all the symptoms of rapidly advancing phthisis appeared; and on March 9th he died.

At the *post-mortem* examination, the ends of both ulnæ were removed; and it appeared that *perfect osseous union* had occurred in both olecranons. The signs of fracture having taken place were as follow:—Along the surface of the greater sigmoid cavity in each olecranon there ran an irregular furrow, about two lines in width, along the course of which the articular cartilage was entirely wanting. In the right olecranon this furrow was about $\frac{3}{4}$ of an inch from the humeral end of the bone; in the left, $\frac{1}{2}$ of an inch. Posteriorly there was no furrow nor projection in either bone, but in both a slight deviation from the normal line of the bone, commencing about an inch from the humeral extremity of each bone.

A line drawn from the points thus marked out would about give the dimensions of the portions which were detached. On making a section, it was found that the cancellated structure above the line just mentioned was slightly condensed, but all remains of the callus seem to have been removed.

The preceding case appears to me to present one or two points of practical interest and importance, the most striking being the complete bony union in both olecranons, which, according to all who have written on fractures near to joints, is an occurrence of extreme rarity. The completeness of the union in this case shows the efficiency of the straight position, which, although objected to by some writers on theoretical grounds, has the sanction of those most able of modern surgeons—Bell, Astley Cooper, and Liston. I should state here, that on his second admission to the Infirmary, the patient in question possessed the full use of both arms as well as he did before the accident.

This case serves also as an illustration of the time required for the removal of all signs of fracture, and coincides with all the authorities to which I have been able to refer, who give an indefinite period, ranging from the sixth to the twelfth month, as the rate for the disappearance of all callus and the complete restoration of the normal condition of the bone. In the present case, the time between the accident and the death of the patient was between nine and ten months, and, as was mentioned, the only remaining signs were the furrow on the articular surface and the condensation of the cancellated structure above the line of fracture.

THE MEDICAL TIMES.

SATURDAY, AUGUST 16.

GOVERNMENT TREATMENT OF THE SURGEON TO THE "INDIAN."

A TRAVELLER relates, that in some parts of China the forfeited life of a rich criminal is redeemed by that of a poorer and purchased substitute. The wealthy offender pays some moderate amount of money. The miserable deputy-criminal, weary of a life of starvation and toil, gladly accepts this mode of providing for his family, and resigns his head to the fatal stroke. The law literally knows no distinction of persons. Somebody has committed a capital offence; somebody dies for it; Justice is appeased, and wealth retains its privileges.

Except that in this, as in all else, we far surpass these benighted idolaters, an analogical mind may find a close parallel in what happens in England when any official crime is discovered. The philanthropy-mongers are on the alert; Exeter-hall is rampant, in all the agility and energy of its porcine panoply; the Press pours out the real counter-parts of these sham warriors, and the public is in a ferment. The chief of the Tape and Sealing-wax Office consults with his confederates; they pick out a convenient martyr from the subordinates; the wretched Jonah is thrown overboard, and the storm is allayed. Save that the Government is the criminal, and that the substitute for punishment has neither a voice in the matter nor any remuneration for his sufferings, the Chinese custom has here an exact counterpart.

We make these remarks *à propos* of the case of a member of our Profession who has thus suffered the most unmerited obloquy and reproach from the public and the Government; and whose sentence, though reversed alike by the Press and his official employers, has never been as fully retracted as it was published. On this account, even at this distance of time, we gladly lend our help to aid a calumniated member of our Profession in re-establishing his character, and, if possible, in procuring redress for his remaining grievances.

Our readers will doubtless recollect that, many months ago, the papers teemed with accounts of misconduct attributed to certain officers of an emigrant ship, the "Indian." Among other offences, the second mate was stated to have converted the women's berths into a harem; while the surgeon, Mr. Sandford, was accused of conniving at his offences, and of general negligence. We need hardly say that this gentleman has abundantly refuted the statements affecting himself. He altogether denies all knowledge of the mate's conduct as alleged; while he shows that the minor irregularities on the part of this man which came to his knowledge were reported by him to the captain. By the medical results of the voyage, and the statements of the emigrants themselves, he shows how little the charge of negligence can be made out. And, finally, he brings testimonials of moral character, showing the unlikelihood of such connivance on his part. Little as such certificates generally prove, in this instance they have been satisfactory to his worst opponents; and we shall only add, that he has not only convinced adverse newspapers, but even that mysterious and impeccable being who rules the Colonial Office. There was nothing found against Mr. Sandford except "want of firmness;" and therefore he was only mulcted of his pay!

We should like to inquire how far, in engaging a surgeon, any man has a right to expect a soldier;—how far a young gentleman, exhausted by technical studies and the fetid exhalations of the hospital and dissecting-room, can be expected to exhibit the physical courage and strength, necessary to command the respect of the vulgar, or insure the obedience of a ship's company? And still more might we ask, whether this rare and all but impossible union of qualities can, commercially speaking, be bought for the pittance offered to emigrants' surgeons? But we should be narrowing the question, and throwing away Mr. Sandford's best *locus standi*, to insist upon these points. The real fact is, that the instructions at that time issued to these officers were so deficient and contradictory, that efficient control on the surgeon's part was impossible. The captain was to be a navigating master; the surgeon, a supercargo and captain. But the difficulty of defining these limits led to the most absurd and incompatible functions being assigned to each. The result is simple enough. The captain of the Indian, probably hitherto an unquestioned despot, unused to the manners of gentlemen, and the virtual ruler of the ship, paid so little deference to the superior officer appointed by the Board as to answer a remonstrance addressed to him by Mr. Sandford by proposing a reference to fire-arms! Under such circumstances, firmness, no doubt, *was* the virtue indicated. Indeed, in future, we counsel the Colonial Office to demand it of all candidates, and to encourage and provide for its maintenance. Let every ship's surgeon be six feet high, and proportionately broad-shouldered, with black whiskers, a hoarse voice, and an unlimited stowage for grog and tobacco. Let him have a shirt of mail under that of check, a hat lined with a saucepan, a light cavalry sabre, and a Colt's revolver. Let his cabin be made shot-proof, victualled for a siege, garrisoned by a similarly constructed assistant, armed with one or two small brass swivel guns, and plenty of ammunition. Considering the risks he will run, insure his life, pay him well, and pension his widow when he gets killed. And then, and not till then,—when, if he cannot harmonise with the habits or command the respect of his subordinates, he will at least have a possibility of enforcing their obedience,—we might expect more "firmness" than was shown by Mr. Sandford on board the "Indian."

If it were not obvious that it is an excuse, and not an occupation, we should comment further on this "want of firmness." Could anything be more cruel—(more natural, some cynic will say)—than a member of a Whig Ministry administering a mild reproof and a heavy punishment for want of firmness. Ye gods! this is the unkindest cut of all! If "*laudari a laudato*" be so sweet, how bitter must the antithesis, "*damnari a damnato*," be?

But we should only waste our time and space to say more on this head. The subsequent alteration of the instructions issued to the surgeons significantly shows that there *was* an official fault, of which Mr. Sandford was unfortunately the victim; and sufficiently the victim, in the temporary shame to which these calumnies must have exposed him, and in the damage which every man suffers from a report, whether true or false, without the addition of this cruel, and unjust, and unmeaning pecuniary fine.

We cannot conceive on what principle a Government can consider itself justified in withholding the stipulated reward of fulfilled services. A private individual would be ashamed of acting thus; and every Englishman who reads these lines must blush to think, that through his paid servants—the Government—he has been instrumental, though ever so indi-

rectly, to what the vulgar would probably designate an act of dishonesty.

Aided by some of the Press, among whom our contemporary, the *Lancet*, stands in honourable relief, Mr. Sandford's character has long ago been cleared from all real stigma. We have only to regret that no Member of Parliament has taken up his pecuniary grievance, which, so long as it is unredressed, affords a handle for calumny. Of course, the so-called philanthropic party, who blackened him so joyfully on the strength of a garbled newspaper report, are too much occupied in promoting the happiness of various exotic and criminal varieties of the human race, to waste any of that time and influence for which they feel so very responsible, in merely rendering justice to an educated and upright English gentleman. But if the time necessarily lost in a voyage from the other side of the world has caused Mr. Sandford's claim to lapse—if no working Member of Parliament like Hume, or Wakley, or Roebuck, can now efficiently espouse his cause, at least Mr. Sandford may console himself with the thought, that as those who knew him never believed his guilt, so those who did not know him at length fully recognise his innocence.

THE ANNIVERSARY MEETING OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION AND THE HOMŒOPATHS.

THIS Society, like good wine, improves with age. Whatever sharp comments we may have made on its proceedings in former years, we are now in a disposition to retract, in acknowledgment of the signal service it has rendered to the cause of Medical Science by its uncompromising denunciation of the Homœopathic quackery at the Brighton meeting. May the plaudits of the Profession recompense the noble determination of the Association! Honest practitioners can hold no intercourse with impostors or imbeciles. Either Homœopathy is false, or regular practice is a fraud. If the latter be such, then, remembering that it has been practised since the creation, it is the most impudent and egregious conspiracy that was ever organised against the common sense and the welfare of mankind. The supposition is too monstrous: Homœopathy is false; and its followers are necessarily either deceivers or dupes. There can be no alliance between the two systems; they are essentially antagonistic, and there must be a broad line of separation drawn between true medical science and this mystic cabalism that affects its name and strives to usurp its credit. The world must know that medical men have openly disowned the homœopath, and that the false creed has nothing in common with the veritable and eternal principles upon which medical practice, throughout all time, has been based. Henceforth the quack can no longer trade under the medical banner. The Provincial Association has cut off the gangrenous member, the Colleges of Physicians and Surgeons of Edinburgh, have broken the alliance; the College of Surgeons of London, under the enlightened presidency of Mr. South, is prepared to repudiate the unlawful progeny; the medical institutions throughout the country are rising in unanimous reprobation of the absurd and perilous imposition. Our College of Physicians alone remains supine.

To Dr. Rose Cormack great praise is due for his persevering efforts to procure this public condemnation of the new medical heresy. He has taken much pains to expose the absurdity of the system, and the dishonesty of its professors. At the Brighton meeting he stated—

"Some homœopaths repudiate, in a sort of half and-half way

the small doses; but the public who see homœopathic doctors generally conceive that their medicines are given to them in the attenuations of Hahnemann, in quantities ranging from a millionth to a decillionth of a grain. Small doses were yesterday lauded at the meeting in Hanover-square Rooms; but these laudations were, perhaps, applauded by men who give more freely than many of us would dare to do, strychnia, and aconite, and other such like drugs, the most terrible doses of which may be administered in drops and fractions of a grain. Large doses of our common medicines, as I well know, are also every day prescribed by men who come forward as candidates for homœopathic practice among the wealthy and the noble. I have said enough to show you how vain it is to define what is meant by homœopathic practice; when" &c.

These statements can be corroborated by quotations from published records of the practice of Homœopaths. In the treatment of cholera, for example, large doses of the sulphate of copper were administered by one of these infinitesimal doctors, and the fact was boldly published to the world in proof of the efficacy of homœopathic practice in the treatment of this virulent epidemic! Dr. Cormack eloquently held up to censure the fanatical ravings of a certain Rev. Thomas Everest, Rector of Wickwar, and Vice-President of the Hahnemann Hospital, who, in a sermon preached for the benefit of the Hospital, had designated Homœopathy the "medicine of love," which prepared the way for the reception of the "gospel of love;" and who, amid much more impiety of a similar nature, had launched his charitable anathemas against regular practice.

It is important to remember that the Brighton meeting was attended by upwards of 300 medical practitioners, collected from every part of England, and embraced the *élite* of the Profession in the Provinces, as well as numerous eminent men of the Metropolis. To see such Resolutions carried with unanimity in such an assembly, is indeed a cheering sign of the times.

The speech of Dr. Williams is possessed of great value. We would implore the supine College of which he is a Fellow, to ponder well the solemn reproof which is conveyed to it in these impressive words:—"Many present must have witnessed what it has been my painful lot again and again to encounter—cases of originally tractable disease rendered intractable and hopeless by delay under the delusions of homœopathy, and at last brought under the charge of the regular practitioner at a stage when he could only lift up his hands and exclaim, 'Alas! it is too late!' Do not such awful scenes, as well as the general interests of humanity and science, loudly call for some guardian influence to warn the infatuated public with a voice of some authority? We look to our Colleges and other bodies in authority, who are, or ought to be, the guardians of the public health, and protectors of the medical commonweal. But what have our Colleges done? With the honourable exceptions of the Edinburgh College of Physicians and the Edinburgh College of Surgeons, the aristocracy of the Profession has done nothing. Then we must look to the practitioners at large; and I do think it most fitting that this great Association should speak out clearly and decidedly on this subject, for it can well speak the voice of the Profession."

The straightforward conduct of Dr. Williams upon this occasion, as well as the whole of his past bearing towards quackery, is deserving of the highest praise. In this matter of homœopathy in particular, the Profession has long been indebted to him for showing an honourable and influential example; for, years ago, as our readers are aware, he took up the right ground, and peremptorily declined to meet a practitioner of that system, though insidiously asked to do so, on the plea of its being "only for the purpose of diagnosis."

Dr. Cowan, of Reading, has long been known as the efficient and uncompromising enemy of quackery, and few provincial physicians have done more to uphold a high tone of professional morality. We hesitate not to say, that to his exertions in past times, the sound feeling evinced at Brighton ought in no small degree to be attributed.

Once more we heartily thank the Provincial Association for their resolutions, which have struck a severer blow at this *pseudo-science* than it has ever yet received. We call the attention of our readers to the Resolutions which we have published at length.

THE EDINBURGH MONTHLY JOURNAL.

OUR remarks of last week have elicited many expressions of opinion as to the pitiable conduct of Mr. Syme and his colleagues. More than one Correspondent has remarked, that Mr. Syme being blamed by one Journal published by Mr. Churchill, endeavours to injure Mr. Churchill to the utmost of his power; but as Mr. Syme is supported by another Journal, also published by Mr. Churchill, our Correspondents further inquire how Mr. Syme and his friends, with any regard to consistency, will now act.

If our Publisher is the origin of all the opinions which appear in the Journals he publishes, he is the most extraordinary man that has ever appeared, and quite worthy the year of the Exhibition. The term "myriad-minded" must be taken from Shakspeare and given to Churchill. A man of such variety of knowledge and versatility of judgment has never before been known. But the rapidity of his transitions is somewhat dazzling; and it is too much for us to contemplate Mr. Syme under the double aspect with which, it appears, Mr. Churchill can view him. As far as Mr. Syme is concerned, we can present but one phase of Mr. Churchill's mind, and our able Contemporary, the *Medico-Chirurgical Review*, must give the other. But Mr. Syme must not blame Mr. Churchill for the half opinion which he believes we give, without assigning him credit for the other half of which our quarterly brother is the organ.

Seriously, the wonder is that men occupying high positions in the Northern Athens, can allow their names to be associated on the cover of their journal with that of Mr. Syme, and permit themselves to be drawn through the mire at the dicta of their petty chief. So humiliating an illustration of toadyism could not be found south of the Tweed.

REVIEWS.

Highley's Catalogue of Medical and Scientific Works. 1851.

Any member of the Profession seeking works on the subject of his particular calling, or on the collateral sciences, will find Messrs. Highley's Catalogue a most useful book of reference; and we notice in it, as particularly worthy of praise, an Appended Classified Index of Subjects, with the names of those Authors who have treated upon them, which must considerably enhance its value. The Catalogue comprises books published within the last five-and-twenty years, excepting pamphlets and other publications of less than half-a-crown in price. It is altogether worthy of the Booksellers to the Royal College of Surgeons of England.

On the Preservation of the Health of Women at the Critical Periods of Life. By E. J. TILT, M.D. Pp. 142. Foolscap. London: 1851.

WE highly disapprove of this work, and think Dr. Tilt has been very unwisely advised to its publication. It is on menstruation, clothed in a menstrual-coloured dress, and indelicately dedicated to a lady! We will not sacrilegiously name the name of her—we blush for him who does—to

whom the Author professes to "owe much of the wholesome advice" he offers in his pages, and whose powers of endurance during "a protracted labour" he unseemly chronicles. Doubtless the book will sell,—those of the class to which it belongs generally do; but, from the Profession, it can receive naught but unqualified condemnation. Besides, it contains nothing new, and is merely a pleasantly told old wife's gossip. An *old* wife's gossip? We wish it had been an *old* wife's gossip; for then, perhaps, we might have found an excuse for the Author. Let us see how Dr. Tilt would educate a young lady. Perhaps, at the next Exhibition, he may have a model one to show. He would keep her as long as possible in the nursery, and give her the benefit of association with maid-servants. He would put her into breeches, (Dr. Tilt would be popular just now in America;) and lest she should "be taken unawares," lecture her upon the uterine functions before they are called into action. She should have an endless supply of drawers, that article of dress being essential to the formation of the female character. Her mother, "a charming woman," must teach her self-control; in other words, to resist all influence save that of constituted authority. She must scent her pocket handkerchief and warm herself at the fire according to rule. She may dance, because it is classical; but plays are forbidden, for they may relate to what seems ever uppermost in Dr. Tilt's mind—that mysterious attraction between the sexes which leads to matrimony. The innocent whose education is thus directed must not go to the opera; the idea is dreadful. What would become of the true British female, if her soul be polluted through her ears, by the band of Costa, or the singing of Grisi, Jenny Lind, and Alboni? The ballet, too! Of course, the pupil must not read novels and romances, Shakspeare or Scott, although "these works contain excellent principles, and admirable precepts of morality;" in short, no work whose influence may excite the young imagination; besides, Dr. Tilt's girls do not care "about moral axioms which are almost always obscured in the brilliancy of fiction." Oh, no! With a nursery-maid for her companion, keep her in the nursery as long as possible; let her be without imagination, without those silent aspirations which produce the purest feelings with which the female mind is blest. No! keep her to make puddings, wear drawers, take purgative medicine, think upon her courses, and consult Dr. Tilt.

We believe the author does possess the education and feelings of a gentleman, however much, in this instance, the vice of the age—writing for practice—may have led him astray. If he should ever succeed in unravelling some difficult subject, or in discovering some new method of treating disease, let him by all means publish his views; but, if he values the esteem and consideration of the Profession, he must avoid writing for the public, and more especially upon such subjects as "The Preservation of the Health of Women at the Critical Periods of Life."

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

THE Nineteenth Anniversary Meeting of this Association was held in the Music-room of the Pavilion, Brighton, on Wednesday and Thursday last, and was the occasion for a goodly assembling of medical practitioners in Brighton, many coming from a considerable distance. Among those present we noticed Sir C. Hastings, M.D., the founder of the Association; Dr. John and Dr. William Conolly, Dr. Cormack, of Putney; Dr. Forbes Winslow; Dr. Tunstall, of Bath; Dr. Ranking, of Norwich; Dr. Jenks, president elect, and Dr. W. King, of Brighton; Dr. Chalmers, of Croydon; Mr. Vallance, of Brighton; Dr. Horner, of Hull; Dr. Mayne, of Leeds; Mr. Stedman, of Guildford; Dr. Robertson, of Northampton; Mr. Bowling, of Hammersmith; Mr. Williams, of York; Mr. Cordy Burrows, of Brighton; Mr. Bottomley, of Croydon; Mr. Smith, of Salop; Mr. Propert, of London; Mr. Newnham, of Farnham; Mr. Carden, of Worcester; Mr. Crang, Finsbury; Dr. Beddome, Ramsey; Mr. Sankey, Wingham; Dr. Wake, Southwold, Suffolk; Mr. Thomson, Stratford-on-Avon; Mr. Workman, Old Ship Hotel; Dr. Robertson, North-

ampton; Mr. Tuke, Chiswick; Dr. Vauxwell, Torquay, Portland-place; Mr. Stilwell, Hillingdon; Mr. Crowdy, Brighton; Mr. Lord, Hampstead; Mr. Lawrence, jun., Brighton; Dr. Tyacke, Chichester; Mr. Duke, Chichester; Dr. Lyon, Manchester; Mr. Royde, Brighton; Mr. Horne, Brighton; Mr. Vieary, Warminster; Dr. Moore, Tunbridge Wells; Mr. Moore, jun., Tunbridge Wells; Mr. Radford; Dr. Woodforde, Taunton; Dr. Greenhill, Hastings; Mr. Ceely, F.R.C.S., Aylesbury; Dr. Challen, jun., Croydon; Mr. Bree; Mr. Bartrum, F.R.C.S., Bath; Mr. Dewsnap, Hammersmith; Dr. Malden, Worcester; Mr. Soden, Sunbury; Dr. Kirkman, Melton; Mr. Winter, Brighton; Mr. Calthurst Clifton, Bristol; Mr. Dixon, Brighton; Dr. Simpson, York; Mr. Farnereau, Christ Church-park, Ipswich; Dr. West, London; Dr. Turner, Stockport; Mr. Downs, Stockport; Dr. Bleech Lye, Hereford; Dr. Davies, Bath; Mr. Norman, Bath; Mr. Church, Bath; Mr. Sheith, Southam, Warwickshire; Dr. Hodges, Bath; Mr. Leete, Thrapton, Northamptonshire; Mr. Lawrence, Brighton; Dr. Ormerod, Brighton; Dr. M'Carrogher, Chichester; Mr. Terry, 13, Montpelier-street; Mr. Wilton, 21, Old Steine; Mr. Weekes, Brighton; Mr. Cook, Tunbridge Wells; Dr. Davies, Seaford; Mr. Collett, Worthing; Mr. Lowdell, Brighton; Mr. Luck, Bolton; Mr. Hollis, Brighton; Mr. Jackson, Boston, U. S.; Mr. Drummond, Brighton; Mr. Noakes, Newhaven; Mr. King, Brighton; Mr. Scott, Brighton; Mr. Kelson, Sevenoaks; Dr. Franz, Brighton; Mr. Rose, High Wycombe; Dr. Burrows, Cavendish-square, London; Mr. Martin, Reigate; Mr. Hatton, Manchester; Dr. Southey, Dover; Dr. Brown, Brighton; Mr. Wade; Mr. Derby; Mr. Seabrook, Brighton; Mr. Kingston, Brighton; Mr. Hornby, Yorkshire; Mr. Street, Norwood; Mr. Furner, Brighton; Mr. Reid, Canterbury; Dr. Radclyffe Hall, Torquay; Mr. Paget, Leinster; Mr. Davies, Brighton; Dr. Cunningham, Hailsham; Mr. Ewen, Lincolnshire; Mr. Taplin, London; Mr. Bell, Great Queensbury; Mr. Smith, Crawley; Dr. Dill, Brighton; Mr. Cartwright, Oswestry; Mr. Hickman, Brocton; Dr. Lyons; Mr. Hopkins, Brighton; Mr. Knowles, Birmingham; Mr. Churchill, London; Mr. Fawcett, Brighton; Mr. Beane, Peckham; Mr. Smith, Brighton; Mr. Field, Torquay; Mr. Hurlock, Brighton; Dr. Addison, Maidstone; Dr. Gibson, London; Dr. Smith, Cheltenham; Mr. Stedman, Arundel; Dr. Martin Holman, Hurstperpoint; Dr. Williams, Southampton; Dr. Edwards, Chester; Mr. Bushell, Clifton; Mr. Magan, Brighton; Mr. Pope, Truro; Mr. Crumpton, Manchester; Dr. Baly, London; Mr. Napper, Guildford; Mr. Beard, Stockport; Dr. Cowan, Beeding; Mr. Sheppard, Worcester; Dr. Snow, Dr. Theophilus Thompson, Dr. Sibson, Mr. Harvey, Mr. I. B. Brown, London; Dr. C. J. B. Williams, of Holles-street; Dr. Hodgkin; Mr. Jacob Bell, M.P.; Mr. Hodgson, F.R.S., President of the Royal Medical and Chirurgical Society; Dr. Cowan, of Reading; Mr. South, President of the College of Surgeons; and Mr. Shaw, of Cavendish-square. The Right Rev. the Bishop of Chichester attended on the second day.

The music-room of the Pavilion, appropriated for the purposes of the meeting, is, perhaps, one of the finest apartments in that gilded toy of George IV. The ornaments of the room are principally Chinese, the dragon being introduced into almost every compartment, especially into the stained glass which forms a part of the ceiling. The effect is very pleasant, and even magnificent. This apartment, although so grand, has yet such a power of resonance of sound, or rather of echoing words when loudly spoken, as to be a source of great annoyance, especially as some of the speakers seemed to think it very necessary almost to shout out what they had to say. From the proximity of Brighton to London, a two hours' run by railway, and the latter city being at present crowded by the celebrities attracted by the wonders of the Crystal Palace, it was hoped and expected that a very large number of the members of the Association would be collected. This hope was not altogether

realised in the early part of the day, but as time crept on, the members continued to arrive, and the benches at last made a goodly display; and on the Thursday much larger numbers were collected. It may be remarked, that the early part of the day at Brighton was gloomy and wretched in the extreme: rain fell in torrents.

WEDNESDAY, THE 13TH.

About ten o'clock, on the proposal of Sir Charles Hastings, Dr. Horner, the President, took the chair.

Dr. Horner acknowledged the honour: he resumed the chair, he said, only to induct thereto his successor, Dr. Jenks; he congratulated the Association that their choice had fallen upon one whose experience and ability so well fitted him for the office. (Cheers.) He would make his remarks very brief. He was pleased to find that the Association had by no means halted in its prosperous career; nay, that during the past year some very important measures had been consummated,—measures which they had long and arduously endeavoured to attain. These would be more especially alluded to, either in the Report from the Council, or possibly by Dr. Jenks himself. He thought they had much cause for satisfaction at their present position. He urged them, however, not to halt, for these were days of progress, of onward movement, of discovery. To put forth only such exertions as they had hitherto done, would really be to stand still, which would be to retrograde, to go back, to be left behind in the great intellectual march. There was greater cause than ever for their exertions; and, as the eagle was fabled to fix its piercing gaze on the sun, and thitherward unswervingly to cleave his course, so let the light of knowledge, the good of mankind, and the advancement of science be, as it were, the shining beacons of their course. With an eye that is single and a purpose that is determined, let their course be like the eagle's,—onward. He could not refrain from alluding, however, to the sad bereavement which they had sustained in the death of Dr. Mackness. He was his sincere friend. No man valued him more highly than himself. But a week before his death he wrote to him expressing his pleasure at the thought of reading an address in that room on that day. This was a very serious matter; it was one calculated to give rise to serious reflection. It was true, here was the audience collected, but where was the lecturer? This decease gave them a reason for doing their duty in that state of life to which they were called. If they were willing to exert themselves for their fellow-men, and for the great objects of the Association, now was the time that they should do it. Such a painful event also naturally awakens in the mind other feelings of a far more important nature, to which it would be inopportune, at that meeting, to allude. The words of Dr. Young were, however, very applicable:—

' Whose grave prescribes the best? A friend's.
And yet, from a friend's grave how soon we disengage!
E'en to the dearest, as his marble cold.
Why are friends ravished from us? 'Tis
To bind, by soft affection's ties, the human heart
To thoughts of death, which reason, too supine
Or misemployed, ne'er fastens there.
And yet, nor reason nor affection, nor both combined
Can break us from the witchcrafts of this world!
The inexorable hour,—how near at hand!
The inexorable hour,—how soon forgot!
Nay, to forget it the chief aim of life,
Tho' well to ponder it—is life's chief end."

There were now specific duties before them; and whether they looked at the magnificent arrangements which had been made for them, or to the high character of their medical friends at Brighton, or at the Association, now in all the vigour of its nineteenth year, he felt sure he could safely promise them a most happy and a most prosperous meeting.

Dr. Jenks was warmly greeted on taking the chair vacated by Dr. Horner. When he looked around upon that assembly composed of members of a learned and scientific profession, many of whom, by the force of intellectual zeal and power, had risen to distinction in the highest walks of literature and of science, as well as in the various branches of medicine and surgery, and considered that he had been nominated to preside over so distinguished a body, he could not but feel deeply sensible of the great honour conferred on him; indeed, he hardly knew in what terms he could make his acknowledgment acceptable. He, therefore, entertained the Society to receive his best thanks as kindly and favourably, as he tendered them cordially and gratefully. In entering on his office, he had no little mistrust of his ability, through inexperience, to fulfil its duties in a manner adequate to his own ideas, much less equal to their expectations. His predecessors had given no lack of admirable and excellent examples to all who might come after; but this very excellence augmented the

difficulties of their successors. In all posts of honour men were excited to do their best. There was a not unbecoming pride in doing more than was expected of them, and not less than others would have done; but with such an array of distinguished predecessors before him, he, in all humility and sincerity, regarded the latter hope as utterly unattainable. He must be content to follow, *haud passibus æquis*, those eminent persons who, with so much dignity and ability, had conducted the deliberations of these meetings on former occasions; and should think himself well rewarded if he succeeded in imitating their example to the satisfaction of those about him. If not, he felt persuaded that they would be generous enough to accept the intention favourably, and to think that there might be even some merit in the earnestness of his endeavours. They were met to celebrate the nineteenth anniversary of the Provincial Medical and Surgical Association; and the numbers assembled abundantly testified to its continued prosperity and importance. Great had been the benefits conferred on its members in the diffusion of knowledge, in the union of thoughts and interests, in the interchange of kindly offices, and he might add, that faithfully and extensively had the general Association been seconded in the good work by the local branches. It was happily and wisely determined by the honoured founder of this Institution to collect his widely-scattered associates year by year into one place, where minds, overwrought by the cares, anxieties, and Sisyphean labours of a busy, harassing profession, might forget a while their ever-recurring toil, and indulge freely in well-intentioned and dignified sentiments and communion by which character is exalted, mutual esteem generated, and good fellowship established and strengthened. Besides the cultivation of the social virtues, they learned the advantage of combination and concert for the advancement of professional objects, and for the public service. The difficult and much-vexed question of medical reform, the unrestricted sale of poisons, and sanitary reform, together with the legislative measures needful for their improvement, had been maturely and deliberately considered by them. Deputations from the Provincial Medical and Surgical Association had been received by those in authority with marked respect, and listened to with great attention. The resolutions formed at their meetings had taken effect, their reports been approved, their suggestions on legislative improvements adopted. In proof of this they might refer to the spirit of conciliation manifested by the Council of the College of Surgeons in their recent concessions, to the Sale of Arsenic Regulation Bill, and to the impulse given to sanitary improvements all over the country. Dr. Jenks then referred to their Journal, as an important auxiliary to their proceedings, which, he said, registered their deeds, published original essays, treasured up valuable facts, and was at once a channel for mutual correspondence, impartial criticism, and useful intelligence. The volume of transactions published yearly, he might say, without fear of contradiction, deserved a place in every medical library. From their meetings there had also emanated that excellent and charitable "Benevolent Fund" for the relief of decayed members of the Profession, and their widows and orphans. He then commented on union medical practice, to which he referred much of the existing evil as regarded the Profession, and regretted he could not announce any improvement on that head; indeed, the Committee of the Convention of Poor-law Medical Officers have suspended their meetings through want of support. After a statement of their difficulties and proceedings, they conclude their report by urging "the Poor-law medical officers and the Profession in general, to consider how much the redress which is sought, and for which so large a sacrifice of money, exertion, and time has been made by some of their brethren, is within their voluntary grasp; but that it can never be hoped for, so long as the degrading and ill-paid appointments are not merely accepted but made the objects of eager competition." How long will this spirit of rashness on the one hand and supineness on the other disturb their counsels and cast reproach upon their name and calling. Let it be remembered, that by this ruinous competition for Poor-law appointments, the real thrift and progress of the Profession are seriously injured; that by undertaking more than they can perform, medical officers share the guilt of neglecting the poor with the so-called guardians; that by receiving less than a just reward for their services, they degrade themselves and damage not only the interests of their fellow-labourers with their own, but indirectly those of every practitioner in the kingdom. Such competition degenerates into unlicensed selfishness, which can only be checked by judicious combination. These rival principles may both be considered useful when properly balanced. Some degree of honest rivalry or emulation is needful to develop the energies of mankind, and some degree of combination equally so to protect the interests of class or of profession. The remedy for this debasing system of Poor-law competition is chiefly in the hands of the Union officers

themselves, but much might be done by a Government acting upon public principles for the public good, and especially for the good of the indigent poor, who in the main are the greatest sufferers by these irregularities. Medical reform at length affords a better prospect. In the opinion of most thinking and well-informed men, the question of medical reform is now ripe, and probably none the worse for having been withheld. It has been cast into the crucible of public discussion, and has come out purified and separated from much dross. The contending parties are now wiser and better disposed to treat upon equitable terms, and it is to be hoped that, seeing the propriety of needful concessions, they will concur in a plan of practicable and useful reform, having for its basis the principles contended for by this Association, and on various occasions so ably advocated by the President of the Council and his colleagues. The consummation of these hopes is not very near at hand; nevertheless, the good already effected is great; the progress, though slow, is assured. The moral certainty of some efficient reform should console them for its delay, for there is no fear of retrogression. Meanwhile, they should remember that an earnest and truthful endeavour to improve their professional knowledge, is the best foundation for public support, and the surest weapon wherewith to defeat the bold pretenders who rise up daily around them. Men of this description, whose maxim is, *Ibi fas, uli maxima merces*, have only themselves to serve: medical men serve their country and mankind. In such a cause their efforts are ennobled, and they should rather rejoice in being called to such a service. Let not any man wonder that quacks and impostors should abound even in these enlightened days. They have abounded in all times and in all professions, and probably will never cease, for there is nothing so irrational or extraordinary that some men will not maintain for truth, feeling sure that the credulous and ignorant vulgar, rich and poor, will receive it with implicit belief. He did not mean to treat of the fashionable follies of the day, the mystifications and legerdemain of Mesmerism, the unreal mockeries and sublimated jargon of homoeopathy, nor the more dangerous excesses of hydropathy. All this has been admirably done lately by an accomplished member of this Society. He would observe merely, that such aberrations from the path of true medical science should be abjured and repudiated with firm and solemn resolution, while the professors thereof may be left to an avenging Nemesis, which will one day or other overtake them. He would, however, turn their attention to an evil which has developed itself within their own ranks—

Iliacos intra muros peccatur et extra.

There is treachery within, and war without. Open adversaries they knew well how to deal with; but it is another thing when a man's foes are of his own household. He was grieved to hear that some, even of the legitimate sons of physic, are tainted with the leaven of these new doctrines; that others, like the bat in the fable, take either side as it may suit their purpose; while a few have not scrupled, from indifference or crooked policy, to countenance this defection, or to shield it by a sort of compurgation. Against this laxity of conduct, the opinion of the Profession should be unmistakeably pronounced. To admit seceders, or doubtful allies, to the privileges of regular practitioners, or to an equality in consultation, is the same sort of treason to the Profession, as the admission of the wooden horse into the walls of Troy. Enough had been said of late, he hoped, to induce those who have extended an ill-timed indulgence to these false brethren to withdraw from further communication with them, for there must never be peace with quackery in any of its monstrous shapes,—and as to the apostates themselves, it would be well that by a self-ostracism they quitted altogether the ranks of a Profession which, by a half-faced fellowship, they dishonour and betray, lest, neglecting such admonition, they find, at length, "forbearance no acquittance." Their secession would relieve them from much embarrassment, and their hostility will have no other effect than to strengthen their mutual confidence, improve their discipline, and excite them to increased exertion. Now, "great labour directed by great abilities is never wholly lost;" and happily there never was more activity displayed, nor greater progress made than at the present time. The labourers in the field are skilful and numerous, and the harvest abundant. By the aid of chemical analysis, the microscope and the stethoscope,—by careful experiment, by patient and industrious observation, and a system of statistics based on numerical methods and averages, and, what is of no slight importance, the co-operation of an active Press, the advance in minute anatomy, physiology, pathology, diagnosis, and therapeutics, have been very considerable. After a high compliment to the Medical Press, Dr. Jenks gave a summary of the principal events of their late lamented associate, Dr. Mackness. In early life he met with sore trials and was beset with difficulties, which to many might have seemed in-

surmountable. By dint of patient industry, frugality, and an excellent understanding, wholly unassisted by favour or fortune, he cleared the way at length to eminence, and made good his position. His was no exception, however, to the rule of the poet—

Haud facile emergunt, quorum virtutibus obstat
Res augusta domi.

He sounded all the depths and passed through all the trials of medical life. He began his professional career as a general practitioner in a country village, whence he removed to a larger field of practice at Northampton; but being unequal, through ill-health, to the numerous and very arduous duties of general practice, he retired. In May, 1840, he went to St. Andrews, where he took the degree of Doctor of Medicine. In the year 1843 he became an extra-licentiate of the Royal College of Physicians, London. Soon after he had obtained his degree at St. Andrews he settled at Hastings, where he continued to practise as a physician till his death. In private life he was beloved and deservedly respected. He was a cheerful and instructive companion. His sentiments were solemnly religious, but elevated and liberal; his manners gentle and unassuming. His professional acquirements were of the highest order. To great skill and readiness in detecting and treating disease he added good sense, urbanity, and benevolence. Though fully occupied in practice, he found time for several publications. He added to the stock of medical literature (besides minor performances) a work on "The Moral Aspects of Medical Life," containing a translation of the "Akesios" of Professor Marx. In this work of our late associate some inexperience in the art of composition is apparent, but it is rich in medical ethics; contains a judicious selection of facts, and abounds in interesting anecdotes. He wrote also a monograph on "Dysphonia Clericorum," a work displaying distinct and accurate views of a disease not heretofore separately treated of, and manifesting great ability and judgment in the application of those views to practice. He was occupied in preparing a report upon the medical topography of Sussex when the hand of death removed him. He died at the early age of 46, after a life spent in much labour and sickness. It may be said of him, as it has been said of another eminent physician,—that "he worked out for himself an education, a profession, a reputation, and a competence." The learned President then welcomed the visitors to the town, and pointed out its "lions," of which he gave a lengthened and valuable historical account. Those most interesting to our readers are the institutions for charitable purposes, which are numerous. The Sussex County Hospital is a spacious building, with 120 beds. The original plan, however, having been upon a smaller scale, two wings have been subsequently added, and it has been found necessary to attach to it an additional building, which will contain a chapel, museum, and library, and afford room for dispensing medicines, and conducting the whole of the out-patient department. The ground on which the hospital stands was given by the late Thomas Reade Kemp, Esq., and more has since been added by the Marquis of Bristol; but the institution itself was projected and magnificently endowed by the late Earl of Egremont. *Clarum et venerabile nomen Gentius et multum nostræ quod proderat urbi.* Next in importance is the General Dispensary—a most useful institution. The building is large and handsome; one room thereof contains the library of the Medico-Chirurgical Society of this town, and serves for their monthly meetings. This Society was founded four years ago; it is in a flourishing state, and is very well supported. The Eye Infirmary is another valuable medical charity. There are, besides, a Self-supporting Dispensary, a Lying-in Institution, an Asylum for the Deaf and Dumb, and one also for Female Orphans. For purposes of education, besides various public establishments and private schools without number, a College has been erected, the whole design of which has not yet been carried out, but, when completed, it will be a fine building. The population of Brighton, according to the Census of the present year, is 65,000. Dr. Jenks concluded by returning his sincere thanks for the kindness and attention with which he had been listened to.

Mr. Sheppard, the Secretary, then read the Report of the Council, from which we extract some passages:—

"In meeting for the first time the members of the Association in the South Eastern District, the Council think they cannot more properly commence the Report which they are called upon to present to this, the 19th anniversary meeting of the Association, than by expressing their great gratification that the establishment of the South-Eastern Branch has led to the gathering of the members together in a locality long celebrated for its attractions.

"The number of members of the Association remains pretty much the same as at the last anniversary.

"The finances were in a sound state, and, by careful management, they hoped that the receipts would at all times be sufficient to meet the expenditure.

"The statement of the accounts was as follows:—

	£	s.	d.
Balance in hand, 1850..	109	18	6
Receipts	1616	19	7
	£1726	18	1
Expenditure	1632	14	11½
Balance	£94	3	1½

"*Medical Reform.*—This difficult question still remains unsettled, but the Council fervently hope that it is approaching a termination that may ultimately prove satisfactory to all parties. The present year has been distinguished by the Council of the College of Surgeons taking the lead of a highly conciliatory course of conduct, for which they deserve, and have received, a meed of praise from all parties in the Profession. This concession has very considerably lessened the obstacles which stood in the way of Medical Reform. There are, however, still some difficulties to be overcome, which require calm and careful consideration; but, as all parties are now animated by an earnest desire that this long contention should cease, your Council cannot but look forward to a final settlement of the question at no distant day.

"As soon as it was known that the Council of the College of Surgeons were prepared to yield so much, your Council communicated with many members of the Association and with the accredited Societies who had worked with them to obtain a legislative melioration of the Profession. The result of the consultation was, that it was deemed prudent by all parties to accept the proffered terms of the College, with some slight modifications. Your Council, therefore, thought it right to address the Secretary of State for the Home Department, and at the same time assured him that they felt gratified by the concessions which had been made by the College; they also reiterated the principles on which they considered any safe medical legislation should proceed.

"*Medical Ethics.*—The subject of medical ethics is very important, and from the commencement of our Institution has attracted more or less attention. A Committee was appointed at Worcester, to report on the subject, but has not hitherto done so, partly because of the death of one of the members, and the health of another, and partly in consequence of the great difficulty of carrying on any deliberation where differences of opinion exist, by any means except *viva voce* communication. Some progress, however, has been made in the work, and portions of the Rules are already in type. At the present juncture, it is highly desirable that we should give a calm and judicious attention to the medical ethics; for it is to be regretted, that many regularly educated members of our Profession have connected themselves, on doctrine and practice, with some of the popular delusions of the day.

"It will be by the judicious consideration of such important matters, that the advantages resulting from this Association will become more and more apparent. The inflexible adherence to correct principles and upright conduct, will thus continue to be the rallying-point of the Members of the Association, and they will evince their determination to maintain among them a sound philosophy and unblemished honour."

Dr. Cormack moved the adoption of the Report, which he believed would meet the approbation of every practitioner in the room. He himself was especially pleased with the concluding remarks, referring to the culpable laxity prevalent respecting the delusions and impostures of a certain class of practitioners.

Dr. Forbes Winslow briefly seconded the proposition.

Dr. Crisp, "as an old medical reformer," and a "one faculty man," was desirous to propose an amendment. He objected to the plan of the Council because nothing was known respecting it, and it might prove injurious. If he understood it rightly, the examination of the General Practitioners was to be conducted by the Colleges of Physicians and Surgeons, and when they have arrived at the mature age of 40 or 45, they may perhaps, on the payment of ten guineas, become Fellows of the College of Surgeons. The Charter of the College of Physicians was very illiberal, and no one could agree with its provisions. He (Dr. Crisp) did not particularly admire the constitution of the Council of the Association, because he had found that the great majority of them might soon, by the new regulations, become Fellows of the College of Surgeons, or members of the College of Physicians. He did not mean to say anything offensive to them, but the majority of the Council, he thought, would be benefited by the adoption of this measure, but such would not be the case with the Profession at large. The interests of those General Practitioners who were not members of the College of Surgeons, but who were a very numerous body, were not

looked after or cared for under this measure. He thought that with a national faculty of medicine they would get rid of the club system, and the science of medicine would obtain a celebrity which it was not likely to secure under the present system. A reform in support of the system of grades, &c., would not improve the status of the General Practitioner. He should propose an amendment, therefore, and, in doing so, would state that he had not spoken to any one in the room on the subject,—he had not provided himself with a seconder, but he trusted some one would support the views he advocated by seconding his amendment. The amendment was to the following effect:—"That in the opinion of this meeting the plan of medical reform reluctantly conceded by the Council of the College of Surgeons, supported by the College of Physicians, and recommended by the majority of the members of the Council of this Association, should not be adopted."

After a considerable delay,

Mr. Stedman, of Guildford, seconded the amendment, not (he said) because he fully agreed in all the remarks made by Dr. Crisp, but because he felt that the Council of the Association did not attend to the interests of the General Practitioners as they ought to do.

The amendment was then put from the Chair, and was rejected by an immense majority; after which, the original resolution for adopting the Report of the Council, was put, and carried unanimously.

Sir Charles Hastings then proposed, and Dr. Ranking, of Norwich, seconded the appointment of a Committee to inquire into the financial condition of the Association, and to report thereon before the close of the meeting the next day.—Carried unanimously.

Dr. Horner, Mr. Soden, Mr. Barton, Mr. Bree, and Dr. Robertson, were appointed the members of the Committee.

Dr. Robertson, of Northampton, then proposed, that the thanks of the Association be given by acclamation to Dr. Horner, their late President, and that his name be placed on the list of their Vice-Presidents. Those who, like him, were present at the meeting at Hull, could certify that the chair had been filled by Dr. Horner with great ability, and that his conduct was marked with great dignity and urbanity. The address on that occasion was one of the most excellent and interesting he had ever listened to.

Mr. Caleb Williams, of York, seconded the proposal, which was carried by acclamation.

Dr. Horner briefly returned thanks, as he considered their time too valuable to be occupied with a long address from him.

Mr. Bottomley, of Croydon, in proposing a vote of thanks to the Council said, that the Association was deeply indebted to those gentlemen for the manner in which they had performed their arduous duties, and the great labour they had bestowed on their services during the past year. He added to the proposal a request that they would continue to officiate in the Council, with the additional assistance of three more members.

The proposal was seconded by Mr. Smith, of Salop, and was carried in the affirmative.

Dr. Horner then recommended the following gentlemen to be elected honorary corresponding members of the Association:—Dr. Princoff, formerly of Manchester, now of Dresden; Dr. Goldie, late of York, now of Rome; and M. Fallorie, of Paris.

They were accordingly elected.

Sir Charles Hastings then read a report from a Committee appointed at the last meeting to consider the propriety of making any alterations in the publications of the Association. It stated, that, after mature deliberation and experience of the plan recommended at the Norwich meeting in 1846, in accordance with which their journal appeared once a fortnight, and a volume of Transactions annually, biennially, or triennially, according to the accumulation of scientific and interesting papers, it had appeared to them to be the best suited to please and serve the members. They also thought that the appointment of two editors was the best arrangement that could be made for the journal, as one was enabled to devote himself to the management of the foreign department, the other to the English, or the home manufacture. Reviews of books should be analytical, and not merely critical, and it would perhaps be better that works of an injurious tendency or imperfect character should not be noticed at all. Editorial articles should not be suppressed; medico-legal questions might be noticed under that heading; notices of reviews of works again might afford a subject for leaders, under the title of "reviews reviewed." The journal had been so well edited for some time past, as not to afford any room for complaint. The Committee, therefore, thought they ought not to interfere. It had been proposed to appoint local Committees in all the large towns, to select and obtain material for the journal, but the plan was not approved of, it being thought better to leave the supply of papers, &c., to the individual zeal of

the members. However earnest the editors might be, much of the success of their journal must depend on the members themselves. A proposal had also been offered to grant prizes for the best contributions, but this it was deemed advisable to restrict altogether to hospital reports received from house-surgeons or the senior pupils, the prize money to come from the Council fund.

Dr. Lyon said that he had been opposed to the Report at first, but he now fully concurred in all its recommendations.

Mr. Workman proposed, and Dr. W. Conolly seconded the adoption of the Report. Carried.

Mr. Bree said that he had been the Secretary to the Committee at Norwich, and in their Report, presented at Derby, they had embodied a suggestion made by a highly valued member, Dr. Wm. Budd, of Bristol, recommending that a prize, not from the Council fund, but from the funds of the Association, of not less than 50*l.*, should be awarded annually for the best original essay, the subject to be fixed beforehand by the Association. Sir Charles Hastings, it appears, thought that they had not funds that could be so appropriated, but he (Mr. Bree) thought differently. It should be borne in mind that the journal was now published only once a fortnight, and the appearance of a volume of Transactions was quite occasional, so that there must be funds in hand on that account.

Dr. Cormack then read a resolution as follows:—"That the prevalence of irregular and unprofessional practices ought to be considered at this annual assembly of the Provincial, Medical, and Surgical Association; and that a Committee be appointed to report to-morrow (the 14th) upon the course which it is proper to adopt." He would not then do more than simply propose the resolution, reserving to himself the right to explain and defend his views, if requisite. He did not expect such would be the case, and, indeed, he would deprecate any discussion then, believing that the presentation of the report of the Committee would be the best time for discussion.

Dr. Ranking seconded the proposition. Carried.

Dr. Cormack, Dr. Tunstall, and Dr. Ranking, were nominated the members of the Committee.

Mr. Vallance then delivered the Annual Address in Surgery, in preparing which, he said, his object was principally to draw the attention of his hearers, who being, like himself, actively engaged in the performance of the arduous duties of the Profession, had but little time to devote to literary pursuits, to some of the most interesting cases in surgery that have occurred during the last few months. The cases selected by Mr. Vallance, related chiefly to the operative department of surgery, and were classed under four several heads or sections, as Fractures, Aneurism, Hernia, and Stone in the bladder. Under the head of "Fractures," Mr. Vallance quoted a case of fractured bone, caused by muscular exertion. He gave the whole history of the case, with remarks, which, however, we need not repeat, as the case was taken by him from the *Medical Times* for January 25, 1851, and was reported by Mr. Chaldecott, the House-Surgeon to St. Thomas's. This kind of fracture is generally connected with some disease of the bony structure. The formation of false joints from the non-union of the fractured extremities of bone was next alluded to. Mr. Vallance observed, that this accident occurred more frequently to the humerus, and occasionally only to the femur. The various modes of treatment he stated to be, 1st, keeping the broken ends of the bone long in close and firm apposition; 2ndly, rubbing the ends of the bone roughly together, so as to excite inflammation; 3rdly, passing a seton between the broken ends of the bone; 4thly, cutting or scraping the ends of the bone with a narrow-bladed knife; and, finally, sawing off the two extremities. Among other cases of successful treatment of this accident by the seton, the following was given in brief:—"James Young, aged 70, was admitted under Mr. Vallance, into the hospital, with ununited fracture of the humerus, of six months' standing. He was, in the first instance, confined to bed, and a long splint, extending along the arm from the shoulder to the wrist, was so applied as to keep the limb in a perfectly immoveable state. The old man was allowed a generous diet. At the end of a month, union not having taken place, a seton was passed through the arm, between the fractured ends of bone, and retained there for a fortnight. This produced great inflammation, attended with discharge, and was followed by perfect union between the broken ends of the bone." A case of Professor Fergusson's at King's College Hospital, reported in the *Lancet*, for Dec. 14, 1850, was also mentioned, and commented on. In this case, section of the ends of the fractured bone, the upper part of the femur, was had recourse to, after all other means had failed. The patient died twenty-four days after the operation. A compound fracture of the thigh bone—and this operation rendered the previous injury similar to the condition of a compound fracture—is always a dangerous position for a patient, and is not frequently rendered firm. Mr.

Vallance observed, that the internal administration of the phosphate of lime, in the dose of fifteen grains three times a day, had been found of service in some cases of fracture, where bony union took place very tardily. In proof of this, he related the following cases:—Peter Collins, aged 47, a seaman, was admitted August 26, 1850, under the care of Mr. Vallance, with a compound comminuted fracture of the lower third of the left leg. After the external wound had closed, which occurred in about two months' time, the limb was put up in the egg-splint and starched bandage, but no union resulted from the treatment. He was ordered a generous diet, but no improvement taking place, on the 26th December, four months after the accident, he commenced taking the phosphate of lime in doses of fifteen grains three times a day. From this time there was a marked improvement, and, on the 5th March, 1851, he was discharged with complete union of the fracture.—Thomas Nunn, aged 19, admitted in February, 1851, under the care of Mr. Vallance, with a simple comminuted fracture of the middle third of the right leg, the result of a fall down a well. The limb was put up in the back and side splints, and, as soon as the swelling had subsided, in the egg-splints and starched bandage; but, union not taking place, and the pressure threatening to cause ulceration over a sharp edge of a piece of comminuted bone, he returned to the back and side splints, and, at the latter end of March, commenced taking the phosphate of lime in fifteen grain doses three times a day, which produced firm and good union of the fractured ends of bone. Mr. Vallance next gave a description of the method of using the egg-splint and starch bandage as follows:—"Here I would beg to allude to our method of putting up fractures in egg-splints, as, from the consolidation and firmness, as well as the readiness of their application, the materials being easily obtained anywhere, together with the reduction of the swelling which they cause, and their adaptation to the shape of the limb or joint, they can be worn, and the patient allowed to get about much earlier than under the use of any other splints. The mode of applying them is as follows:—A bandage cut up into many pieces the length of the fractured limb, soaked in egg and flour, is laid on smoothly the entire length of the limb, in a succession of layers steadily and evenly laid on; they will dry rapidly, and become consolidated, thus forming a splint of great firmness, which, when adapted on both sides, and afterwards bound up with a starch bandage, becomes perfectly hard and immovable." *Aneurisms*.—Under this head Mr. Vallance related several cases; the first, an instance of diffused, sloughing femoral aneurism, reported by Assistant-Surgeon Saunders, of the 47th Regiment, and published in the *Medical Times*, March 29, 1851. The external iliac artery was tied by Mr. Battersby, and the case terminated favourably. The plan of treatment adopted by the Dublin surgeons, of applying pressure on the arterial trunk, thereby lessening the current of blood through the vessel, as preferable to tying the artery, by the avoidance of the risk of secondary hæmorrhage, was next commented on, and the following cases were quoted as illustrative of the doctrine:—A case by Mr. Parrett, (*Lancet*, July 5, 1851) at the Royal Ordnance Hospital, Woolwich. The aneurism in this case was cured by Bulley's spring tourniquet, after it had been worn ten days. A second case, from the same hospital, published by Dr. Briscoe, in the same journal, was also successful. The tourniquet was kept applied for fifteen days. A case recorded in the *Medical Times*, for February 8, 1851, by Staff-Surgeon Dartnell, at Chatham, was spoken of as being highly instructive. The application of pressure by Dartnell's double hernia truss effectually cured the disease in sixty-seven hours. The subject of wounded arteries and false aneurisms was next adverted to, and the advice given by Mr. Guthrie in such cases, to cut down upon and tie both ends of the injured vessel, was strenuously supported. A case of Mr. Lloyd's, at St. Bartholomew's, reported in the *Lancet*, December 21, 1850, was mentioned in illustration. A boy, 15 years of age, had the right ulnar artery wounded by a stab with a knife. After the lapse of a fortnight, a false aneurism was formed. Mr. Lloyd cut open the aneurism, evacuated its contents, and tied the injured vessel above and below the wound. The patient recovered. *Hernia*.—On this head the following cases were referred to:—First. The operation without opening the sac, as practised by Mr. Aston Key (Guy's), and Mr. Luke of the London Hospital; a case operated on by Mr. Fergusson, at King's College Hospital, (*Lancet*, December 7, 1850,) terminating successfully. An interesting case of congenital hernia in a man, aged 45, published in the *Lancet*, December 7, 1850. The case is interesting and instructive from its rare occurrence; it terminated fatally. The rarity consisted in the occurrence of a hernia at the age of 45, the parts presenting all the characteristics of a congenital hernia. The patient was under the care of Mr. Critchett of the London Hospital. *Reduction en masse*.—A case by Mr. Luke, (London Hospital,) published in

the *Medical Gazette*, December 20, 1850. The patient was 72 years of age. The case is very accurately described by Mr. J. W. D. Brown; it terminated successfully. The report concludes with some remarks on the danger of using "improper force." The next case described by Mr. Vallance was an unpromising instance of hernia; patient aged 70; occurring in his own practice. The following are the details of the case.—Thomas Wood, aged 70, has had an inguinal hernia nearly all his life, on the left side, which compelled him to wear a truss. The truss broke four days ago, and he neglected to procure another; he was subsequently seized with all the symptoms of strangulation, viz., constant sickness, great pain and tenderness of abdomen, swelling of the hernia to double its ordinary size, and its becoming very painful and hard; bowels ceasing to act, &c. He sent for a surgeon, who attempted to reduce the hernia by the taxis, but not succeeding, bled him largely, used the hot-bath, and gave him calomel, with castor-oil, &c. These means failing to afford relief, on the second day he proposed operating, but the patient would not consent; he therefore determined to try the effect of opium, and administered one grain of the muriate of morphia, which considerably depressed the vital powers, but did not assist the return by the taxis. On the evening of the third day Mr. Vallance was called in, and found his patient suffering great pain, with tenderness of the abdomen, particularly over the seat of the obstruction; constant vomiting and hiccough; pulse 135; tongue dry and furred; anxiety of countenance, with restlessness, etc. The tumour was very hard, and very painful, about the size of the fist; extremities cold. Upon opening the sac, which was much thickened, the bowel was found to be very dark, almost black; after division of the stricture it was returned, and the patient put into a hot bed, with hot water to the feet, &c.; a cup of gruel was given, which remained on the stomach. In half an hour he had rallied considerably, expressed himself as feeling comfortable and free from sickness, and the skin was becoming warm. The following morning he was much improved; the vomiting had quite ceased; the skin was warm and moist; pulse 120; countenance placid; had had one motion, liquid, and passed wind frequently. Tongue cleaning; but hiccough still troublesome. Ordered sesquicarb. ammonia, gr. viij., in mist. camph. every two hours, which relieved him after the third dose. To have beef-tea and gruel every two hours, and a composing draught at night. The next morning pulse 120; tongue moist and cleaning; abdomen less painful, and soft; bowels moved eight times; skin acting freely; countenance tranquil; expresses himself as being very comfortable; wound dressed, and looking well. To have arrow-root and brandy alternately with beef-tea, every two hours; and a dose of tinct. opii. gr. xx. in his first cup of arrowroot, to be repeated at night if the bowels are still purged. 3rd day.—Improved in every respect; slept well; bowels quiet; abdomen soft, and free from pain, except over the strictured portion, and there much less than yesterday. Pulse 118; tongue moist, and still cleaning; skin gently perspiring; enjoys his food. In fact, he is progressing fast towards convalescence. A week after, the sac suppurated and sloughed away, and the wound healed by granulation, and a month after the operation he came to Brighton, and had a truss fitted. This case is very instructive, from the length of time allowed to elapse before the operation was performed, from his great age, as well as the powerful remedies that had been adopted, (as he would not consent to the use of the knife,) the state of collapse he was in, he being in fact almost sinking, and from the instantaneous relief following the operation; relief so great, that he only required plentiful and free support to restore him to convalescence. There have been thirteen cases of hernia operated upon in the hospital during the last year, and only one death. Mr. Vallance next gave the particulars of a case of thyroid hernia, under Mr. Stanley, in St. Bartholomew's Hospital, (*Lancet*, May 10, 1851;) he also alluded to a case of hernia of the obturator foramen, which occurred in the Sussex County Hospital, and one of omental hernia in the same hospital, the preparations of both which cases are in the hospital museum. They happened ten years ago. He added to these a case of complicated inguinal hernia, under the care of Mr. Featherstonhaugh, of the Gateshead Dispensary, and one of intra-abdominal hernia, under Mr. Curling, at the London Hospital, (*Lancet*, July 20, 1850.) A case of strangulated femoral hernia, under Dr. Bowman, at King's College Hospital, was also mentioned. The sac in this case sloughed away, and the patient ultimately sunk. *Stone in the Bladder*.—1st. Treated by lithotrity. Case by Dr. Massey, of Nottingham; patient aged 49; detritus after the operation weighed seven drachms. (*Lancet*, March 8, 1851.) Another case of Dr. Massey's, the patient aged 69, detritus weighed ten drachms; stone crushed in seven sittings. Case of Mr. Curling's, at the London

Hospital, complicated with stricture and enlarged prostate; patient aged 54; the fragments and detritus were all removed by the lithotrite scoop. Mr. Vallance described this as "an extraordinary case." 2ndly. Treated by lithotomy. He gave a case occurring under Mr. Erichsen at University College Hospital (*Lancet*, Nov. 23, 1850), which illustrated the difficulty occasionally arising from the calculus lying up over that part, and the advantage gained in such cases by pressure over the pubes, by which the extraction of the stone is facilitated. Two cases of Aston Key's were referred to, in which pressure had been equally available. That age alone is not always an objection to the operation, is shown by the results of a case operated on by Mr. Gisborne, of the Derby Infirmary, and reported in the *Provincial Medical and Surgical Journal*, Oct. 16, 1850. The patient was 80 years old. Two large calculi, one weighing ten, and the other seven drachms, were removed by the lateral operation, the patient recovering. The calculi had been in the bladder for many years. *Stone in the Female*.—Mr. Howard, of Buckingham, operated on a female patient, 23 years of age, with Weiss's dilator, and succeeded in removing a stone weighing two ounces four drachms. The patient was ultimately enabled to retain half a pint of urine in the bladder at a time. In this case, the operation was rendered more difficult than usual, by the contraction and fixed position of one of the lower limbs, the result of previous hip-joint.

The thanks of the Association were given unanimously to Mr. Vallance for his excellent address, after which, the meeting adjourned for one hour.

Mr. Norman expressed his gratification at the practical selection of cases made by Mr. Vallance, and proposed, that the cordial thanks of the Association be presented to him, and that he be requested to allow his address to be printed.

Mr. Carden, of Worcester, seconded the proposition.

The President, having added a few words of high compliment, put the question, which was carried unanimously.

Mr. Vallance returned thanks.

Sir Charles Hastings then read a letter from Dr. Babington, the President of the Epidemiological Society, inclosing some papers relative to the objects of that Society, and requesting that they be submitted to the meeting. Dr. Babington added, that some of the Life Assurance Societies had subscribed largely to the funds of the Society. This he (Sir Charles Hastings) feared their financial condition would not enable them to do, although the objects of the Society were worthy of all support, and, indeed, formed a part of those originally contemplated by the Association. He moved, that the documents sent by Dr. Babington form part of the proceedings of the meeting.—Carried unanimously.

Dr. Smith, of Cheltenham, expressed his wish to bring before the meeting a subject of great importance, and one which demanded their serious consideration,—he meant, the ill-advised Income-tax, from which they had long iniquitously suffered. It was oppressive, unjust, and something more. He put the case of a medical man, who, just after he had made his return and compounded for three years perhaps, was taken seriously ill, and was unable to exert himself. He had no appeal in such a case, and would be unable to recover any portion of the money he had paid for the tax. He (Dr. Smith) was opposed to it altogether; the mode of assessment was bad. An oath of secrecy was certainly taken; but what security was there that that oath would be regarded when these clerks had left their situations? He had himself compounded for three years, and was overcharged some 20%. He went to pay the money, and he could have seen, had he so chosen, the books with the names, etc., of many of his neighbours, so as to become acquainted with all their affairs. There were many other persons present, tax-payers as well as clerks, to whom the amount of his payment, and, consequently, of his income, could be readily made known. In fact, there is no secrecy about it; that plea is all a farce. The Profession should exert itself to cast off this oppressive burden. The agricultural interest had succeeded in obtaining a modification of the tax, as regarded themselves, and they should do the same. With regard to the assessed taxes, he did not see the justice of taxing the English Medical Practitioner and allowing the Irish medical man to escape; nor could he think it right that, as regarded the new House-tax, the medical man should pay 9d. in the pound, and the merchant, who was rolling in wealth, should pay only 6d. He proposed that they should appoint a Committee to investigate the subject of taxation, as acting injuriously and oppressively on the Medical Profession.

Mr. Newnham, of Farnham, seconded the resolution.

Mr. Lord, of Hampstead, mentioned the case of a medical friend who was taken ill, and obliged to leave England, and travel for a year or two in Spain. The official papers were sent after him. He valued his income at what it had been, and paid accordingly. On his return, he found that his practice was entirely ruined; never-

theless, in spite of repeated applications, he could not get back any portion of the money he had paid for Income-tax. This was indeed a gross and heavy infliction. God helps those who help themselves; and if they, as a body of men, submit to such aggression, they would be inflicting an injury, not only on themselves, but on the community at large. He cordially supported the resolution. (Carried.)

The following gentlemen were named as the Committee:—Dr. Malden, Worcester; Mr. Colthurst, Bristol; Mr. Fowler, Cheltenham; Dr. Cannon, Cheltenham; Mr. Lord, Hampstead; and Dr. Smith, to act as Secretary.

Dr. Horner read the following Report on the Finances of the Association:—

"We, the undersigned, being a Committee appointed by the General Meeting of the Provincial Medical and Surgical Association, report to the Meeting, that, with the assistance of Sir Charles Hastings, the Treasurer, and Mr. Crompton and Mr. Hatun, the Auditors appointed at the meeting of 1850, we have carefully gone through the accounts of the Association, and that we find the statements laid before us as under are perfectly correct; and we think the Association is under a debt of obligation to Sir C. Hastings for the time and trouble which he has devoted to the pecuniary affairs of the Society.

"We find that the balance in favour of the Association in 1849 was 16*l.* 2*s.* 6*d.*; in 1850, 109*l.* 18*s.* 6*d.*; and that the cash balance in favour of the Association up to the 31st July, 1851, is 94*l.* 3*s.* 1½*d.*; and that it has been reported to us by the Treasurer, that the subscriptions due up to this period are 1050*l.*

"F. R. HORNER, Chairman.

"A. ROBERTSON.

"JOHN S. SODEN.

"C. R. BREE.

"JOHN S. BAITMAN."

Mr. Parker moved, and Mr. Newnham seconded, the adoption of the Report. Carried.

MEDICAL BENEVOLENT FUND.

Mr. Newnham read the sixteenth Report of this fund. The Committee congratulated their subscribers on the change of place of meeting to London, which was very advantageous; the harmony and efficiency attending their deliberations; and, lastly, on the enlargement of their income. For the past year, to June 30, it amounted to 540*l.* 1*s.* 4*d.*, being nearly 50% more than on the previous occasion, notwithstanding many causes operative against it. The amount of donations has been lessened, the previous year having been one of special appeal; 188*l.* 15*s.* 6*d.* was the amount received; 214*l.* 14*s.* 6*d.* have been invested in Bank Stock, the permanent fund now amounting to 1200*l.* in Bank Stock, which, at the present price of that stock, would produce 2,568*l.* Four annuities were granted during the past year, and two half-yearly payments have been made, amounting to 75*l.* The further carrying out of that plan must depend on the support they receive. The activity and zeal with which the officers of the British Medical Fund have acted, have operated injuriously against this fund, but the Committee, far from undervaluing it, consider it likely to be of the greatest assistance to the Profession, as medical men are generally poor. Often many are men in sufficient income, while the value of their lives is much below that of other professional men. The British Fund is, however, essentially a provident fund; but this, the Medical Benevolent, is intended for those upon whom misery has fallen without they having been able previously to prepare for it. Facts have shown that no early prosperity can secure the medical man or his family from the possibility of future distress; and, while this should awaken them to the importance of making provision for the future, it should also fully arouse the noble and Christian sentiment of sympathy and active benevolence towards the sufferers in their hour of need. Let those who have much, give of their abundance: let those who have little, give gladly of that little, and assuredly they shall not lose their reward. The history of the past year clearly shows the necessity that exists for a purely charitable fund, for the relief of a great mass of professional misery, which is unrelieved and unrelievable by all the provident institutions combined, and therefore the necessity for the existence of the Medical Benevolent Fund becomes every day more and more apparent. During the past year, relief has been afforded by it to 46 applicants, at a cost of 464*l.*, besides the sum of 75*l.* paid to annuitants, making a total of benevolent aid during the year of 539*l.* The relief thus given has not only been efficient, but it has been discriminating: the cases have been minutely investigated, and those only have been aided who could bear this examination, and be proof against a searching ordeal. Still the relief has been inadequate. Five or ten pounds have been given, when their judgment told the Committee more was

requisite. They regret that the Fund has not been supported by the Profession as it merits, those who are above needing its assistance probably thinking their brethren in the same condition, or have contented themselves with private charity, forgetting that this Society has the means of investigating cases, and thus preventing imposture. The early payment of the subscriptions was urged, as from want of it last year, their proceedings were nearly arrested, and would have been, but for the advances of their treasurer—*Qui cito dat, bis dat!* In conclusion, the Committee thanked their non-professional friends and subscribers, especially their treasurer and banker, Sir W. Farquhar, and the medical press generally, particularly the *Medical Gazette*. They further stated their intention to have a public dinner early in the next spring, in behalf of their objects.

The Report was signed, "Wm. Newnham, Chairman."

DONATION FUND.

Dr.		Cr.	
Amount invested to		Amount previously in-	
July, 1850 ...	£2,179 10 6	vested... ..	£2,179 10 6
Interest for the year ...	62 10 0	Balance due to Trea-	
Donations for the year ...	188 15 6	surer, July 1, 1850 ...	11 9 6
	£2,450 15 6	Annuities, Nov., 1850 ...	37 10 0
		Do. May, 1851 ...	37 10 0
		Purchase of Bank	
		Stock, July, 1851 ...	214 14 6
Per contra	2,480 14 6		£2,480 14 6
Balance due to Trea-			
surer	29 19 0		
Value of Bank Stock invested £1,200 at 214: £2,568			

SUBSCRIPTION FUND.

Dr.		Cr.	
Balance, July 1, 1850...	£33 1 1	Benevolent aid to June	
Subscriptions to June		30	£464 2 6
30, 1851	540 1 4	Nichols, for stationery	
	£673 2 5	and printing	20 16 6
		Envelopes and stamps	26 15 10
		Advertisements, and	
		expenses of local Se-	
		cretaries	5 0 2
Per contra	516 15 0		£516 15 0
Balance in Treasurer's			
hands	£56 7 5		

DISTRIBUTION OF BALANCE.

Donation Fund due to Treasurer	£29 19 0
Subscription Fund in Treasurer's hands	56 7 5

Dr. Wm. Conolly, in moving the adoption of the report, congratulated them on the steady though slow progress of the fund. During the past year they had changed their location from Cheltenham to London, which was better adapted for their purposes; and they had found that the donation fund had reached to the amount at which they had determined to grant annuities. Their fund is a purely benevolent fund, not being confined to the members, but its advantages extended to all who are in distress. He proposed a request to Mr. Newnham to continue his services.

Dr. Thompson, of Stratford, seconded the resolution, which was carried unanimously.

Mr. Bottomley observed, that he had long been a subscriber to the Surrey Benevolent Fund, of which he is now a life member. It had been established since 1812, and was now in possession of 5000*l.* stock. He believed there were similar Societies in the different counties, and if so, they *pro tanto*, diminished the chances of their Fund.

Mr. Newnham expressed his thanks for the kindness of the Association. The shadows of evening were lengthening around him, but he would continue at that work while it was yet day. He then commented on certain cases submitted to the meeting, and showed that the fund mentioned by Mr. Bottomley was a provident, and not a purely benevolent fund; it had about twenty members, but the relief afforded was confined to those who belonged to it. The provident part of it is of course to be commended, but still they should not forget their brother when in distress. As Dr. Conolly truly said, theirs was a truly benevolent, not a mere provident, fund. There is a similar Institution in Ireland, and Mr. Newnham read extracts from its reports.

EMPIRICISM.

Dr. Malden, of Worcester, read a talented paper on the progress of empiricism, which we shall publish at length in our next.

[PROGNOSIS IN INSANITY.

Dr. Conolly made some observations as to the probable recovery of patients labouring under insanity—a question, he said, often of great importance to families, and, indeed, to all who have relatives so suffering. The general practitioner, in such cases, seeks to ascertain whether the insanity depends on functional disorder, or

on structural change. The last seems to shut out all hope, but functional disorder may endure for life, or may pass into structural change, while some few alterations of structure may be recovered from. Where they exist before the period of puberty, they generally cause imbecility or idiocy, many cases of which have been found to admit of a certain amount of physical and mental improvement. These results of course are producible only in well selected cases, and not without the greatest care and watching. The disease, in these cases, may occur through dentition or at puberty. The morbid changes may occur in the male as well as in the female, but not so frequently, perhaps. The least unfavourable cases are the hysterical, the disease not being permanent, but giving way as the constitution improves; the most distressing, when the moral feelings are changed; such are generally incurable. In some cases the good and bad qualities are often intermingled, and if not duly attended to, the moral disease may become past help. Young women are generally more under control, but they have some peculiar influences, more or less associated with the organs of reproduction, and on the re-establishment and due performance of the functions of those organs, their recovery may depend. Women are less liable to insanity than men, and more frequently cured. If the uterine functions improve, without any corresponding improvement of the brain, the patient becomes imbecile. The shape of the head is worth notice. Those who have a well-developed front brain, even when the back part is in excess, are more likely to do well than when the front part is ill shaped. From 20 to 45, the passions are in full action; during that time, if the insanity be accompanied with great violence, and the attack sudden, there is more probability of a cure than when the disease came on gradually. In those cases where the attack is sudden, and attended with great and repeated violence, there is usually danger, as the patient may die from exhaustion. Insanity may terminate in imbecility. In those instances there are some, attention to whom may be of service. They have hitherto been passed over as beyond hope; nevertheless, now and then they get better—something rouses them and brings them round. The cases in which sudden recovery may be expected are those of women with functional uterine disorder. Other cases are not of such easy explanation. A case occurred at Hanwell, in the person of a young man, suddenly after a sleep; he remains well. Esquirol says, acute mania has a tendency to get well in a month's time. The complication of insanity with epilepsy is unfavourable; it indicates organic disease, and the patient soon sinks under it. Illusions of the senses, of sight and hearing, incoherence of speech, dirty habits, etc., if they occur in recent cases, may disappear, and may return; but, if they supervene in an old form of insanity, they serve to indicate that it has become incurable. Delusions respecting the possession of high rank, great wealth, power, etc., especially if associated with hesitation of speech and tremors, indicate the existence of incurable disease—of general paralysis, which is sure to make progress. Few thus attacked survive the fifth year; many die by the end of the second month. It may occur in any station of life, with a well-formed head and active brain; but is rarely met with among women. Religious delusions are more frequent among women than men, but they often recover; and he (Dr. Conolly) believed that they frequently depend on uterine or ovarian derangement or excitement. Melancholia in women of forty-five or fifty years of age is generally very obstinate, but may be recovered from. It is more difficult of relief in man, who generally lingers a few years, and then dies of consumption. Mania occurring upon melancholia is often dangerous. When it is intermittent it is generally unfavourable. Puerperal insanity is usually thought to be a very curable disease. In his (Dr. Conolly's) private practice he could not recollect a case in which a perfect cure did not take place. Nevertheless, in all or nearly all these cases, there was an hereditary predisposition to insanity. Mania in young men, caused by intemperance, is curable by abstinence. Should they again become intemperate, the disease will relapse, and lead to permanent cerebral disease. In some cases insanity and general paralysis may come on, dependent on head injury received years before. In the impairment of the mind from over exertion, the prognosis is seldom favourable; nevertheless, intellectual labour is less dangerous than a profound mental shock or impression. When residence in a hot climate has subjected a person to congestion of the brain and meninges, it is hardly possible for him, when recovered, to return there. Patients have sometimes, after a long duration of insanity, apparently got well. It is not advisable to set such persons at liberty until the cure is rendered assured by careful watching.

Dr. Conolly having been warmly thanked for his lecture, the meeting adjourned for an hour. The members then re-assembled in the banquetting-room, and did full justice to an ample dinner

provided for the friends by the Brighton members of the profession. The meeting, after partaking of the excellent cheer set before them, broke up in excellent harmony.

THE MEDICAL TOPOGRAPHY OF SUSSEX.

At eight in the evening the members assembled in the Music-room to hear Dr. Mantell lecture on "the Medical Topography of Sussex." He commenced with a geological description of the country between London and Brighton, as laid bare by the railway. Beginning at London, he showed that the metropolis was geologically situated over a basin exactly similar to that of Paris, and that it was as favourably placed for the formation of an artesian well as Grenville, near Paris, where a magnificent example existed of the triumphs of geological knowledge, the fact that water would be obtained by boring not only being predicted, but also the temperature at which it would be received when spouting from the bowels of the earth into the air. Geologically journeying to Brighton, he showed that, after meeting the red sand formation, we arrived at the chalk at Merstham, after which we came again to the red sand formation extremely impervious to water; first, there being a stiff argillaceous clay, often requiring six horses instead of two to draw the plough through it; and then Red-hill, so called from the ferruginous colour of the clay there. Dr. Mantell then proceeded to express an opinion that ague, typhus fever, etc., depended not altogether on dampness, but from something generated in a locality. Years ago he was practising as a surgeon at Ringmer and in the surrounding parishes, and so distinctly did he find fevers confined to a district where the blue clay succeeded the chalk, that at his representation the healthy chalk site of the old barracks was retained by Government for use in the event of another war breaking out. In fact, a geological map, denoting the locality of the blue clay, would denote peculiarly the region of fever. Dr. Mantell then mentioned that ague, typhus, &c., used to prevail on the low grounds contiguous to the river at Lewes, but not on the chalk; and an instance of the periodical attack of fever in the autumn, of a family living on the top of the chalk hill, which was got rid of by the removal of an accumulation of dung from a large stable. Some cases of cholera in the neighbourhood of a large uncovered sewer at Chelsea, were also mentioned as showing the local origin of disease. He also spoke of the theory of a French physician, who came to England in the last time of cholera, that cholera depended on the galvanic condition of the rocks of the district. He conceived that alternations of sand and clay gave rise to galvanic action; and, with his theory in mind, he traced the progress of the cholera in France and England. He said he had been to the Registrar-General, who told him that cholera was owing to the poverty of the people, to dirt, and to stink; but, he added, "You have always poverty, and dirt, and stink, but not always the cholera." Both in France and England they found no cholera on the chalk, except in one place. After the lapse of half an hour, Dr. Mantell resumed his lecture, and described the discovery by himself in the Weald, of the teeth, bones, skull, of the iguanodon, and pointed to a drawing of the natural size, of a bone of the Pelorosaurus, which was probably a living animal eighty or ninety feet in length.

THURSDAY.

The President took the chair at twelve o'clock; and immediately called on Dr. Cormack to bring up the Report of the Committee on Irregular Practice.

Dr. Cormack said: I have the honour, Sir, to be commissioned to offer for the acceptance of this great meeting the report of your Committee on irregular practice. Although the terms of our appointment might have justified a more general notice of the prevailing delusions and impostures of the day, we have thought it best to direct your attention solely to what is called homœopathy, as along with it are almost invariably associated other systems of charlatanry. (Cheers.) I am anxious to state, at the outset, that we have not thought it necessary to adopt the language of controversy, and we have endeavoured principally to mark out the necessity of excluding from this Association three classes of practitioners; first, those who really (and many of them honestly,) practise homœopathy; second, those of a mixed or bastard breed, who practise homœopathy, in combination with mesmerism, hydropathy, allopathy, or *any pathy* which the patient may fancy the most; and third, those who, under various pretences, hold professional intercourse with homœopathic practitioners. It is not necessary, in this assembly, to prove that homœopathy is a mere chimera—a system opposed to reason, common sense, and all medical experience; but, I may, in a few words, give you a brief synopsis of what Hahnemannism is. Dr. Cormack then stated, that there were three leading doctrines, or rather dogmas, promulgated by

the German dreamer. 1st. That all diseases depended upon three inherent taints, the principal one being the itch, or psora, as he called it; 2nd. That "like cures like"—*similia similibus curantur*; and 3rd, the giving of infinitesimal doses. With regard to all of these chimera, Dr. Cormack averred that they had no scientific basis, no facts to rest upon; and the statements made about medicines acting when divided into the decillionth of a grain, are so transcendantly nonsensical as to be entertained even as a subject of consideration, for an instant—only by an unhealthy mind. The simple fact is this, that Hahnemann's doses cannot be demonstrated to exist, and are so small that the mind of man can form no conception of their minuteness. Some homœopaths repudiate, in a sort of half-and-half way, the small doses, but the public who see homœopathic doctors generally conceive that their medicines are given to them in the attenuations of Hahnemann, in quantities ranging from a millionth to a decillionth of a grain. Small doses were yesterday lauded at the meeting in Hanover-square Rooms; but these laudations were perhaps applauded by men who give more freely than many of us would dare to do, strychnia, and aconite, and other such like drugs, the most terrible doses of which may be administered in drops and fractions of a grain. Large doses of our common medicines, as I well know, are also every day prescribed by men who come forward as candidates for homœopathic practice among the wealthy and the noble. I have said enough to show you how vain it is to define what is meant by homœopathic practice, when I mention, that, at a recent meeting of the Annual Congress of homœopaths, there was present, as a large participator in the business, Dr. William M'Donald, who, besides being a homœopathic practitioner, is a leading man as a believer in, and lecturer on the highest degrees of Mesmerism. Then Dr. Macleod (whose autobiography I hold in my hand), the keeper of a water-cure inn at Benrydding, in Yorkshire, is a chosen champion of homœopathy, —a man whom the *Homœopathic Times* delights to honour, and who treats his patients by globules and wet sheets. But, besides the legitimate and the bastard homœopaths, there is another class of men who have no right to sit with us as brethren on these benches, nor be associated with us in this Society. (Applause.) Regarding this class, I wish to say little, but that little must be plain, and it is this,—that we must not—not one member of this Association must hold professional intercourse with those traitorous men who meet at the bedside with those whose medical creed and character I have, though perhaps too mildly, depicted. A broad line of demarcation must be drawn, and it must be done this day. (Loud cheers.) Private friendships have perhaps made some of us too long in adopting the painful, but only right course. To error or imposture there never can be made an honourable concession. (Hear, hear.) After adverting to other subjects in the Report, Dr. Cormack said he approached the next topic with feelings of the deepest pain and sorrow. He continued: I will not yield to any man in my respect for the sacred office of the ministry; myself the son of a clergyman, I have always felt that the only other calling more noble than our own is that of preaching the everlasting Gospel; but, when clergymen assail us from the pulpit and injure our influence with our patients by their zeal in converting proselytes to Hahnemann, neither delicacy nor duty exacts from us silence. Numerous facts have been laid before your Committee, from which we have ascertained, that in some districts of the country the zeal with which the clergy have taken up homœopathy knows no bounds, and many of our brethren have had their patients wiled away. I would not have ventured, however, to bring this prominently before you, did I not hold in my hand a sermon preached by a Rev. Vice-President of the Hahnemann Hospital, in Bloomsbury-square, from which it is necessary that I should read to you some extracts. The preacher was the Rev. Thomas R. Everest, Rector of Wickwar. He selected his text from the Gospel of St. Matthew: "And as ye go, preach, saying, the Kingdom of Heaven is at hand: Heal the sick, *cleanse the lepers*, raise the dead, cast out devils; freely ye have received, freely give."—Chap. x. 7, 8. In this text the Rev. gentleman finds revealed the doctrine of Hahnemann! But I will give you his own explanation of the words of the Evangelist,—"*Heal the sick and cleanse the lepers. Cleanse the lepers!* Why pick out disease at all from among the ills of men? And if so, why that particular one? Why not blindness, or madness, the stone, or the dropsy, rheumatism, or the gout?" Thus you see, that the leprosy of St. Matthew and the psora of Hahnemann are the same thing. That, in fact, is the grand idea of the sermon. But we are also told that the great redemption was not complete, or, at least, not available to fallen man, till Hahnemann appeared! I almost feel, Sir, that the passage is too awful to recite before you; but I must do it to save myself from the charge of misrepresentation. "At the fall of man sin entered into the soul,

and disorder into the physical frame (with which that soul is connected) at the same moment. God sent his Son to repair the mischief, and he bade his ministers 'preach the Gospel and heal the sick;' that is, cure the moral disorder and the physical disorder together,—and for 1900 years that precious wisdom has cried in the streets unheard. The preacher of the Gospel, not aware that that Gospel could have never free course until the physical leprosy of man was cleansed and his chronic tendencies cured, has handed over to a separate Profession the business with which his Lord entrusted him; and that Profession, unconscious of its privileges, its duties, its powers, has, so to speak, ignored the whole question. It leaves those mad whom it might have cured, or it maddens men by large doses of powerful medicines, and then we wonder at the crimes and folly that mark the career of man. Let us be assured, brethren, that there is in the Gospel of Jesus a life, a power, a spirit, which is so much in harmony with man's happiness, and brings with it so much good, that if it had been understood by those who teach it, and had had fair play, it would long ago have altered the whole face of society. But, in spite of Moses, in spite of Jesus, in spite of the law of nature, alike deaf to God's voice and blind to facts, the medical Profession has left the leprosy of the flesh to entwine itself with the leprosy of the soul. Between the two, man's tendencies to sin are increased by the disorders of his reason caused by the abnormal working of his machinery; and the Gospel finds in that individual in whom God intended that all should be normal, but with whom it can only communicate by means of nerves in a chronic state of irritation, and a brain in discordant working, not a gentle convert, but a hardened criminal, a perverse unbeliever, a furious fanatic, or an eccentric, unreasoning lunatic. But old things are passed away, behold all things are made new. (Expressions of horror.) Let us now see what the new system proposes to do for the human race;—that is to say, let us see what homœopathy can do to complete the Christian system. This extract, Sir, is almost too blasphemous to have been read, even though my argument required it. I apologise. ("Hear," and cheers.) The next extract which I shall read is an appeal to the pockets:—"Mothers! do you wish to see your children washed clean of that leprosy tendency to disease which fills our graveyards with sweet young flowers cut off untimely, and which, to those who survive, transmits a legacy of pain, sin, and sorrow? Then aid us! Fathers! do you wish to see your sons grow up faithful Christians and sensible men, with a normal allowance of health, able to use calmly the reason which God has given to man for his comfort here, far from all extravagance and all eccentricity, holding a course of life steady, reasonable, religious—such a course as man, healed, God-fearing, and intellectual, should hold? Then aid us! Governors of God's heritage, Monarchs, Parliaments, Magistrates! there is a gloomy thundercloud collecting on the horizon, rolling its deep masses over the face of day, threatening, lurid, portentous, but no man knows exactly of what. It is called Socialism, Communism, the Rights of Man, the Rights of Labour, the Red Republic. It is earnest, dark, sombre, avenging. It has been lashed up by hunger, low wages, glaring inequality, *wicked passions of psoric origin*, roused by alcohol and medicines, maddened by burning eloquence. It has no strain of gentleness in it. It is arrested neither by ridicule nor menace. There is not one smile or one jest hidden beneath its fantastic swirls. The sword has cleft it, but it re-unites more baneful than before. The cannon has poured its iron hail against it, but it rolls on as dense and as red as ever. The priest has cursed it—society trembles to hear of it; but there it hangs, in the calm that precedes the earthquake, baffled, perhaps, but biding its time, till the 'hour come, and the man.' Shall I teach you to draw the lightning quietly from it ere it bursts upon your throne and your altar, and piles all your institutions into one heap? Aid us!" I must inflict one more extract upon you: it is the preacher's account of the *medicine of love*:—"The medicine of love" (that is homœopathy) "has prepared the soul for the Gospel of love. The seed of the Word will soon strike root in such a soil, and bring forth much fruit; not the fruit of thievery and crime, afflicting folly and snarling religion that exists at present, but a wholesome crop of sensible actions and sound opinions ripened by the steady rays of reason and religion. Growing up thus amidst calm and sunshine, and love and harmony, induced by *the medicine of harmony*, the education of the young candidate for heaven commences. The first care of the parents is, by proper dynamic medicines (for medicines in a brute, material state, having a totally different action on the human organism, are perfectly useless, or rather merely injurious), to eradicate all those psoric tendencies which cause or increase all our aches, pains, ill-temper, obstinacies, rebellions, cachexias, and all chronic diseases. (Laughter.) Life in the beginning does so long for harmony, that, if thus gently

aided, it soon overrides all discordant tendencies. The molecular attraction proceeds normally. The infant develops into a normal child of the normal type, in whom all tendencies to irregularity, whether of body or mind, growth or disposition, are much weakened and simplified. It has never been exacerbated by *frantic doses* of powerful medicines,—never been excited by poisonous diet, never been beaten into obstinacy, never imitated the quarrels of its elders, never been spoiled into selfishness, never indulged into evil tempers; continuing the physical education, and watching carefully the cries which life utters for assistance, in order to relieve her just where and when she wants aid—never by mere palliatives, but always by dynamic remedies whose energumenic power, akin to life itself, has been subtly awakened and called forth from the brute mass in which it lay slumbering, and, if well chosen, will, by its unfailing elective attraction, restore to life at the very spot, by the very nerve wherein it labours, the very force in which it is deficient, you commence the moral and religious training of the child. Plain, simple, easy, and charming is *the good news of great joy*." So much for the medicine of love; let us now hear what the preacher says of our system of medicine:—"There was once a marriage made in heaven, but you put asunder those whom God joined together, when you separated the healing of the sick from the preaching of the Gospel, and made two professions out of that which Jesus made one; and, therefore it is that the art of cure, separated from the holy principle of love, has lost its way and fallen into foul company, and consorted with all unloveable things—cathartics, moxa, the lancet, emetics, and blisters." Now, Sir, this sermon was preached in aid of the Hahnemann Hospital, and under the patronage of much of the wealth and aristocracy of this country. Emblazoned on its title-page, we find the names of His Excellency Chevalier Bunsen, His Grace the Duke of Hamilton, the Earl of Wilton, the Earl of Shrewsbury, Lord Robert Grosvenor, M.P., and many other noblemen and members of Parliament. To such lists we are generally referred triumphantly. I would only say, that it would not be difficult to add to them the names of many members of Parliament, noblemen, bishops, and archbishops. But, Sir, I have yet to learn, that such men are safe guides in matters of medical experience. Not all the coronets and mitres in England can transform a lie into the truth; and layman though I be, I hesitate not to proclaim in this public Christian assembly, that the sermon from which I have quoted is replete with quackery, heresy, and impious doctrine. (Prolonged applause.) [We have not room to follow Dr. Cornack through the remainder of his address, which was listened to throughout with the greatest attention, and which he concluded by reading the following Report]:—

"Your Committee have, after consultation with numerous members of the Association, maturely considered the subject referred to them, and beg respectfully to suggest the adoption of the following resolutions:—1. That it is the opinion of this Association that homœopathy, as propounded by Hahnemann, and practised by his followers, is so utterly opposed to science and common sense, as well as so completely at variance with the experience of the Medical Profession, that it ought to be in no way or degree practised or countenanced by any regularly educated medical practitioner.—2. That homœopathic practitioners, through the Press, the platform, and the pulpit, have endeavoured to heap contempt upon the practice of medicine and surgery, as followed by members of this Association and by the Profession at large.—3. That for these reasons it is derogatory to the honour of members of this Association to hold any kind of professional intercourse with homœopathic practitioners.—4. That there are three classes of practitioners who ought not to be members of this Association, viz., 1st, real homœopathic practitioners; 2nd, those who practise homœopathy in combination with other systems of treatment; and 3rd, those who, under various pretences, meet in consultation, or hold professional intercourse with those who practise homœopathy.—5. That a Committee of seven be appointed to frame laws in accordance with these resolutions, to be submitted to the next annual meeting of the Association.—6. That the thanks of the Association are eminently due, and are hereby given, to the Presidents and Fellows of the Royal Colleges of Physicians and Surgeons of Edinburgh for their determined stand against homœopathic delusions and impostures.—7. That the thanks of the Association are also due and are hereby given to the Universities of Edinburgh and St. Andrew's, for their resolution to refuse their diplomas to practitioners in homœopathy; but the Association feels imperatively called on to express its disapproval of any school of medicine which retains amongst its teachers any one who holds homœopathic opinions.—8. That these resolutions be printed, and transmitted to all the medical licensing bodies and medical schools in the United Kingdom; and that they likewise be inserted in the *Times*

newspaper, the *Morning Post*, the *North British Advertiser*, *Saunders's News Letter*, all the British and Irish medical periodicals, and in such other journals as the Council may sanction upon the recommendation of the branch associations. In proposing these resolutions for the adoption of the Association, your Committee are anxious to state, that they are actuated by a strong sense of the importance of the subject in its relation both to humanity and morals. They most conscientiously believe that the countenance afforded to the form of charlatanism herein alluded to is detrimental to the true interests of the public, as it is subversive of that strict integrity which ought to characterise practitioners of medicine, and which has ever distinguished the profession in these kingdoms.

"JOHN ROSE CORMACK, M.D., Edin. Fellow Royal Coll. Phys. Edin. (of Putney).

"JAMES TUNSTALL, M.D., Edin. (of Bath).

"H. H. RANKING, M.D., Cantab. (of Norwich.)"

Such, then, (continued Dr. Cormack) is the report of your Committee; and we now ask you to adopt it as an expression of the sentiments of this Association. Let us say our whole mind plainly, firmly, and calmly. Silence would be far better than the giving forth of a feeble and uncertain sound. (Dr. Cormack resumed his seat amid prolonged cheering.)

Dr. Malden moved the adoption of the Report.

Dr. C. J. B. Williams said, that he had been asked, on entering the room, to second the adoption of these resolutions; and, although quite unprepared, he had no hesitation to do so, and to express a little of what he felt on the subject. It was high time that the Profession should speak out, for quackery was rampant through the land, and, with homœopathy foremost, was deluding and entrapping the rich and poor, the wise and the simple, in one awful infatuation. Yes, indeed, awful! for the game was played not only with the health and the properties of the victims, but with their lives—nay, he might almost say, with the fate of body and soul! Many present must have witnessed what it has been my painful lot again and again to encounter, cases of originally tractable disease rendered intractable and hopeless by delay under the delusions of homœopathy, and at last brought under the charge of the regular practitioner at a stage when he could only lift up his hands and exclaim, "Alas! it is too late!" Do not such awful scenes, as well as the general interests of humanity and science, loudly call for some guardian influence to warn the infatuated public with a voice of some authority? We look to our colleges and other bodies in authority, who are, or ought to be, the guardians of the public health, and protectors of the medical commonweal. But what have our Colleges done? With the honourable exceptions of the Edinburgh College of Physicians, and the Edinburgh College of Surgeons, the aristocracy of the Profession has done nothing. Then we must look to the practitioners at large; and I do think it most fitting that this great Association should speak out clearly and decidedly on this subject, for it can well speak the voice of the Profession. The public have great need to know really what homœopathy is, and why the Profession condemn its absurdities; nay, there are even medical men, who much as they disapprove of quackery in general, are more tolerant of homœopathy, because they have not really found out what it is. In a report of a homœopathic meeting in the *Times* of yesterday, the reporter compares homœopathy with medicine, by remarking, that the medicine swallowed by one of the ancestors of the speakers, would have sufficed for all the homœopathic establishments in Golden-square; but this shows that the reporter did not know what homœopathy is. Our ordinary doses could be reduced to homœopathic proportions only by dividing one man's dose among ten thousand times the inhabitants of the whole earth! (Applause.) In fact, homœopaths deal with figures and numbers that are quite incomprehensible and inconceivable; and they need some such comparisons as this to show their enormous absurdity. He would appeal to the chemist and natural philosopher, who could appreciate minute realities, whether such numbers as decillionth, treccillionth, and the like, are not nonsensical, as applied to experimental agents. One of the most delicate chemical tests known, might just detect one hundred thousandth of a grain in solution; but homœopaths claim the power of influencing and overcoming diseases by an agent a million times more minute! And it is by such preposterous notions as these that they profess to oppose powers which derange function and destroy structure: it is on such ineffable absurdities that fashionable fools rely for aid in sickness, and it is with those that profess belief in such inanities that some of our Profession have degraded themselves by consulting. (Cheers.) Believing, then, nay, knowing, as we do, on the grounds of reason and experience, that homœopathy is entirely a fallacy, we must feel it our bounden duty to discountenance it in every way, and

to lose no opportunity to warn the public against its mischievous sophistry. (Great cheering.)

Dr. Crisp gave the Edinburgh College of Physicians no credit whatever for their resolutions: they acted under the irresistible influence of the pressure from without. As for the Medical School of the University, Dr. Henderson, the Professor of Pathology, actually taught homœopathy within its walls. Dr. Crisp approved of the Report with that exception.

Dr. Horner rose to correct Dr. Crisp. The Edinburgh Colleges fully merited the compliments bestowed upon them by the Committee. They had condemned homœopaths, and removed Dr. Henderson. (Cries of "Not yet!")

Dr. Cormack would explain how the matter stood; and he was glad to have an opportunity of doing so, as he knew that there were in many quarters inaccurate ideas prevailing. This was the state of the case:—The Medical Faculty of the University and the College of Physicians were two entirely distinct bodies. The members of the former were not the patrons of the Chairs of Medicine, and they had no power to remove Dr. Henderson from the Chair of Pathology—that privilege could only be exercised by the patrons, the Town Council. The Medical Faculty, however, had done all they could to prevent Dr. Henderson from poisoning the minds of the students, as they had, by their control over the department of clinical teaching, at once, on his heresy becoming known, removed him from the clinical wards; and Dr. Cormack had learned on the best authority, that Dr. Henderson, though he practised homœopathy, had not dared to teach it. The resolutions of the Edinburgh College of Physicians were believed to be making some impression upon the patrons; and he (Dr. Cormack) trusted that the news of the enthusiasm and unanimity of this day would reach Edinburgh, and produce a good impression. If the members of the Association wished to aid in relieving the University of Edinburgh from an encumbrance, they must adopt this Report in its integrity. (Cheers.)

Dr. Cowan, in a speech of great eloquence and power, supported the motion of Dr. Malden. He said that homœopathy was only a part of certain influences which characterised the age in which we live,—an age full of intellectual dangers,—and which manifest themselves in matters of religious belief, and in other sciences besides that of medicine. The Church, as well as our Profession, was infested by a species of homœopathy; there, too, were men teaching the very opposite of that which they were solemnly set apart to inculcate. (Applause.) A homœopath, said Dr. Cowan, I always distrust in his judgment of every subject. Belief in homœopathy is but the symptom of a mind without stay or ballast, liable to be driven hopelessly into any folly,—liable to spurn to-day what it yesterday believed. We regret that, from the rapidity of Dr. Cowan's delivery, we have not been able to do more justice to his admirable address, which produced a great impression upon the audience.

The motion that the Report be adopted was put from the Chair, and unanimously agreed to.

The following Committee were then appointed in terms of the fifth resolution:—Dr. Cormack, of Putney; Dr. Tunstall, of Bath; Dr. Ranking, of Norwich; Dr. Malden, of Worcester; Dr. C. J. B. Williams, of London; Sir Charles Hastings, M.D., of Worcester; and Dr. Cowan, of Reading. Dr. Cormack to be convener.

On the motion of Dr. Tunstall it was unanimously resolved, that the proceedings in reference to this subject be printed and circulated among the members.

THE JENNERIAN PRIZE.

Mr. Bree gave notice, that at the next anniversary meeting, he should propose that 50% of the funds of the Association be appropriated to the foundation of a prize in honour of Dr. Jenner, the apostle of vaccination, the said prize to be called by Jenner's name.

THE SALE OF ARSENIC.

Dr. Sibson read the Report of the Committee on the sale of arsenic, and congratulated the Association on the successful results of their efforts to put a stop to that fearful amount of poisoning which has been going on for a long while in this country, even up to the present summer. The Report showed that two important clauses, introduced into the Bill in the House of Lords, were so introduced at the suggestion of the Committee. The Report was signed by Dr. Toogood, Dr. Sibson, and Mr. J. Bell, M.P.

Dr. Tunstall moved, and Sir C. Hastings seconded, the adoption of the Report.

Dr. Theophilus Thompson mentioned that he had lately been applied to to sanction the sale of half an ounce of that powerful poison, strychnine, for the alleged purpose of poisoning a grouse

mountain to destroy poachers' dogs. He mentioned this, as by such means great numbers of persons might lose their lives.^(a)

The Report was then unanimously adopted.

SUMBUL.

Mr. Bree exhibited a specimen of the sumbul-root, and of its alcoholic and ethereal tinctures. He stated that, in its action, it was antispasmodic and stimulant. In Russia it had been used successfully in the treatment of epidemic cholera. Dr. Granville, who has published a descriptive pamphlet, was the first to make the British members of the Profession acquainted with the virtues of this Oriental drug; and the Messrs. Savory were readily induced to import it freely.

THE ADDRESS IN MEDICINE.

Dr. W. King delivered the Annual Address in Medicine. He commenced by expressing his unwillingness to undertake the task, as it implied the power on his part of communicating to his brethren information respecting the art and science of medicine which they did not possess, or such a concentration of the present truths of the Profession as might amount to a similarity or analogy with those mighty discoveries in chemistry, whereby a single drop of a substance is made to possess a virtue and an efficacy only to be found in former days in an infinite number of drops. He said he had neither the ambition nor the power to be a discoverer in the proper sense of the word, and he thought that there was quite enough known for the most important purposes of life, if medical men would but carry into practice the spirit of our great predecessors. The best thing a man can do is the application of the truths of science to common life. He can make himself acquainted with all the truths that are known in medicine and all the collateral sciences, and can distinguish in each case of discovery what part of it is appropriate, and what not. He is the true discoverer, although the world at large may never become acquainted with his name. Dr. King further stated, that he might give a concentration of all that is at present known, but even if he were capable of doing this, it would have the appearance of a "tuition lecture." He should, therefore, content himself with some desultory remarks on the present state of the Profession, its claims to public respect, and its future prosperity. He commenced by observing, that Sussex, upon the whole, is one of the healthiest counties in England. It is one of the four in which the inhabitants attain to the greatest age. This, he said, was owing to the very large proportion of the down-land and sandstone, and the small proportion of clay. The general aspect of the county is long and narrow. The centre is occupied by sandstone running east and west, rising occasionally to a considerable elevation in a county comparatively flat, and sufficiently so to afford a large space of land suitable to health and longevity. The contour of the country is such that it naturally drains itself, so that there are not any large reservoirs of water to cause malaria. The courses of the rivers are the most unhealthy, but they are but a small part of the county, and should rather be regarded as drains than as sources of malaria. The chalk hills and the valleys which run among them cover a large part of the land, and are proverbial for health. The valleys have a considerable depth of earth above the chalk, evidenced by the fine trees growing in them; no stagnant water collecting in them. Brighton itself is considered as far above the general standard. The air, soil, and water are salubrious. The fishermen live in close, confined houses, badly arranged, in narrow alleys, called twittens, and many of the old ones settled a foot or two in the earth; the windows are small, and not intended for ventilation. In fact, years ago, Dr. King says that the medical man who spoke of ventilation was thought a philosopher and not a physician. Brighton is well situated; it lies upon a slope from north to south, and the aspect is rather to the south-east,—an aspect recommended for salubrity ever since the days of Hippocrates; the evaporation of the morning dew and the peculiar influence of the direct rays of the morning sun, carrying with them the virtues of light, heat, chemistry, and electricity being all-important to the vitality of the vegetable and animal kingdoms. Upon the surface of the chalk lies a bed of sand of unequal thickness, through which the rains from the hills percolate, until they find an exit upon the beach and in the wells in the south part of the town. The purest water in Brighton is to be found in a spring upon a shore opposite the battery, Hove. It contains iron, and runs northward to the chalybeate hill, where there is a chalybeate spring, first brought into notice a century ago, by Dr. Russell. This spring is impregnated with carbonic acid by machinery, so as to render it more

agreeable and efficacious. It cannot, however, compete with the springs of the Continent, where volcanic agency influences the solution of the iron, &c. Dr. King believes, from long experience, that the superior efficacy of the higher mineral waters depends on their influence on the blood, and their imparting to it a higher vitality. Ordinary medicines, especially purgatives, act more superficially, and, in many cases, as mere irritants, and frequently aggravate the very evils they are meant to remedy, unless administered with the nicest judgment; while the higher mineral waters enter immediately into combination with the blood, by which their action is rendered mild and gentle, and often, at the commencement of a course, imperceptible, but, in the long run, more powerful than ordinary medicines which at first appear stronger. Dr. King thought it much to be regretted, that the artificial mineral waters were not generally used by the Profession, by whom they would be, he thinks, much appreciated. When known, he says, they must be esteemed, because they are specific, i.e., they possess virtues that no other medicines do, and they will cure peculiar diseases which no other medicines will do. He (Dr. King) believes, that, in the next generation, no large town will be without an establishment of artificial mineral waters, of the higher and more complicated kinds. He paid a high compliment to Dr. Struve, by whom these waters were introduced into Brighton. He introduced all the ingredients; others had, previously, only used what they considered to be the more important, and the result was, they found the effects produced were dissimilar to those they expected. Dr. Struve's experiments were made first in the Carlsbad water, and he found that the omission of the silex, apparently so unimportant an ingredient, materially modified the results. His experiments subsequently were thoroughly successful. In consequence, Dr. King sought to introduce the use of water aerated with carbonic acid into the hospitals and into private practice, other than by effervescing draughts, which he considers to be useless, and he derived the most beneficial effects from the use of the carbonates thus prepared. A not expensive apparatus has since been originated for the purpose of aerating water, with the addition of a small quantity of the alkalis. He (Dr. King) explained the beneficial influence of these waters by saying, that the acids of the stomach combine with the alkalis; the carbonic acid being then set free, is absorbed with advantage; and the alkalis are conveyed into the mass of the blood, of which they form a component part, the blood being consequently purified and vitalized. The apparatus just mentioned, he trusted would be introduced into hospital and private practice. Westward from Brighton, after Shoreham and the river Adur have been passed, there is a wide level plain extending for some miles, and lying between the Lea and the Downs. The soil and climate of this district up to Arundel are remarkably mild and temperate. The part between Shoreham and Worthing, more particularly around the village of Lancing, is (continued the Doctor) a more desirable spot for delicate individuals and those predisposed to consumption, than any place usually resorted to for that purpose,—either the Isle of Wight, Torquay, Madeira, or Malta. The soil is rich and alluvial; fruit of all kinds, especially figs, arrive at great perfection there. At the village of Tarring, a little to the north-west of Worthing, there is a large garden of standard fig-trees, which from time immemorial has supplied London with some thousands of ripe figs annually. The village of Lancing is surrounded by the finest groves of elms, utterly uninfluenced by the violent winds from the south-west, which is not the case in any other part of the county,—the trees and hedges elsewhere turn towards the north-east, from the prevalence of the south-west gales. This at Lancing may be owing to the shape of the hills, etc., by which the currents of the winds are broken. There are houses in the King's-road, Brighton, which never feel the highest winds, though they face the south. Whenever two currents of water are opposed to each other, there is a point between them which is at rest, and where any sediment they contain may be deposited. So, with air in motion: two opposing currents destroy each other. In riding over the Downs in windy weather, spots of entire calm will now and then be met with. Such is the situation of Lancing and the neighbouring district, which he (Dr. King) asserted will, when it is known, become the great resort of invalids, and supersede all their usual resorts. Dr. King then proceeded to speak of the present state of the Profession, first paying well-merited compliments to Sydenham and Haller. At the time of his pupilage, physiology was struggling into birth; diseases were disconnected with structure; they rested in symptoms, and the causes of symptoms were wrapped in obscurity. Even now medicine is the most difficult of all studies. The facts are often so complicated, the causes so subtle, and the remedies so delicate, that it requires, more than any other, a patient, truthful, and sagacious mind. It is this dif-

(a) Large quantities of strychnine are sold to the agricultural interest for the destruction of birds and vermin. We have heard of one farmer who lately bought about 70*l.* worth at one purchase. He showed himself as well acquainted with the mercantile value, qualities, and action of the poison as any manufacturing chemist might be.—R.E.P.

ficulty which exposes it so much to quackery, the inseparable companion of ignorance. The public being incapable of judging, are more liable to be led by assumption and confidence, than by sober and modest truth. The study of organology, the application of chemistry to the component parts of the body, and the secretions and excretions, and to the ultimate elements of remedies, has made the study of medicine a new thing, and has placed it among the sciences. The improvements resulting from the use of the microscope in physiology, and in the pathology of the fluids and solids, were next touched upon, and also the assistance derived from chemistry,—the great discoveries connected therewith, such as the law of definite proportions, the discoveries in electricity, galvanism, and magnetism; the interest in the last-named being continually increased in the hands of Faraday and others, by their discovery of new and intimate relations between it and vitality. Liebig was next spoken of as one of the giants in chemistry, and commended for having popularised parts of the science, and made it richly subservient to physiology. To Dr. Bence Jones credit was due for applying the views in chemistry to obtain important results in practical medicine. So great are accumulations of science at the present day, that a single mind cannot grasp the whole of one subject; of those who do study, it may be said that, in spite of their ignorance on some subjects, their knowledge of others is greater than that of the greatest of their predecessors. The great hospitals become schools in medicine, in which science is taught step by step; the gradations through which the student passes are very judicious, their teachers zealous and indefatigable. No study is better calculated to form and exalt both the intellect and the heart than that of medicine properly pursued. Its first principles, as displayed in structure, are strictly mathematical, both in the mode in which the parts act on each other, and in the relative strength of the structures. It then rises to a vital chemistry of the highest order, inasmuch as it is subservient to thought and mind. It also shows how closely misery is connected with any departure from the laws on which our whole nature of body and mind is constructed. The humblest practitioner of the present day is better acquainted with the principles of his profession than was the most learned physician fifty years ago. As a science, medicine did not then exist: there were facts in abundance, but they insulated without connecting principles. The General Practitioners, who now constituted the great bulk of the Profession, the most laborious, and, in some sense, the most useful, were then as a body unknown. He (Dr. King) believed they were gradually brought forward by the wants of the army, navy, and East India Company, by the terrible crises and exigencies of the revolutionary war. Sir A. Cooper, Abernethy, and others, the successors of the Hunters, sent forth their pupils all over the world. Abernethy had a more medical and physiological mind than Cooper. These, and a few others, were the fathers of the College of Surgeons, which ought to have formed one body with the General Practitioners; if the General Practitioner of the present day stands higher than the pure physician or the pure surgeon did in the last generation, it is but a barbarous anomaly to continue him in the same habitat which belonged rightfully to his ignorant predecessor, because he was ignorant. A preliminary classical education, tested by examination, should be secured before the studies proper to the Profession are commenced. The universities would still be open for those who would wish to take a student's life, and the higher grades of the Profession. Education, in the most extended sense of the word, can never lose its value. It will always gild everything it touches. The unity of the Profession Dr. King again commented on, showing that then the libraries and museum would be common property, and that then a Medical Benevolent and Retiring Fund, as is the case in the East India Company, might be instituted by statute. The objects to be aimed at in future, are, to go on with improvement, not reform. The noblest possible motives lead us on,—the investigations of the hidden powers of nature, and the relief of suffering humanity. Dr. King concluded his address in the following words:—"I honour the Profession, not because I belong to it; but I belong to it because I honour it. In choosing a profession, I looked around for one whose service was perfect freedom; in which I might study truth unfettered by the inquisition of darker ages; for truth is Nature, and Nature is Providence. I felt that man was a being whose life consisted in the discharge of deep responsibilities; that the vital principle of mind was progressive truth; that only to God himself is truth a finality; but that to man, in his childhood and manhood, in his barbarism and civilization, truth is but the first link in a chain of endless dimensions; that, till the finite equal the infinite, there is no bar to the progress of man; that all those arts, or sciences, or professions, which lay claim to a finality, are inconsistent with the nature of man and the revealed will of the Creator, who proposes to us no less a model than that of his own Divine Son, to whom we are continually approxi-

mating, though we can never hope nor presume to think of reaching. So I thought when young; much more meet is it I think so when my sand is nearly run out. Let no man be so unhappy as to think that he can separate power from mind. The power which keeps the planets in their spheres, which performs the chemistry of mineral, vegetable, and animal life—which gives vitality to the blood, and thought to the brain—which makes the human body a magnet, and gives omnipresence to the electric wire, is all one. That power, which once divided the sea to separate nations, has now given the electric wire to unite them. There is a time for all things; a time to divide, a time to unite; a time for war, and a time for peace on earth and good will towards men. In proportion as His children have learned the use of power, He has granted them more. Discovery is the presentation of new powers to those who have rightly used the old ones; and who, in England, so rightly use the powers of knowledge and science, as the 20,000 or 30,000 medical men, who not only go about, after the example of their Great Master, 'doing good' by day, but who do not even sleep at night if the cry of pain is heard at their doors?"

Dr. Malden proposed a cordial vote of thanks to Dr. King, with a request he would allow his address to be printed. (Applause.) He spoke highly of Dr. King's comprehensive views, and sound and deep feelings, his warm heart, and friendly manner. He felt sure these would be appreciated by them all.

Dr. Hodgkin seconded the proposal. Carried unanimously.

MEETING AT MANCHESTER.

Sir Charles Hastings then drew the attention of the meeting to the requisition from Manchester, calling on them to meet there next year; and he added, it was generally understood that they were to visit that city in 1852. It was one of their most important localities, and had afforded them great support. For 1853 they were urgently solicited to visit a town in an Eastern County. Ipswich was named, and many reasons were alleged why it should be the town selected; but he had reason to know, that if Cambridge were to be the place of their reunion, the Ipswich medical men would not be displeased. He then proposed that the meeting for 1852 should be at Manchester, that Mr. Wilson be the President elect, and Dr. Eason Wilkinson deliver the annual address in medicine. Carried.

Mr. Hatton expressed his gratification at this decision, and stated that his colleagues would do all that was possible to show their welcome.

THE TYPE OF DISEASE.

Mr. Caleb Williams, of York, read a paper in abstract on the type of disease, in the course of which he showed that its character had greatly changed within the last thirty years, both as regards inflammatory affections and fevers. In the former period, disease was decidedly sthenic, and large and repeated bleedings, with other antiphlogistic remedies were required and borne. The form of disease is now entirely adynamic. Measures, even in inflammation of the important internal viscera, at all approaching in severity to the antiphlogistic treatment of thirty years' since, would either destroy the patient by exhaustion, or cause a break-up of the constitution, with dropsy, etc. The change commenced in 1822 or 1823, and has continued to progress ever since. The signs of disease are equally modified, and give clear indications of the great change operated in the type of disease.

HUTCHINSON'S SPIROMETER.

Dr. Radclyffe Hall, of Torquay, read an abstract of a paper entitled, "Observations with Hutchinson's Spirometer," concluding with the following, which he offered as provisional propositions, to be confirmed or refuted by further inquiry:—1. The close connexion between the vital capacity and the stature, which constitutes Dr. Hutchinson's greatest and very important discovery, throws into the shade its other relations; yet size of chest, as measured by its circumference, does appear to exercise an influence when not nullified by co-existing with a small thoracic mobility. 2. Narrow chests more constantly possess a full mobility than broad ones, both being healthy. 3. Consequently, both size and mobility are to be taken into account in estimating the significance of the vital capacity; for, if a large chest with a large mobility present even a moderate vital capacity, this may virtually imply greater defect than a smaller vital capacity in a chest of the same size, but which, normally, possesses a smaller mobility. 4. The only exact standard for any individual being his own normal vital capacity when in health, and this being rarely ascertainable, we must be guided by what we can learn of departure from it, by examining the chest and its amount and kind of mobility, rather than by the actual degree of deviation of the vital capacity from the standard quantity laid down. Thus, a given deficiency taken in conjunction with any other ground of suspicion adds force to the latter; but, in the entire absence of such, taken alone, it does not necessarily indi-

cate anything abnormal. 5. The limit of deficiency from the standard quantity laid down, which is consistent with health, cannot be stated with precision. It is probably a variable quantity, special in every individual. The author apprehends that the limitation to 16 per cent. will be found too low in adult males, and considerably too low in females. 6. Dr. Hutchinson may not intend his standard scale of vital capacity to be applied to females, or to males before the completion of visceral growth. For both these classes the standard is too high. 7. When a deficient vital capacity co-exists with any cause of impatience of holding the breath, or with hurried breathing on slight exertion, which is not on other grounds referable to the lungs, it does not by itself necessarily indicate disease of the lungs. This, which is but a truism in the case of ovarian dropsy, and such-like causes of dyspnoea, also applies to cases of anæmia and of chronic disease of the liver, in which a small vital capacity need not by itself induce suspicion of tubercle in the lungs. 8. When the evidence furnished by the spirometer is distinctly favourable, it is valuable, trustworthy when taken singly, and needs no qualification. But, when the evidence appears to be unfavourable, although still valuable, it is not trustworthy when taken singly, but requires to be carefully checked by every other means of diagnosis, more especially by the use of the chest-measurer, before we can justly deduce from it the existence of any deviation from health.

CHEST-MEASURER.

Dr. Sibson exhibited an improved form of his "Chest-measurer," an instrument for showing with minute accuracy the movements of breathing. The chest-measurer which Dr. Sibson exhibited four years since, at Derby, and with which he made the numerous observations in his paper in the "Medical and Chirurgical Transactions," on "The Movements of Respiration in Disease," was an instrument perfectly answering its purpose, but too bulky for general use. To render it portable, Dr. Sibson detached the small watch-like part of the instrument, which showed the respiratory movements, from the framework which supported it. That framework was itself much lessened in size, and made somewhat in the form of callipers. In general, the hand can hold the detached measurer of movement with sufficient steadiness. Dr. Gairdner suggested the separation of the instrument into two parts. Dr. Williams the employment of callipers. Dr. R. Quain has recently contrived an ingenious instrument, resembling Dr. Sibson's, which measures the movements of the circumference of the chest. Dr. Sibson's former instrument measured the movements of the diameter of the chest, those movements being the most important to ascertain. By adapting a thread and tape to the new instrument, which is made by Mr. M'Douall, an ingenious watchmaker, the movements of the circumference, as well as of the diameter, can be shown. The chest measurer is of practical value. It shows when and where the movements are modified by disease. It thus points to the seat of disease. If, for instance, one upper lobe is affected with phthisis, the movements over that lobe are lessened. If there is pleuritic effusion into one side of the chest, the movements over the whole of that side are lessened, annihilated, or even reversed, while those of the other side are exaggerated. If there is bronchitis or emphysema, with great obstruction to breathing through both lungs, the lower part of the sternum and the adjoining costal cartilages actually fall in, instead of advancing, during inspiration. If there is acute disease of the lungs or pleura, the ordinary movements over the unaffected lung are exaggerated, but they are only slightly increased when a deep inspiration is attempted. If, on the other hand, the lung, though no longer the seat of active disease, is crippled by adhesions or otherwise, through a bye-gone attack, then the ordinary movements are lessened over the crippled lung; but they can both there and elsewhere be much augmented during a deep inspiration. It is important to note the symmetry of the respiratory movements. When the symmetry is unaltered, or when the movements are abnormally lessened or increased to an equal extent over every part of the chest, there is seldom any disease in the lungs themselves. If there be peritonitis, the abdominal movements are lessened or arrested, while the chest movements are increased.

THE DURATION OF LIFE AMONG THE PATRIARCHS.

Mr. Smith, of Southam, exhibited a diagram to show the duration of the lives of the ante-diluvian and of some post-diluvian patriarchs, with the offences which led to the shortening of that duration. On looking at the table, it appeared that each time the duration of life was lessened it fell one half, and each time the change followed some great sin, such as disobedience, pride, idolatry, and lust, hardness of heart, and unbelief, in the wilderness.

THE MEDICAL BENEVOLENT COLLEGE.

Mr. Lord, of Hampstead, in the absence of Mr. Propert, drew

the attention of the Association to the approaching establishment of the new Benevolent College in connexion with the Medical Protection Society. A proposal had been made by the managers of the Protection Society to set aside a certain proportion of their profits for the establishment. When the affairs of that Society were transferred to Mr. Propert's hands, he conceived the idea of forming a Medical Benevolent Society on a large scale, with a college for decayed and infirm medical men, or for the widows and orphans of deceased medical men. They had already 2,100l. The original expense for building is calculated at 20,000l., and the annual expenditure at 1,500l. The College was intended to receive 100 pensioners, and there are to be schools attached for the education of the sons of Medical men, at a certain stipulated payment of 25l. a-year for board, lodging, and education, and also for a certain number of orphans, free of charge. Mr. Lord urged on medical men to support this Institution, and averred that it had many and irrefutable claims on the public.

A resolution was afterwards adopted by the meeting, on the motion of Dr. Conolly, that the Medical Benevolent College is eminently required by the Profession, and is deserving the support of the Provincial Medical and Surgical Association.

GANGRENE OF THE FOOT.

Mr. Bottomley described the case of a middle-aged man, a builder, a man who had lived freely, without being a thorough drunkard, and who, last September, while running down hill, felt a pain in the calf, as if he had broken something. This continued, and the foot became cold. After some time, a black spot was seen on the toe, which was the seat of much pain. The livor increased, with a dark red tint beyond it. No pulsation of the popliteal, scarcely of the femoral. Amputation was recommended, but no line of demarcation, and Mr. Bottomley opposed it, because he thought the patient's reparative powers would not bear up against it. By-and-bye, after the whole foot had become gangrened, the health being generally improved, the line of demarcation formed, suppuration took place, the tendo-Achillis was eaten through; and then Mr. Bottomley divided sundry ligaments, cut through the bones, and the wound healed by granulation without a bad symptom.

KOUSO.

Dr. Crisp mentioned four cases of tænia solium, in which he had used the kouso. Two were cured, and other two were failures. He questioned whether it were worth more than turpentine, except that it was milder in its action.

THE SKIN A DIAGNOSTIC OF THE HEALTH.

Mr. Hunt read a fragment of a paper, "On the Skin as a Diagnostic of the general Health;" the object of which was to show, that eruptions, being for the most part defensive efforts of nature exerted for the purpose of eliminating some morbid material in the blood, the form of the eruption became modified by the urgency of the case; eruptions of rapid evolution being thrown out when the system was severely oppressed by the presence of some poison; and eruptions of slow evolution proving to be chronic, feeble, abortive efforts to relieve the system of the influence of some materies morbi, not threatening any immediate or even remote danger. To illustrate this theory the author arranged the orders of Willan in the following manner:—

- | | |
|-----------------|--------------------|
| 1. Exanthemata. | } Rapidly Evolved. |
| 2. Bullæ. | |
| 3. Vesiculæ. | |
| 4. Pustulæ. | |
| 5. Papulæ. | } Slowly Evolved. |
| 6. Squamæ. | |
| 7. Tuberculæ. | |

The rapidity of evolution observed in most of the diseases comprised under these several orders was stated to be in the order in which they thus stand, the three first comprising diseases of rapid rise, progress, and decline; the three latter containing diseases slow in origin and progress, and protracted in duration, the order pustulæ taking an intermediate station in this respect. Thus, urticaria lasts a few hours only; erysipelas but a few days; herpes twice as long; ecthema a few weeks; lichen often as many months; lepra as many years; lupus for the whole life; supposing in all cases these diseases are left to run their course without medical interference. As the skin, therefore, even when in health, becomes an important diagnostic of the general health, by its changes in respect to harshness or smoothness, dryness or moisture, temperature, colour, &c., so, when diseased, it might be regarded as revealing, by its form of eruption, the degree of urgency of some internal malady or poison which the cutaneous vessels were charged with the burden of eliminating. The time did not allow Mr. Hunt to complete his illustrations of the subject.

CÆSARIAN SECTION.

Dr. Oldham read a case of Cæsarian section, which lately occurred under his care at Guy's Hospital. The subject of the case was a female of middle age, who had borne several children; but the commencement of her present pregnancy was attended with some discharge from the uterus, which, towards the period of quickening, increased in extent, having a sanio-sanguinolent appearance. Dr. Oldham first saw her at the seventh month, and found a mass of malignant disease at the cervix, which he anticipated would offer an insuperable obstacle to delivery by the vagina. The question of premature labour was discussed by him but abandoned, as rendering the life of mother and child more insecure. By means of sedatives, internally and locally, and the frequent inhalation of chloroform, the patient's sufferings were mitigated, and pregnancy carried on till near its full term. Labour was suffered to continue for some time to try its effects on the diseased mass; the child's life being ascertained by listening to its heart's beats: but the only result was to force the mass lower in the pelvis without dilating the os uteri. Under these circumstances, before exhaustion came on, he resolved on delivery by the Cæsarian section. The operation was performed by Mr. Poland in the usual way, and the child was extracted by Dr. Oldham through a comparatively small uterine opening, which was slightly enlarged in order to liberate the head. The after-treatment consisted in the free administration of opium, with ice, and ice-drinks, and beef-tea, and subsequently by stimulants and a good diet. The abdominal wound has gradually closed, and she has gone on well to the present time—six weeks after the operation. Chloroform was inhaled during delivery with the best effect. The child has thriven well.

The dinner which followed commenced at 7 p.m. Upwards of 200 sat down, and seemed determined to enjoy themselves to the uttermost. The bill of fare was very tempting, but, from the late hour of the evening at which the guests began to partake of the creature comforts, many were obliged to hasten away soon after the removal of the cloth, or to lose the last train.

Among other objects of interest exhibited, was an invalid bed, with a somewhat complicated apparatus for shifting those who are utterly incapable of helping themselves. The contrivance showed mechanical skill, and rather too much of it. The Acoemeter, an instrument invented by Mr. Yearsley, and used to determine the degree of improvement in hearing, from the application of the hydrated cotton in cases of deafness attended by loss of the membrana tympani. It is also available for ascertaining the arrest or progress of disease in ordinary cases of deafness. The apparatus is worked by clockwork-machinery, and consists of a hammer attached to a wire which strikes loudly or not on the sounding-board, according as it is more or less forced by a slanting slide, under the rotatory action of a notched wheel. The slide is washed with the gradations of sound from 1 to 18 degrees of loudness, and commences with a tick so fine as to be heard only by those in whom the sense of hearing is perfect, whilst the tick in the other extreme is so loud as to indicate an incurable state of deafness, if unheard by the patient. Mr. Cordy Burrows exhibited a series of casts of heads belonging to well-known characters. There was also a fine collection of specimens of Sussex mosses; also of specimens in geology, for which Sussex is famous.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 5th inst. :—

ALSOP, JAMES, Bolsover, Derbyshire.
CUNNINGHAM, ROBERT HANNAY, Lima, South America.
FOX, THOMAS WILLIAM, Leicester.
GOODWIN, FRANCIS, Newtown Butler, County Fermanagh.
HUGHES, JOHN ROBERT, Rhyl, Flintshire.
IRWIN, WILLIAM THOMAS, Omagh, County Tyrone.
JONES, JOHN, Duffryn, Merionethshire.
KER, JOHN, Tipton, Staffordshire.
NOWELL, JAMES, Bradford, Yorkshire.
PARTRIDGE, SAMUEL BOWEN, Newport, Monmouthshire.
SPARK, JAMES, Newcastle, Staffordshire.
WOOD, HENRY BENJAMIN, New Romney, Kent.

The following gentlemen were admitted on the 8th inst. :—

BRIDGE, WALTER ALEXIS, Nicaragua, Central America.
BROWN, JOHN ANSELL, Surrey-square, Old Kent-road.

DENNEHY, CORNELIUS WILLIAM, Cork.
DICKSON, JAMES, Charleston, South America.
GEORGE, HENRY, Kirton Lindsey, Lincolnshire.
LEVERTON, HENRY SPRY, Truro, Cornwall.
O'CONNOR, MAURICE JAMES, Morpeth, Northumberland.
POSNETT, JOHN BREDIN, Belfast.
ROTHWELL, CHARLES, Bolton-le-Moors, Lancashire.

At the same meeting of the Court, Mr. ROBERT CHARLES SCOTT passed his examination for Naval Surgeon. This gentleman had previously been admitted a Member of the College, his diploma bearing date August 9, 1847.

The following gentlemen were admitted on the 11th inst. :—

AYRTON, FRANCIS, Liverpool.
BAYES, FREDERICK WILLIAM HART, Stiffkey, Norfolk.
BORHAM, WILLIAM HENRY, Edgware-road.
CROSLAND, GEORGE, Wakefield, Yorkshire.
DRURY, GEORGE DIXON, Emsworth, Hants.
DYER, RICHARD RIDGE, Taunton, Somerset.
ORR, WILLIAM JOHN ALEXANDER, Dublin.
SPEARING, ANDREW, Cork.
STRETTON, ARTHUR, Wandsworth, Surrey.

At the same meeting of the Court, Mr. WILLIAM THOMAS BILLINGS passed his examination for Naval Surgeon; this gentleman had previously been admitted a Member of the College, his diploma bearing date August 1, 1842.

NEW FELLOWS.—At a meeting of the Council of the Royal College of Surgeons, on the 7th inst., Messrs. PETER REDFERN, of Aberdeen, and EDWARD SMITH, of St. John's Wood, and formerly of Birmingham, were admitted Fellows of the College. These gentlemen are also Members, their diplomas bearing date respectively August 18, 1843, and May 10, 1841. The following are copies of the questions submitted to the candidates, of whom, it is understood, there were six;—

August 4, 1851.—Anatomy and Physiology.—1. Describe the knee-joint, its articular surfaces and their form; the ligaments connecting the bones; the muscular attachments serving the purpose of ligaments to this joint; other muscles or their tendons passing over the joint. 2. Describe the parts seen on opening the abdomen, and their relative position. Describe the formation, extent, and attachments of the great and little omentum, the peculiar characters of the small and large intestines, and the special circumstances distinguishing the duodenum. 3. Describe the membranes which invest the brain, the peculiarities of their structure and function. The remarkable circumstances distinguishing the arterial and venous apparatus of the brain from those of the other parts of the body. 4. Describe the boundaries of the perinæum, the parts contained within it, and their relations to each other. 5. Describe the parts exposed in dissecting the bend of the elbow, and their relative position. 6. Describe the circulation of the blood through the heart and lungs, with the action of the valves. Also the changes effected on the blood in its passage through the lungs, and in the general circulation.

Surgery and Pathology.—1. State the primary and secondary consequences of a wound into a joint, if adhesion of the divided parts do not speedily take place. Describe the treatment of such wound, and its consequences. 2. Describe the symptoms and causes of a strangulated hernia. The treatment to be employed for its reduction. If an operation be required, what its object, and what the circumstances which determine the return or not of the contents of the sac into the abdomen? 3. Describe the symptom distinguishing concussion and compression of the brain. The kinds of compression, and the period at which the symptoms appear. State the treatment of concussion and its effects, and generally that of the several kinds of compression. 4. Describe the causes and treatment of retention of urine from stricture. Also the causes, consequence, and treatment of extravasation of urine. 5. Describe the primary treatment of a wound made into the brachial artery in the operation of phlebotomy. State what happens to the artery if improperly treated on the occurrence of the accident, and what is then to be done under such circumstances. 6. Describe the consequences and treatment of a penetrating wound of the lungs.

THE GENERAL BOARD OF HEALTH.—On Monday, two Acts of Parliament were printed confirming certain provisional orders of the General Board of Health. On the 17th of September next, elections for local Boards of Health are to take place at the following places:—Morpeth, Bristol, Beverley, Sherborne, Bridgend, Bryn Mawr, Norwich, Gateshead, Doncaster, Margate, Borough of Weymouth and Melcombe Regis, Newmarket, Romford, Tenby, Kingston-upon-hull, Hartlepool, Hastings, and at West Cowes on the 4th of September. By the second Act, the provisional order for Great Yarmouth, in Norfolk, is confirmed.

COLLEGE CONVERSAZIONE.—The third of these interesting reunions took place on Wednesday last, in the spacious apartments of the Royal College of Surgeons, which were brilliantly illuminated, and, on which occasion, Mr. Quekett was advertised to deliver a lecture on the Organic Basis of the Vegetable and Animal Skeleton, with Microscopic Illustrations; but we were, with several others, doomed to disappointment, in consequence of the very serious indisposition of that gentleman, who has been confined to his bed several days from an attack of acute rheumatism. Messrs. Monckton, Skinner, and Falconer, the College students, endeavoured to fill Mr. Quekett's place, by exhibiting the microscopic specimens prepared by that gentleman; in the library were also displayed some rare fossils, pathological preparations, and rare objects of natural history; in the council-room was exhibited the magnificent collections of medical portraits, belonging to Mr. Squibb, of Orchard-street, Portman-square, and Mr. Thompson, the printseller, of Oxford-street, to whom, and to Messrs. Lloyd, of Ludgate-hill, and Mr. Hogarth, of the Haymarket, the Profession are indebted for the publication of that superb work of art, "Harvey demonstrating the circulation of the blood to Charles I.," and for the recently published portrait of the late Mr. Aston Key. One of the most interesting features of the evening was the curious collection of instruments used by the "old maisters in chirurgery," now in the possession of the College; while comparing these with the beautiful modern instruments exhibited by Messrs. Savigny and Matthews, we heard many of the visitors express their regret that the worthy President, Mr. South, who was so qualified for the task, did not deliver a short discourse on the comparative merits of the instruments used by our forefathers. It is understood that Mr. Quekett will deliver his lecture at a *conversazione*, which will assemble in December next. Among the distinguished visitors present were observed Professors Liebig, Weber, Wagner, Schafhauth, Verdet, Dr. Alexiades; and the observed of all observers were Peir Ibrahim Khan, accompanied by Seyed Abdoolagh, in their splendid oriental costumes; the former is well known from his connexion with Major Edwardes in the Mooltan engagement; for his services on this occasion the Government gave him the title of Bahadour; the Mandarin Hesing and his attendant were also present, as also Messrs. South, Hawkins, Coulson, Bishop, Pilcher, Paget, Owen, and several provincial members of the College also, on their way to attend the meeting of the Provincial Medical and Surgical Association at Brighton, of which we this day publish a full report. We were glad to find that the hints thrown out by us on former occasions were taken, as our professional friends, with a few juvenile exceptions, appeared in the evening dress of gentlemen, and the tea and coffee were both hot and strong; we hope a few ices and soda-water will be provided on future occasions, when the weather is so excessively hot, as it was on Wednesday last: in fact, our Oriental friends were obliged to avail themselves of the open windows to get a refreshing draught of air.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, August 7:—

HAYNES, SYDNEY, Sandwich, Kent.

PEARSE, WILLIAM HENRY, Launceston, Cornwall.

STOCKER, ALONZO HENRY, Sloane-street, Chelsea.

TOVEY, CHARLES HENRY.

WILLIAMS, WILLIAM, Birmingham.

OBITUARY.—On the 9th inst., at Islington, Thomas Robertson, Surgeon, R.N. This officer was, with two exceptions, the oldest on the retired list of surgeons. He entered the service as Assistant-surgeon on June 20, 1794, and served in that rank, and as surgeon of the Europa and Flying Fish, at the capture of Port au Prince, in 1794; and in the Dedalus in the attack on Goree. While in the Leopard, he had charge of the hospital at Mocha, and served in the Sirius in Calder's action. He was also present in her at the battle of Trafalgar, and in her action with the French Flotilla off the Tiber; he was surgeon of the Norge at the defence of Cadiz. He was the principal founder of the Seamen's Hospital in the Thames.

DR. JOSEPH WHYTE, LATE OF BANFF.—This talented practitioner died at Montreal, on the 6th ult. The deceased practised in the town of Banff for nearly thirty years, after having served as assistant and full surgeon in the Navy, having been promoted after only three years' service. During the period of his practice in Banff, he acquired a considerable local celebrity as an accoucheur. The *Montreal Daily Herald* of the 8th ult., in recording the demise of Dr. Whyte, whose age was 70 years, states that he emigrated to Lower Canada in 1835, and settled at Huntingdon, Goodmanchester, county of Beaharnois, where he acquired the esteem and confidence of a large portion of the community in that section.

NAVAL APPOINTMENTS.—Surgeon Thomas Henry Lowry, M.D. (1845) to the Virago; Thomas J. Layton, M.D., (1850) to the Grecian; James Rae (b) (1850) to the Volcano; William W. Wilde, M.D. (1845) to the Victory flag-ship at Portsmouth; and John B. Ricardo (1847) to the Rodney; Assistant-Surgeons John T. Robinson (1848) to the Grecian; George H. Edwards (1847) to the Waterloo; William Ross (b) (1845) to the Virago; John G. Harrison (1832) to the Waterloo, 120, at Sheerness; and Hugh Jameson (1830) to the Rodney, 90, at Portsmouth. Surgeon Superintendent Henry Morris (1828) to the Rodney, hired convict-ship; Surgeon Henry Trevan, M.D., (1846) to the Virago, steam-sloop, at Devonport; Assistant-surgeon Wm. H. Clarke (1846) to the Centaur steam-frigate, at Portsmouth; J. L. Trousdell, M.D., (1827) from the Victory to the Shearwater steam-vessel, at Woolwich.

MEDICAL APPOINTMENTS AND VACANCIES.—The resignation of Dr. Moore has caused one of the appointments of Physician to the Salisbury Infirmary to be vacant; election on the 28th inst. A Resident and a Non-resident Pupil are wanted at University College Hospital. A Junior House-Surgeon, M.R.C.S. and L.S.A., is required at the Liverpool Northern Hospital; salary, 60*l.* a year, with board, &c.; election on the 1st of September. A Surgeon is wanted for the Pimlico Dispensary; date of election not stated.

ENGLISH HOMŒOPATHIC ASSOCIATION.—Through the "indisposition" of our own reporter, in consequence of his connexion with an Allopathic Journal, we are indebted to the *Times* for an account of the Annual Meeting of the above Association, held on Tuesday evening, and from which we give the following homœopathic abstract:—The Chairman was sorry that Lord Robert Grosvenor was not in his place. He knew him personally. But he (the Chairman) had some grounds and claims to be considered a fit and proper Chairman. As much as twenty years ago *two* relatives of his derived great benefit under an Italian doctor who practised homœopathically, and from this he thought it was a system that had great claim on their attention. Under homœopathy, *if the disease was found*, no doubt existed as to the treatment. The Secretary then read a Report, detailing the wars they had engaged in, the victories they had gained, the publications they had issued, and the state of the funds. Mr. A. Steinmitz moved the adoption of this catalogue of wars, victories, etc. He had been won over to infinitesimals, *by being treated allopathically for apoplexy* [so difficult of diagnosis!] *when he had nothing of the sort.* Mr. Shaen, Master of Arts, was a living proof of the benefits of homœopathy. Eight or nine years ago [not certain which] he was always in the doctor's hands [for what complaint did not transpire;] but, since he had adopted homœopathy, it had been much better for both his health and his pocket, [a pretty good proof of the nature of his disease.] He was a Dissenter, therefore he could not go to Oxford or Cambridge, and in consequence had selected the University of Edinburgh as his alma-mater; but the mother-beloved had turned round on her offspring, on a pretence of non-identity. Mr. W. Hashurst was the friend of little pills. Before the superior powers of littleness were known he had been at death's door many times, but had come back again. However, his old doctor died, and the new doctor [homœopathy] was called in;—he had never been to death's door since, [and probably never would go again.] He then treated of the subject of social and political economy, and declared his profound conviction, that if they took no physic, they would have no physic to pay for,—that if they paid for no physic, they might save money,—and that if they were to carry out their views, the meeting must subscribe liberally. Dr. Epps sang a poem in honour of homœopathy:—

"100,000,000,000, sick
000,000,000, smell;
000,000,000,000, lick
000,000,000, well."—*Walkinghame*

Mr. E. Miall spoke a long speech while half the audience were wisely retiring, and a vote of thanks to their inestimable Chairman closed the very allopathic proceedings.

TO CORRESPONDENTS.

The length at which we have reported the very important Meeting of the Provincial Association at Brighton precludes any replies to Correspondents.

COMMUNICATIONS have been received from—

MR. HENRY T. CHAPMAN, of Lower Grosvenor-street; Mr. ROBERTSON, of Union-place, New Kent-road; DENARIUS SECUNDUS; L. W. R.; Mr. S. L. SWEET, Tenbury, Worcestershire; Mr. NEWMAN, Editor of the "Phytologist;" AN EDINBURGH PRACTITIONER; Dr. FREDERICK BIRD, of Brook-street; Mr. HENRY SMITH, of Caroline-street; A TYNO; A READER OF THE EDINBURGH JOURNAL; Mr. PARKER, of Birkenhead; DESIRANS; Mr. TAYLOR, of Bristol; EDINENSIS; D. R. L.; Mr. HENSON, of Worthing; A CORRESPONDENT; Dr. LIGHTFOOT; AN EDINBURGH MAN; ANTI-HUMBURG; Dr. SIBSON, of Brook-street; Mr. SANDFORD.

MR. CHURCHILL'S ANNOUNCEMENTS FOR THE COMING SESSION.

Lectures on the Principles and Practice of SURGERY.

By BRANSBY B. COOPER, F.R.S.,
Senior Surgeon to Guy's Hospital.
One thick 8vo volume.

[Ready, 1st of October.

A Manual of Physiology ;

With numerous Illustrations on Steel and Wood.

By W. B. CARPENTER, M.D., F.R.S.

The Second Edition, carefully revised, with additions.

[Ready, 1st of October.

On Diseases of the Heart.

By JAMES WARDROP, M.D.

One volume 8vo.

[Ready, 1st of October.

On Diseases of the Skin.

By ERASMUS WILSON, F.R.S.

The Third Edition, 8vo.

[Ready, 1st of October.

The Same Work, Illustrated with Engravings on Steel, accurately Coloured.

On Diseases of the Liver.

By GEORGE BUDD, M.D., F.R.S.,
Physician to Kings' College Hospital.

Illustrated with Coloured Plates and Engravings on Wood.

The Second Edition, revised, with additions, 8vo.

Medical Anatomy ;

Illustrating the FORM, STRUCTURE, and POSITION of the
INTERNAL ORGANS,
in HEALTH and DISEASE.

By FRANCIS SIBSON, M.D., F.R.S.,
Physician to St. Mary's Hospital.

Imperial folio, uniform with Maclise's Surgical Anatomy.

On the Physical Diagnosis of Diseases
of the LUNGS and HEART,

By HERBERT DAVIES, M.D.,

Senior Physician to the Royal Infirmary for Diseases of the Chest.

[Post 8vo.

Clinical Reports of Uterine Diseases,
with COMMENTARIES.

By ROBERT LEE, M.D., F.R.S.

[Foolscap 8vo.

A Practical Treatise on the Pathology
and TREATMENT of RHEUMATISM, NEURALGIA, and
COGNATE DISEASES, usually called Pseudo-Syphilitic.

By JAMES BIRD, M.D.,
Late Physician-General, Bombay.

[Post 8vo.

The Principles and Practice of
SURGERY.

By WILLIAM PIRIE, F.R.S.E.,
Regius Professor of Surgery in the University of Aberdeen.

With numerous Engravings on Wood.

[8vo.

On Diseases of the Bladder and
PROSTATE GLAND.

By WILLIAM COULSON, F.R.C.S.,
Surgeon to St. Mary's Hospital.

The Fourth Edition, revised, with Additions.

[8vo.

A Manual of the Principles and Practice of MEDICINE.

By GEORGE H. BARLOW, M.D.,
Physician to Guy's Hospital.

[Foolscap 8vo.

A Manual of Materia Medica and
THERAPEUTICS.

With numerous Engravings on Wood.

By J. FORBES ROYLE, M.D., F.R.S.,

Professor of Materia Medica in King's College, London.

The Second Edition, revised, with Additions.

[Foolscap 8vo.

The London Pharmacopœia ;

Translated, with Copious Practical Notes and Commentaries.

By T. REDWOOD,

Professor of Chemistry and Pharmacy to the Pharmaceutical Society.

[Demy 8vo.

On Syphilis ;

CONSTITUTIONAL and HEREDITARY.

By ERASMUS WILSON, F.R.S.

[Demy 8vo.

What to Observe at the Bed-side.

Published by Authority of the London Medical Society of
Observation.

[24mo.

A Pocket Formulary and Synopsis of
the BRITISH and FOREIGN PHARMACOPŒIAS ;

Comprising Standard and approved Formulæ for the Preparations and
Compounds employed in Medical Practice.

By HENRY BEASLEY.

Fifth Edition, 18mo.

Neuralgia ;

Its Various FORMS, PATHOLOGY, and TREATMENT.

The Jacksonian Prize Essay for 1850.

By C. TOOGOOD DOWNING, M.D., M.R.C.S.

[Post 8vo.

Hand-Book of Scientific Chemistry,

designed chiefly for the Use of Medical Students.

By F. A. ABEL, F.C.S.,

Demonstrator of Chemistry at St. Bartholomew's Hospital ;

and

C. L. BLOXAM,

First Senior Assistant at the Royal College of Chemistry.

A Compendium of Domestic
MEDICINE,

and

COMPANION to the MEDICINE CHEST.

By JOHN SAVORY.

Member of the Society of Apothecaries, and late President of the Royal
Pharmaceutical Society of Great Britain.

Fourth Edition, 12mo, cloth.

Pathology of the Human Eye.

By JOHN DALRYMPLE, F.R.S.

Fasciculus VII.

[Imperial 4to.

Portraits of Skin Diseases.

By ERASMUS WILSON, F.R.S.

Fasciculus X.

[Folio

ORIGINAL LECTURES.

CLINICAL LECTURE

ON THE USE OF THE NEUTRAL SULPHITES

IN THE TREATMENT OF DISEASES ATTENDED BY
THE DEVELOPMENT OFPARASITIC PLANTS,
ESPECIALLY THE *SARCINA VENTRICULI*.

DELIVERED AT

UNIVERSITY COLLEGE HOSPITAL.

BY WM. JENNER, M.D.,

Professor of Pathological Anatomy in University College,
Assistant-Physician to University College Hospital, &c.

THE great object, Gentlemen, in the treatment of disease, is the removal of that lesion of structure, or that condition of the system on which the *symptoms depend*; but should it happen, either from our inability to detect the primary lesion,—the disease properly so called,—or to remove it when detected, that we are compelled to alleviate suffering only, then we treat symptoms. Frequently, however, by the relief we afford to symptoms, we do more than alleviate distress; we prolong life, or haply, even place the patient in such a condition that nature accomplishes what our remedies fail to effect, and what she would be incapable of effecting were not the symptoms referred to removed.

To-day I propose to bring before you a case which illustrates the fact, that the relief of a symptom may exercise a markedly favourable influence on what is, perhaps, an incurable organic disease,—and I seize this occasion the rather, because it affords me also an opportunity of illustrating the advantages that the science of medicine has derived from the progress of the collateral sciences, and of proving to you that the microscope is not a mere toy for the non-practical man, but, “one aid the more” in enabling us to determine the disease under which the patient labours, and so of treating him the more successfully, and that a knowledge of chemistry may serve, in *some cases*, to direct us in our choice of remedies. No better example than the case of James Martin could be offered of the advantages to be derived from the use of the microscope in rendering diagnosis more precise, and of the benefits chemistry may confer on therapeutics.

You have all repeatedly seen the man referred to in ward 4. You may remember his appearance when he entered the hospital—emaciated, with a worn and suffering-indicating countenance, generally sitting up in bed, with his knees drawn up to his abdomen, his head and shoulders bent forwards, his arms clasped round his raised legs, or lying on his face with a pillow forced by his clenched hands on the region of the umbilicus; bitterly complaining of the misery he suffered, of a dreadful burning sensation, a fire seated in the region of his stomach, and, every now and then, of “flashing pains,” as of flames darting upwards, of constant evacuation of enormous quantities of flatus, and of one or two attacks of vomiting daily. For more than twenty years this man had been thus suffering. You may see him now in the ward offering a striking contrast to his former self. His face has in a great measure lost its pain-worn aspect, the eructation of flatus has ceased, and when on his bed he reclines as men in health. He is gaining flesh.

James Martin, now aged 66, the son of healthy parents, who died at the ages of 82 and 80 respectively, enlisted into the Artillery when 18 years of age, served in the Peninsula, was at Waterloo, and subsequently went with his regiment to North America, where he remained six years. He was discharged in 1824. After leaving the army, he worked in the Thames Tunnel, and was there when the water broke in. He was supposed to be dead when first removed, and for a year he attended as an out-patient at Guy's Hospital. In 1829, he entered the police force, in which he continued for seven years. After leaving it, he entered the Queen of Spain's service, and returned with the Legion in 1837. Though formerly of intemperate habits, he avers that for many years he has been very sober. With the exception of an attack of ague while in America, his health up to the time of the accident in the Thames Tunnel was excellent.

From that event he dates the commencement of his present ailment. While in the police he suffered from intense pain at the epigastrium, and used often to retire into back streets, and there lean with his abdomen firmly fixed against an iron post. At first, the vomiting occurred once or twice a week; afterwards, every day. It was at this time, he says, that he first vomited blood. From the time of the accident he has been subject to constipation, and long tried all sorts of quack medicines; and, to relieve the pain in the abdomen, took a teaspoonful of carbonate of soda twice a day. While in Spain he endured many hardships, but was not so much a martyr to his old complaint; and, for the first six months after his return, he enjoyed comparative health.

In the early part of 1838 he entered University College Hospital, and, by his own account, has been unable to work since. He has been, at different times, in and out-patient at this and other hospitals, and, on one occasion, was an inmate of the parish infirmary. He was an out-patient when I was appointed to this Hospital, but too ill to attend himself. His wife came for his medicines. It was in consequence of the description she gave of the vomited matters (*viz.*, that they frothed over the vessel in which they were received like yeast) that I examined them microscopically. I then found the bodies described by Mr. Goodsir, in 1842, as *sarcina ventriculi*. When I first visited Martin, a year ago, this was his condition,—he was in bed, and had not been up for more than a few minutes for several days. He said that, in consequence of pain in his abdomen, he slept but little. He was free from headache, and his complexion was clear, his skin was cool, and there was no trace of oedema of the extremities. Neither the liver nor spleen was enlarged. There was decided tenderness at the epigastrium, and so far as this permitted manipulation, no tumour could be detected. He stated (and his countenance bore witness to the truth of his assertion) that he then was, and had been, suffering acutely about the umbilicus, above, below, and on either side of that spot; that the pain was “smarting and burning like a blister;” that if he sat up, he felt as though he had “a cord around his bowels, tying them back” to his spine; that he was in the habit of sitting in bed, with his knees drawn up towards his abdomen, his head and shoulders bent forwards, his arms resting on his knees; and that, while in this position, he would often get his wife to place some hard body—at one time a bundle of clothes, and at another, “the bellows”—between his knees and abdomen, the pressure of which seemed to give some relief during the paroxysms of pain. The pulse was only 72, the respirations 18 in the minute; his appetite was indifferent. His bowels had long been most obstinate, never acting without medicine, and that of the most powerful kind, croton oil, &c. He remarked, that whenever the vomiting diminished the pain increased, so that he desired the vomiting to continue. While an out-patient I tried for his relief nitrate of silver, hydrocyanic acid, creosote, morphia, henbane, large doses of carbonate of soda, &c. I thought the morphia lessened the frequency of the vomiting, but, although it produced drowsiness, it seemed to increase the pain. With difficulty I persuaded him to come into the hospital, and, so satisfied was his wife that death would speedily terminate his sufferings, that, after he had been in a few days, she earnestly entreated me to discharge him lest he should die here.

He was admitted into the hospital as an in-patient March the 15th, 1851, and on the 16th the following notes of the case were taken:—Mind and special senses normal; *arcus senilis* strongly marked; can walk with facility, but feels weak; expression worn, is extremely thin, skin cool, mucous membranes pale, no sallowness of complexion, no anasarca, legs drawn up towards his abdomen and his arms around his knees, shoulders bent forwards, his head resting on the elevated inferior extremities; tongue large, flabby, indented at the edges, and thinly furred; no dysphagia, appetite generally good; had for his dinner yesterday two potatoes and some broth; dined between twelve and one o'clock; at five o'clock p.m. vomited, ejecting the whole of the matters now in the basin in about five minutes; the quantity of ejected matter reserved is two quarts.

Characters of the Vomited Matter.—Floating on the surface is a layer, from a quarter to half an inch thick, of a brownish colour, closely resembling yeast in general characters, entangling in its substance quantities of air-bubbles. *Microscopical Elements.*—Striated muscular fibres; *sarcinae ventriculi* in great numbers, of a dark yellowish colour; torulæ very numerous, undistinguishable from the yeast-plant in size

and shape; fat-globules and starch. After eating his dinner felt comfortable and satisfied for two hours, then experienced considerable thirst; about four o'clock p.m. took a cupful of cold fluid. He thinks that cold fluids excite vomiting, hot prevent it; that cold fluids cause pain, hot fluids relieve it; from the time of drinking the fluid he felt severe burning twisting pain over nearly the whole abdomen; the burning pain was most severe about the epigastric region, the twisting pain about the umbilicus; to use his own expression, "he felt in a burning flame;" much flatus was discharged before vomiting, chiefly by belching, each eructation of flatus was attended with severe sense of burning up the centre of the sternum, called by the patient "a flashing pain;" after vomiting, the pain and burning were considerably relieved; still the pain continued during the whole night, increasing in severity at intervals. Five grains of extract of colocynth, with two drops of croton oil, were taken last night; these operated about eight o'clock a.m., producing three stools; the action of the bowels relieved a sensation of tightness. He had this morning for his breakfast, about eight o'clock a.m., a cup of tea and a little bread and butter. At twelve o'clock complained of a nipping pain between the umbilicus and pubes, a burning pain from the epigastric region upwards over the right mammary and sternal region; no vomiting to-day; complains of tightness and fulness of abdomen. Abdomen convex; convexity less marked at epigastric and hypochondriac regions, than below the umbilicus; interval between recti-muscles distinct; tenderness in epigastric and umbilical regions; slight tenderness also in hypogastric; more in hypochondriac and umbilical regions. Some sense of resistance on pressure over recti-muscles; resonance generally normal; no tumour to be detected in any part of abdomen; there is, however, greater fullness in the vicinity of the pylorus than elsewhere; (from tenderness and distension the manipulation was less deep than subsequently;) passes his urine freely; pulse 60, regular; lungs (a) and heart generally healthy, only the second sound at the base is murmurish. The stool contains a large amount of yellow amorphous matter, sarcinæ, and triple phosphates; its reaction alkaline.

The daily reports from this time tell of his continued suffering; of the frequency with which he was observed in what is termed, in some of the reports, his old position.

On April the 22nd the following report was made:—

At half-past eleven p.m. the twisting and burning pain came on, and he brought up about eighty ounces of fluid at two efforts; then drank about half a pint of gruel, after which he continued eructating flatus and vomiting a little fluid till three a.m.; the fluid last ejected was about forty ounces in quantity. He describes the pain which preceded the vomiting to have been of a bursting kind. He says he felt "as if being torn to pieces." He complains that during the night he suffered from headache and vertigo. The abdomen is now very tender; he complains of a bitter taste in his mouth, which he says is always full of water. Bowels acted last night; pulse 76. The vomited matter was strongly acid, and resembled in all particulars that above described, and the stools were as before alkaline, and contained sarcinæ.

On May the 29th the report states, much freer from pain; all sense of "flashing burning" gone; lies ordinarily with legs extended, as if free from pain. His present state offers a striking contrast to his condition on admission. Bowels acted to-day. No stool the preceding three days.

As the hardness of the abdomen disappeared and the distension diminished, it was pretty clearly made out that the stomach was dilated, the stomach-note being audible to the umbilicus; and an ill-defined solid body was imperfectly felt about two inches to the right of the middle line, midway between the umbilicus and cartilages of the ribs.

His present state you have all witnessed; he suffers little pain; is freed from the eructation of flatus; his position is unconstrained; his abdomen is much less full than on admission; he is gaining flesh; the worn expression is comparatively trifling, and he sleeps well. The alteration in his general carriage and position strikes his wife and friends most forcibly. It is, he affirms, many years since he enjoyed the same state of comfort. I must briefly advert to the condition of his urine. It is acid when first passed, but becomes alkaline rather more quickly

than healthy urine should. One of my excellent clinical clerks, Mr. Simpson, has been kind enough to examine it daily for some time, and he notices no difference in the degree of acidity, as manifested by litmus paper, whether Martin is vomiting or not. An analysis of the matter vomited before the man's admission to the hospital, was kindly made by Professor Graham. It contained a large excess of free hydrochloric acid, a little acetic acid, alcohol, and sugar; the gas disengaged was carbonic acid. It was identical, in all essential particulars, Mr. Graham says, with the matter vomited by a man suffering from sarcina ventriculi, under the care of Dr. Bence Jones, in St. George's Hospital.

Now, did the primary disease in the case of Martin, consist in the presence of the sarcina in the stomach, or was the sarcina (as Schlossberger from his cases concludes it invariably is) merely an epiphenomenon?

Let us see what lesions of the stomach experience has shown to be coincident with the occurrence of sarcinæ. It appears from cases on record, and especially from the observations of Dr. Todd, recorded in the *Medical Gazette* of May 2, that if the food is retarded in its passage through the stomach, sarcinæ are developed there, and that thickening of the pylorus, narrowing of the pyloric orifice, and dilatation of the stomach, are the lesions most frequently found after death in such cases. Now, the pylorus is, in its healthy state, closed by muscular action. The muscular fibres by which this closure is effected, are, I need not say, of the kind termed plain, i.e., they belong to the class of involuntary muscles.

Constriction of the pylorus may be organic or spasmodic. The pylorus is the seat of ulceration; the ulcer heals; contraction of the cicatrix follows; and hence stricture of the pyloric opening. The submucous tissue is the seat of the exudation of lymph, simple fibrillating or contractile lymph, or of fibro-plastic blastema; permanent stricture of the pylorus is the result; or the same tissue is the seat of cancerous infiltration, and coarctation of the same part follows. An error in diet is committed; digestion is imperfectly performed; and the pylorus, healthy in structure, refuses to allow the offending substance to pass into the duodenum. It is a well-known law of the animal economy, that increased demand leads to increased supply; that when a part is called on to perform extra duty, not only is the nutritive material carried to that part in quantity sufficient to compensate for waste, but in still larger quantities; and hence hypertrophy of the over-exercised structure ensues. This is especially true of the muscular system, and peculiarly so of the involuntary portion of that system.

Again, experience proves that when, from any cause, coarctation of the orifice leading from a hollow viscus takes place, the viscus itself frequently undergoes dilatation: whatever, therefore, interferes with the free exit of food through the pylorus, may lead to dilatation of the stomach.

Taking all these facts into consideration, it seems to me that the very presence of the sarcinæ, and of the fermenting intensely acid fluid may possibly, nay probably, (by keeping the muscular fibres that close the pylorus in constant action,) be, in some cases, the cause of the organic coarctation of the pylorus and the consequent dilatation of the stomach, which are, as I tell you, so frequently the lesions found after death, where these vegetables have been detected in the vomited matter during life. But supposing that organic disease exists anterior to the development of the torulæ, and the sarcinæ, and to the secretion of the acid fermenting fluid, yet must we allow that the irritation produced by their presence would be likely to excite spasmodic closure of the pylorus, and so add, at least, to the difficulty with which the contents of the stomach would find their way through the organically coarctated orifice; while the rapid disengagement of gas could not fail to increase the dilatation of the stomach, already over-distended by the ingesta.

Thus, then, whether the primary disease be (as, in some cases I am disposed to regard it to be) the secretion of a fluid favourable to the development of the germs of sarcinæ, or whether the development of these bodies be the result of the retardation of the food in a dilated stomach, the consequence of a mechanical impediment to its transit through the pylorus, (as in many cases I have no doubt it is); whether the vegetable organisms, and the fermentation which accompanies their development, be the cause or the consequence of the pyloric stricture, still must it be desirable to check their development and prevent their growth, as a

(a) The case has been much abridged as regards the organs not bearing directly on the disease.

means, if not of curing, at least of retarding, the progress of the organic disease.

But, allowing for a moment that our expectations could not reach thus far, yet, would it still be a gain to prevent the distension caused by the disengagement of the carbonic acid, the product of fermentation, to check the formation of that flatus, the very eructation of which is a constant source of distress to the patient. "The three symptoms,"—says Dr. Walshe, speaking of cancer of the stomach,—“which most torture patients, and for which they most earnestly implore relief, are flatus, vomiting, and constipation.” But to return to Martin, and to the bearing of his case on the question here stated. Some years since he suffered from mechanical violence; subsequently he had hæmatemesis, suffered from pain in the abdomen, and vomited his food often many hours after eating it; and presumptive evidence is afforded, by percussion and palpation, of dilatation of the stomach, and thickening of the pylorus. When he first came under our observation, the symptoms, according to his own and his wife's account, had continued almost unabated in intensity for many years, and certainly they were as severe three years since as they were on his admission.

The long continuance of the stomach disease (more than twenty years) without marked alteration of the symptoms, without the implication of other organs, and without any indication of the existence of constitutionally malignant disease, as well as the fact that vomiting of blood was among the earliest of the symptoms, renders the existence of scirrhus of the pylorus improbable, while it renders the existence of ulceration in the vicinity of the pylorus, cicatrization of the ulcer, and subsequent thickening of the sub-mucous tissue, extremely probable; but still remember, only probable. Taking, however, this view of the primary stomach disease, I cannot but think that this organic coarctation of the pyloric orifice and dilatation of the stomach, have both been increased by the presence of the sarcinæ, the torulæ, the acid fluid that, under the stimulus of their presence, is poured into the stomach in such large quantities, and the gas which accompanies their formation. I have read to you some notes, which illustrate the improvement that has taken place in our patient's condition since his admission into the hospital. Let us now see by what means that improvement has been effected.

It appears from the notes, that, from his first admission till the 5th of April, he vomited almost daily an enormous amount of thick fluid in a state of fermentation, loaded with sarcinæ and torulæ. To give you an idea of the quantity, I may mention, that, on March 10, he vomited two quarts; on the 17th, one quart; on the 19th, a pint and a half; on the 20th, one quart; on the 22nd, five pints; on the 24th, two pints and a half; the drugs given during the same three weeks were hydrocyanic acid, acetate of morphia, and sulphate of zinc. You will remember he had previously taken creosote, nitrate of silver, etc.

At this time, guided by the knowledge that sarcina is a vegetable, and having had my attention called by my friend Mr. Marshall to the fact, that Professor Graham had suggested the employment of sulphurous acid in cholera, when that disease was supposed to depend on the presence of a fungus in the intestinal canal, as the agent the most destructive to vegetable life, and, at the same time, one that might be evolved in the human stomach with impunity, I administered the sulphite of potash.

The power exercised by the remedy has been most remarkable and most unequivocal.

Before taking it, he was vomiting daily from 40 to 100 ounces of the fluid, loaded with sarcinæ and torulæ; thus, on the 1st of April, he vomited 100 ounces; on the evening of the 2nd, between 70 and 80 ounces, although he had the same morning, from the action of sulphate of zinc, vomited 50 ounces. No vomiting on the 3rd. On the 4th, in consequence of the extreme pain and sense of distension, sulphate of zinc was again administered.

On the 5th, he took ʒss. of the sulphite of potash early in the morning; in the evening he vomited. On the 6th the dose was increased to 1 drachm. On the 7th, he vomited 12 ounces only of acid fluid, on the surface of which there was but a small amount of scum; it contained perfect sarcinæ, but no torulæ.

From the 8th, he took 3 drachms of the sulphite daily, each dose being given in ʒiiss. of water. At 6 a.m. on the 9th, he ejected from the stomach 4 ounces; the sarcinæ were now decidedly less numerous, and there were no torulæ. In

the evening of the 6th he again vomited, but the vomited matters were now free from sarcinæ and torulæ, and there was appearance of fermentation. Between the 9th and the 18th he vomited three times, but on neither occasion did the vomited matter contain sarcinæ or torulæ.

On the evening of the 18th the sulphite of potash was omitted; and on the 19th, he vomited a fluid in a state of fermentation, containing torulæ, but no sarcinæ. On the 20th he vomited 9 ounces of a similar fluid; these specimens were not examined by myself, but by a most trustworthy observer, Mr. Morris, the physician's assistant. On the 21st, there was a thick scum on the surface of the vomited matters, which contained sarcinæ and torulæ in abundance.

The sulphite of potash, in drachm doses, was again administered; no further vomiting occurred till the 27th, when, without any apparent cause, it recommenced; the vomited matters had their old yeast-like odour and appearance, and were loaded with sarcinæ and torulæ; I now, you well remember, began to suspect that the man could not be taking his medicine regularly, but on inquiry, no omission could be discovered. The medicine itself was then tested, and it was found that it gave off no odour of sulphurous acid, on the addition of a stronger acid. At the dispensary we learned that a fresh stock of the drug had come in on the 20th. On submitting a specimen to Mr. Graham, he found that it contained no trace of sulphurous acid. At his suggestion I prescribed from this time the sulphite of soda, a more stable salt, and one less liable to be decomposed either in the preparation or by keeping.

On the 29th of April, half a drachm of it was given at bed time, and on the 31st, half a drachm three times a day. On the 1st of May, our patient vomited 40 ounces of a fluid covered with a thick scum; the vomited matters were not examined microscopically.

On the 2nd, the dose was increased to a drachm. There was no vomiting till the 5th; the vomited matters were in quantity about 50 ounces; had no scum floating on their surface, and were entirely free from sarcinæ and torulæ.

On account of the burning pain which he occasionally complained of, I now ordered him a mixture containing sodæ carb., two scruples in each dose. On the 13th, 15th, and 16th, he again vomited sarcinæ in quantity, and as I suspected that the soda prevented the evolution of sulphurous acid, I omitted the carbonate. From the 16th of May to the 19th of June, the vomited matter contained no trace of sarcinæ or torulæ, and had lost its yeasty odour and appearance. *During these thirty-three days he ejected about 230 ounces of acid fluid; during the first eight days of his residence here he ejected 380 ounces.*

On the 19th of June, the vomited matters contained a considerable amount of sarcinæ. On inquiry at the dispensary, I found that the stock of sulphite was nearly exhausted, and on testing it by the addition of a stronger acid, it gave off but little odour of sulphurous acid.

I increased the dose to ʒiv., and on the next day to ʒiiss.

From the 19th of June to the 1st of July he vomited once only, and the ejected matter contained no sarcinæ.

About the end of June my attention was directed, by Mr. Thompson, of Croydon, to a case of chronic vomiting, with phosphatic urine (evidently a case of sarcinæ ventriculi), reported by Dr. G. Bird to have been cured by strychnia.

On the 30th of June the sulphite was omitted, and I gave strychnia in small doses, but the vomiting returned directly; the ejecta were found to contain sarcinæ and torulæ. On the evening of the 3rd the sulphite was again given; the vomiting ceased till the 10th, and then the vomited matter contained neither sarcinæ nor torulæ, and were free from the yeast-like head. On the 14th vomiting occurred, but no sarcinæ. As I was desirous of examining the sarcinæ for the purpose of inquiring into their mode of development, I directed the sulphite to be omitted on the 16th. On the 17th, 18th, and 19th he vomited large quantity of the yeast-like fluid, containing abundance of sarcinæ. On the 20th he resumed the use of the sulphite; and although yesterday, i. e., the 24th, he vomited about three ounces of acid fluid; still it was transparent, and had no trace of sarcinæ or torulæ. Now, gentlemen, I wish particularly to impress upon you the marked improvement that followed in this case from the cessation of the production of the sarcinæ. Coetaneous with their disappearance, the sense of distension and the terrific eructation of flatus ceased; the burning pain at the epigastrium abated considerably, and the pains which our

patient described as "flashing, darting upward," vanished. By preventing the formation of the sarcinæ and stopping the fermentation, we have, then, greatly relieved his sufferings; and, allowing the existence of organic stricture of the pylorus, we have placed the patient in a much more favourable position than before, for we have removed a cause of constant spasmodic constriction of the pylorus, and have placed the stomach in a much more favourable position to resume its normal dimensions, by preventing the formation of the gas, one cause of its constant distension; and it is obvious, that if a dilated, hollow muscular viscus is to resume its normal size, it must never be allowed to become distended.

But perhaps it may be supposed that diet has assisted in removing the sarcinæ. Not at all, for Martin has had a pretty liberal supply of arrowroot, beef-tea, mutton, milk, bread, and potatoes, with two ounces of rum daily. Sometimes the meat has been replaced by fish; sometimes the diet has been chiefly animal, sometimes vegetable; but this has exerted, apparently, no influence on the formation of the sarcinæ. It is true the sarcinæ return directly the sulphite of soda is omitted; but then, even though it were necessary for this man to continue its use for life, it would be no great trouble. Sulphite of soda is not more disagreeable to the palate than carbonate of soda, and is less injurious, and many take the latter daily. But I hope, by steadily pursuing its use, by the employment of unfermented bread, as

to-day suggested by Mr. Graham, and by some other alterations in his diet and drugs, that ultimately he may be able to omit the sulphite entirely.

I cannot conclude without observing, that considerable benefit may be anticipated from the employment of sulphurous acid in all diseases attended with the development of parasitic plants. I would mention porrigo especially. That it would prevent the growth of the epiphyte there is little doubt, and, should it do so and yet not cure the disease, the question of the relation between the two would be settled.

In some forms of dyspepsia, attended with the discharge of large quantities of flatus, I think I have seen considerable benefit from its use.

On the whole, I am satisfied that in the sulphite of soda we have a valuable addition to our materia medica.

Let me advise such of you as may be tempted to employ the neutral sulphites, to test before administering them. An omission of this precaution may lead to disappointment.

Now, Gentlemen, I think that I have proved my point with reference to the value of the microscope and chemistry. Without the microscope the vegetable bodies could not have been detected, and without the aid of the chemist the remedy for them would have been unknown; and I think also that I have shown you that more than temporary benefit sometimes accrues to the patient from the treatment of individual symptoms.

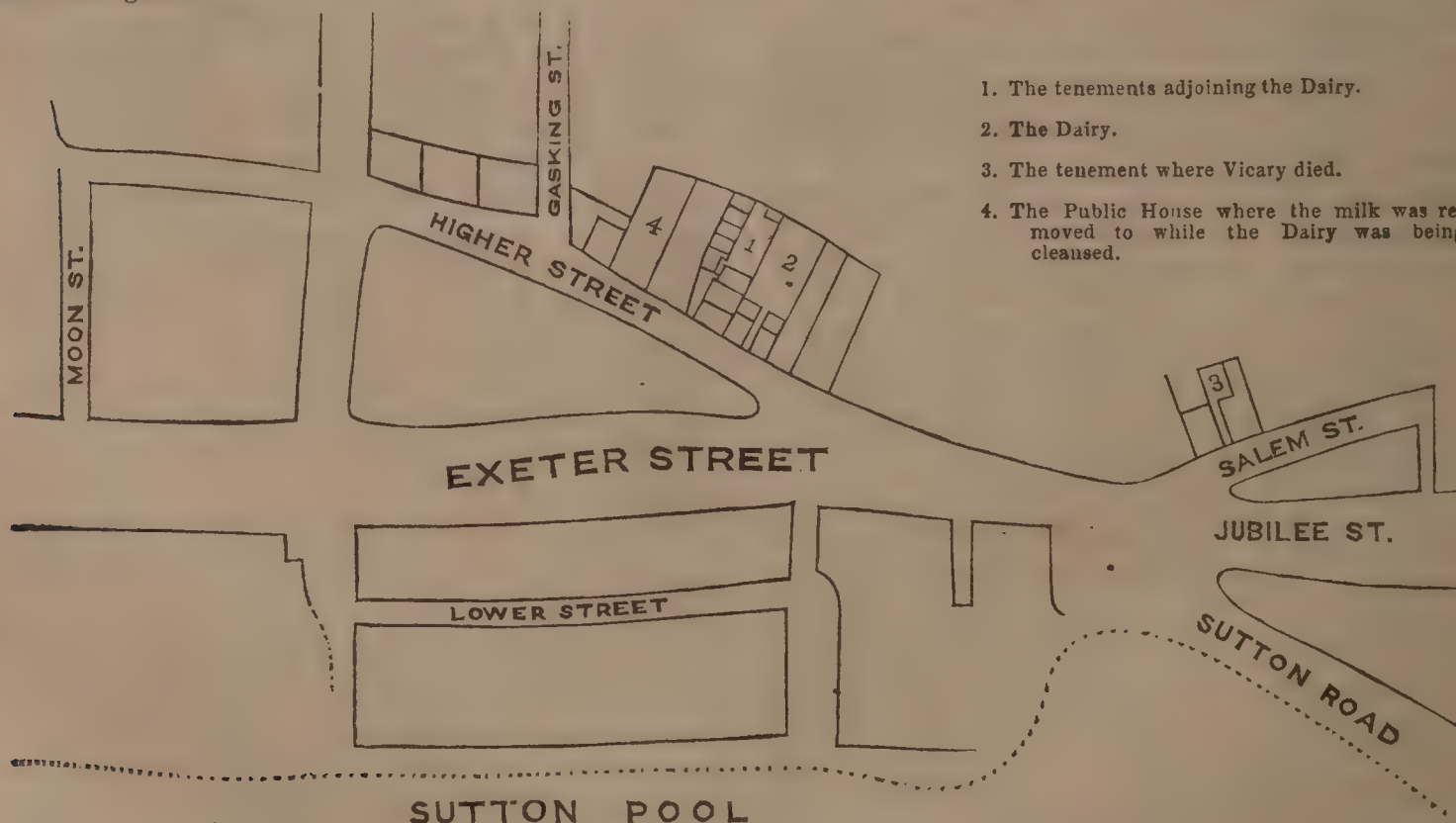
ORIGINAL COMMUNICATIONS.

THE CHOLERA IN PLYMOUTH AND ITS NEIGHBOURHOOD, IN 1849.

By EDWARD T. ROE, M.D., Plymouth.

(Continued from page 455, Volume I., New Series.)

HAVING, in my last paper, considered the cholera as it showed itself at the western end of Plymouth, I shall now pass on to the opposite or eastern extremity of the town, leaving the connecting link, which includes my own district, for subsequent investigation.



The streets principally involved in the present inquiry, are Higher, Lower, and Moon streets, all of which are narrow; but the first, which was a few years ago the main eastern entrance into Plymouth, is tolerably clean, well drained, and not inordinately populated, except as regards one house; its inhabitants, on the whole, are sober and respectable. The other two streets are dirty, close, overcrowded, and ill drained, the resort chiefly of tramps, German musicians, and the lowest class of persons.

As early as July 7, an infant is reported to have died of cholera in Jubilee-street, which will be seen, by reference to the map, to be the easternmost street in Plymouth. The 15th of the same month, Vicary, who, as already stated, (a) had been employed in Stonehouse-lane, died in Salem-street, and July 22, there was a death from cholera in Moon-street.

During August there were occasional cases of, and deaths

(a) Vide *Medical Times*, Vol. I., page 454.

the evening of the 17th two more children, aged respectively 3½ and 5½ years, had cholera and died the following day.

The grand-parents, the parents, and one other child continued well. All the family used Medland's milk, generally only the raw, and the children had it in their tea only. Both the houses were scrupulously clean, well drained, and occupied by persons in comfortable circumstances, who had no connexion with, nor been in Higher-street.

5. Edward Blight, aged 35, a turnkey in the Customs, a man of somewhat intemperate habits, and of an irritable nervous disposition, living in the same house in Ebrington-street as the last-named family removed to, was seized with cholera at 5 a.m. on the 17th, and died on the 21st.

6. His wife, aged 34, was also attacked at 1 p.m. on the 18th, and died in 24 hours. They had partaken of Medland's milk, both scalded and raw.

7. Emma P., Ebrington-street, aged 28 months, had some of the scalded milk to drink on the 15th, and again on the 16th; the night of the 16th she had cholera, and was with difficulty saved after three weeks' illness.

All the rest of the family had the milk, but none drank it as freely as the child, and no other member of the family suffered.

8. Mary Jane Robjohns, aged 4, Ebrington-street, was seized with cholera on the morning of September 16, and died the same night.

9. Her father, aged 41, was similarly attacked on the morning of the 17th, and died the same day. His wife escaped. They had all partaken of Medland's milk.

10. Susan Maxwell, aged 34, Ebrington-place, sold and used the same milk. At 8 a.m. on September 17, she became the subject of cholera, and died in 10 hours. Her husband and two children had no illness.

11. Christopher Passmore, aged 27, Ebrington-street, was attacked on the 17th, but, after a very severe illness, recovered.

12. His child, 11 months old, had cholera at the same time, and died on the 19th.

This was the only family in the house that had Medland's milk, and theirs were the only cases which occurred there.

13. Lieut. R., R.N., aged 63, Ham-street, took some of the scalded milk, as was his custom, on the evening of September 15, and again on the morning of the 16th. He immediately became ill, and died the same day.

14. His daughter, aged 14, who had also partaken of the same kind of milk, was seized soon after her father, and died on the 17th. Mrs. R. and another daughter, as also two other persons in the same house who had taken the raw milk only, did not suffer.

15, 16, and 17. Mr. H., Gasking-street, had both kinds of milk from Medland's. One child, aged 7, was attacked at 11 p.m. September 15, and died in five hours; another, aged 2, and the servant-girl, both had cholera, but recovered.

Mr. H. and one other child had no illness. The child that died had always been delicate and weakly.

18, 19, and 20. Mrs. Congdon's family, living in Wellington-street (almost the highest part of Plymouth), was supplied by Medland's servant, on September 15, with scalded milk. The following day her child, aged 16 months, died of cholera after 10 hours' illness. At 2 a.m. on the 18th the mother, aged 30, died 22 hours from the commencement of the attack, and the same morning the husband, on his return from the Cemetery Office, where he had been to give directions for the burial of his wife and child, became the subject of cholera, and died at 5 a.m. on the 22nd.

The only fatal cases of the epidemic that occurred in Corn-wall-street (one of our best business streets) were in the family of a tailor who used Medland's milk, and, so far as I can ascertain, no other persons in the street were supplied with milk from the same quarter.

21. Mr. M., his wife, three children, and the servant, had the raw milk on the morning of the 15th in their tea, as usual. In the middle of the day the children had butter milk and bread with their dinner. Mr. M. and his wife ate the butter milk thrown over French beans at the same time; he was seized with cholera at 10 the same evening; but, after a very severe attack and three weeks' confinement in bed, he recovered.

22. His daughter, 3 years old, was taken ill at 6 a.m. on the 17th, with the usual symptoms, and died at 12.

23. His son, aged 4½, was seized the same morning, but did not die until seven days after.

The other child died at the same time of long-standing

mesenteric disease, unaccompanied by diarrhoea. His wife and servant had no illness.

These are only skeletons of cases, but to fill them up would be to go over the same ground again and again unnecessarily; in all I have clearly and indisputably ascertained the taking of Medland's milk on Sept. 15th, and the subsequent speedy development of cholera, generally of an unusually malignant type. No connexion existed with persons in Higher-street or its neighbourhood, excepting in the last three cases (21, 22, 23), where, previously to the cholera being in Higher-street, the servant was in the habit of sleeping there, and bringing the milk herself from Medland's every morning. As soon as the cholera was in the street, she did not go home but slept in her master's house. All but Mr. H.'s family, in Gasking-street, lived a considerable distance from, and more than 100 feet above, that part of the town. Previously to the cases recorded here, no death from cholera had occurred in any of those streets excepting one,—that of an infant in Wellington-street some time before.

Having detailed many well-marked cases of malignant cholera which followed the use of milk from Medland's dairy more or less rapidly,—according, apparently, to the idiosyncrasy, relative strength of constitution, and strength of the dose of cholera poison administered;—we will now pass in review the large mortality of the district, in order to see if it at all bears out or substantiates the inferences drawn from those individual observations; and we think it will be shown that it does so, to a remarkable degree.

Higher-street is far superior in drainage, in situation, and in class of inhabitants to either Lower-street or Moon-street; it is also much less densely populated; yet it suffered much more severely. The inhabitants of the tenements adjoining Medland's dairy were peculiarly of a class to use his scalded milk, and, notwithstanding his denial, I have clearly ascertained that they were large consumers of it; they suffered most, for seventeen were carried out dead from those few tenements alone.

Medland states, that he refused to sell milk to the occupiers of the tenements because they owed him money; but we must seek for other evidence than his bare assertion. Now, in the nature of things, it is not very probable that, if persons paid for what they then bought, he would refuse to supply them with a commodity such as scalded milk, which was almost valueless out of his own poor locality, when he knew they had only to go the length of the street to get what they required elsewhere. Again, we know enough of the habits of the poor to be convinced that they would not go further, slipshod and untidy as they generally are, than next door, if they could get there what they wanted. Then I have the statements of the occupiers of those tenements, that the majority of them bought Medland's milk; that they were in the habit of sending their children for it, and that if they had wished for credit, it was not at all probable, from their migratory habits, that he would have given it to them. And lastly, I have the evidence of the landlady of the public-house in Higher-street, where the milk was removed while the dairy was being cleansed, that they were then customers for it. Again, a short street of three houses, remarkable for its invariably clean appearance, well-drained, and situated on an incline, at a distance from, and considerably above, Higher-street, was acknowledged by Medland to be almost exclusively supplied from his dairy. In that street there were four deaths and twenty-two cases of cholera and choleraic diarrhoea.

I have already stated, that several persons partook of all that Medland sold at the time his wife and servant were dying, and yet had no illness; but this proves nothing. Most of those persons lived in Higher-street, and when the dying and the dead were surrounding them on every side, they still continued well, showing that they were not susceptible of the disease;—at all events, at that time; precisely in the same way as some persons may never be susceptible of the contagion of small-pox or typhus, or may be so at one time and not at another.

This holds,—however concentrated or attenuated the poison is, and appears to depend more on some principle inherent in the individual than in the poison itself. Thus, the slightest exposure to contagion will, in some cases, and under some circumstances, produce malignant typhus; in others no effects are produced, or many days after exposure to its influence it may be suddenly started into activity and vigour by the fatigue of a journey or the excitement of change of air and situation, and this equally applies to cholera; we found

persons killed by the slightest exposure to cholera poison, others escaping after long-continued contact with it, even in its most concentrated form; some again, after resisting it for months, becoming almost the last victims of the epidemic, while others, continuing well so long as they remained in Plymouth, became suddenly affected with the disease on removing to a healthy and, perhaps, rural district.

It may, however, be objected, that malignant cholera occurred at other dairies in the town, without being followed by any particular or noticeable fatality among those who partook of the milk; and granting this from absence of proof to the contrary, it does not at all follow that cholera might not have been conveyed in this manner before, without its origin being either known or suspected.

We should not expect, in other cases, similarly violent outbreaks of cholera, for in no instance was there a parallel amount of cholera poison brought into such immediate contact with the milk, as in Medland's case. When it is recollected, that, in the room a storey above, the excretions had been allowed long to remain, and some portion consequently to dry, the particles of which would float about and adhere to the clothes of the attendants (among whom was Mrs. Medland and her servant,) and be thus carried to the dairy; then Mrs. Medland's illness and death in a room opposite, and close to the entrance of the milk-shop, and the servant's in, as it may be said, the dairy itself, with no other exit than through it we may readily suppose, that if milk is capable of absorbing any portion of cholera poison, it would do so in the largest possible degree under such circumstances.

Whether there is a cholera poison, and if so, of what nature, is not my intention, in these pages, to discuss, as it would lead me widely from my subject,—which is simply the history of the cholera in Plymouth and its neighbourhood.

To return to Medland: it has been painful to me to pursue this investigation, as I feel assured that nothing could have been further from his thoughts or wishes than to sell an article that was likely to injure his fellow-townspeople; the great public question involved in the inquiry, must, however, outweigh every private consideration.

I afterwards attended him in cholera, and he was the only one of his family who escaped with life. The way he manœuvred to secure for himself a lodging out of the infected neighbourhood was highly illustrative of the state of alarm that existed at the time in Plymouth.

On finding that he was becoming ill, he requested one of his customers to allow him to sit down for a short time in a back room to rest himself, as he was much fatigued, and having secured a bed, he calmly took possession of it; the usual symptoms soon manifested themselves. I was hastily summoned, and had difficulty in restraining his alarmed and irritated hostess from turning her unfortunate guest into the street; indeed, I believe she would have done so, in spite of my remonstrances, if she could have obtained any one bold enough to assist her.

He had a fearfully severe attack.

[To be continued.]

CYSTIC DEGENERATION OF THE KIDNEY.

By HOLMES COOTE, F.R.C.S.,

Demonstrator of Anatomy at St. Bartholomew's Hospital.

OBSERVATION teaches us that cysts are developed in more ways than one, *e.g.*, 1. By the gradual enlargement and convolution of the natural tubes and tubules of a secreting gland; as is instanced by the dilatations of the lactiferous tubes,—obvious to the naked eye in cystic disease of the breast,—apparent under a common magnifying lens in the chronic mammary tumour.

2. By the dilatation of veins.

3. By the formation of a cyst of areolar tissue around an hydrid, or some other parasite.

4. By the growth of nucleated cells within a parent cell, each generation being capable of transmitting the germ-force to its own offspring.

It is to cystic degenerations of the first variety that I now propose to offer a few remarks, and to illustrate some of its principal characters by a description of cystic degeneration of the kidney.

It occasionally, though rarely happens, that, upon examining the body of a patient, who, during life has made no complaint of disorder of his urinary organs, but who, for a longer or shorter time has suffered from irritability of disposition, waywardness of mind, or decided insanity, we find the kidneys from three to four, or five times their natural size, and converted into a mass of cysts, containing a fluid, either clear as water, or of light amber, yellowish brown, ochre, or even brownish black hue. Those nearest the surface, presenting an appearance somewhat like grapes, project from the substance of the organ, under the thinned and distended capsule; those which are deeper seated make their way amongst the tubuli uriniferi, which they separate one from another. Upon injecting the kidney, and making a section of it, we find that the tubes still retain their normal proportions, but that their extremities, or the sacs surrounding the Malpighian body, become dilated, and that the twisted artery, of which a Malpighian body is composed, stretched, elongated, separated from its natural connexions, and partially compressed, becomes eventually obliterated. (a) The fluid (which is derived from the highly vascular walls of the cyst) is either thin as water, or of gummy consistence; in some instances, it is loosely coagulated, and resembles jelly. In it we find either the constituents of the urine, or albumen and fibrin in varying quantities; altered blood-discs, crystals of cholesterine, either floating in the fluid, or adhering to the walls of the cysts, in the form of minute granulations, mixed with crystals of the carbonate of lime, whose fractured surfaces present a radiated appearance.

To Mr. Quekett is due the merit of having first satisfactorily investigated the morbid changes which have taken place in the minute structure of a kidney so diseased.

George H., a patient in Bethlem Hospital, died April 6, 1847. The body was examined twenty-four hours afterwards by Mr. Lawrence.

There was slight partial thickening and opacity of the arachnoid on the cerebral hemispheres, and at the base of the brain considerable serous infiltration of the pia mater. About an ounce of clear fluid in each lateral ventricle. The orifices of divided vessels on sections of the cerebral substance were numerous and large. The remains of a cerebral hæmorrhage, (which must have occurred in connexion with a former attack of paralysis of the left arm and leg) were found in the right hemisphere of the brain. The cerebral substance was of brown colour to the extent of nearly two inches, measuring from before backwards. This discolouration occupied part of the corpus striatum, of which the ventricular surface, however, was entire. In the centre of the brown part, there was a small cavity with smooth sides. The discoloured part was rather firmer than the natural texture of the brain, and extended to about 1-6th of an inch in depth all round the central cavity.

The coats of the arterial trunks at the base of the brain were partially thickened and opaque.

The right lung was consolidated throughout, so much so in the greater part of its extent as to sink to the bottom in water; the portions least consolidated sunk below the surface. Purulent infiltration through nearly the whole extent of the lung, the substance breaking down under moderate pressure of the fingers. Recent agglutination of the base of the lung to the diaphragm, and at the neighbouring surface to the thoracic parietes, with slight effusion of soft yellow fibrin. The left lung was diseased in a similar manner, but to less extent. About two-thirds of it were consolidated, and in a more or less advanced state of purulent infiltration.

The left ventricle of the heart was thick and strong.

Both kidneys were at least three or four times their usual size, and beset through their whole substance with cysts of

(a) It may be objected that the Malpighian body cannot well be compressed by the elevation and separation of the capsule that surrounds it; but let it be recollected that, being attached to the wall of the capsule, it must be subjected to the same pressure that the cyst generally undergoes by distension. Moreover, it suffers yet further compression by being driven against the surrounding renal structure. This compression of the Malpighian body has been described by Dr. Gairdner, who observes that, in cases of disease of the cortical substance, "the Malpighian coils of vessels, which, in a strictly normal specimen, may be observed filling the capsule, particularly towards its circumference, with red injection, are pale, bloodless, and compressed, sometimes maintaining their rounded form, at other times more or less angular. Along with this condition of the Malpighian bodies, I have generally observed distension of the urinary tubules, either by morbid deposit, or by the accumulation of their own secretion. In the latter case, the kidneys have usually been above the normal size."—"Gairdner on the Pathology of the Kidney," p. 4. Edinburgh. 1848.

various size, containing a thicker or thinner turbid fluid, loaded with cholesterine.

There was a stricture of the urethra; the coats of the urinary bladder were thickened and indurated. The right testicle presented an uniform enlargement of pyriform shape; the swelling was firm but fluctuating. It proved to be an hydrocele. The tunica vaginalis was dense and hard, but not thick. The contained fluid was of the consistence of thin gruel, of dirty brown colour, and contained a large proportion of cholesterine.

By Mr. Lawrence's direction, the two kidneys were conveyed to the College of Surgeons, where they were minutely injected, and then examined by Mr. Quekett, who found through every part of the organ distension of the Malpighian capsules, and, in many situations, the partial or complete obliteration of the tortuous convoluted artery contained within.

Upon the first survey of a kidney so degenerated, the inference arises, that its capabilities as a secreting organ have long been annihilated; but yet, the history of cases shows that it is only in the later stages, and in the extreme forms of the disease, that the secretion of the urine, though possibly vitiated, becomes obviously diminished, attended with the manifestation of the usual cerebral symptoms; and this agrees with the information derived from minute injection and from microscopic examination.

Each cyst commences about a single Malpighian body; and, however capacious that cyst may become, it never directly involves more than this one. Two or more cysts may become confluent by the absorption of some part of their walls, and then fibrous bands or fræna pass from side to side of an irregular and dilated sac, which communicates by several openings with the neighbouring uriniferous tubes. Numerous as are the cysts, the Malpighian bodies are infinitely more so; so that secretion goes on until, as in the extreme cases, the cysts, tightly distended, cause by their pressure general absorption of the glandular structure. But, in such specimens as are common in hospital museums, I have doubts as to whether there has been any sensible diminution, during life, in the flow of the urine. It constitutes a beautiful microscopical object to see in the injected kidney the tubes, winding amidst this mass of disease, forming the mammillary bodies, and terminating in their proper excretory ducts. This immunity from destruction is to be attributed to the facility with which the kidney, partially covered by peritoneum, and imbedded in loose fat, enlarges in every direction.

When death ensues, the immediate symptoms which precede it are those of coma; in fact, they are precisely such as, under all circumstances, would attend the mixing of urea with the blood. But the disease is essentially chronic, and instances are upon record in which patients thus afflicted have died from apparently other causes. M. Lecomte has related the case of a woman, who expired after two years suffering from cancer of the uterus. Four days before her death, she became delirious, upon the fifth she suddenly sank into a state of coma and died. In other cases, no symptom has been remarked which could indicate during life the existence of such disease; there has been no suppression of the urine, no pain about the loins, and the cerebral symptoms have been referred to acute meningitis, (as in a case related by Dr. Behier) or to confirmed insanity, as in the case which occurred in Bethlem Hospital.

Rayer, in his excellent work upon "Diseases of the Kidney," remarks, that in the greater number of observations upon cystic degeneration of the kidneys, collected up to the time when he wrote, mention only has been made of the cerebral accidents which have immediately preceded death; for, he adds, very "rarely can one procure an exact account of the condition of the patient anterior to the time when he is subjected to treatment." The feeling which views insanity in the mixed light of a misfortune and a disgrace, is not yet rectified; and families still carefully conceal as long as possible, even from those whose skill they require, the fact that the intellect of any one of its members is in any way deranged.

We are indebted to MM. Corvisart and Leroux for the particulars of a case which in some measure supplies this deficiency, and which is interesting, taken in connexion with the circumstance already noticed, of a specimen of this rare disease having been procured from a patient in Bethlem Hospital.

Case.—William R., aged 49, a lawyer, became subject, at

an early age, to flatulence, palpitations of the heart, and other symptoms of indigestion. His temper, naturally none of the best, was not improved by these ailments; and his fits of passion, though soon over, were easily roused, and occasionally followed by slight feverish attacks. At the age of thirty-nine, he had a severe attack of fever, accompanied by delirium, in the midst of which occurred the exciting events of the 10th of August, 1792, when the Parisians, infuriated at the supposed treachery of their rulers, took the palace of the Tuileries by assault, massacred the Swiss guard, and made their unfortunate king a prisoner. Excited by the tumult, and becoming acquainted with the cause, he rose from his bed, went enthusiastically to his post, and, when all was over, and he became calm, found that his fever had left him. During the years that immediately followed the restoration, he was occupied in public affairs, and much excited by the stormy events which ensued. Shortly afterwards, he experienced pain in the loins, became subject to sickness and vomiting, and felt general malaise. From possessing considerable embonpoint, he became thin and emaciated, and the symptoms of dyspepsia, which had in great measure left him, returned with increased severity. Eventually, his circumstances becoming bad, and being unable to command proper attendance at his residence, he presented himself for admission, and was received into the hospital of La Charité. Whilst in the hospital, he passed an abundant quantity of urine, which was colourless, and with but little odour; his strength was still good, and his spirits were gay. He spoke readily of his adventures and his disappointments, and recounted with accuracy past events. One morning at the visiting hour (6½ a.m.) he was in his usual state, having passed, as customary, a large quantity of limpid urine. In the course of the day, without apparent cause (unless some unexpected distress may be so considered) he was seized with general trembling, with a sensation of oppression and of extreme anxiety; during the close of the day, he was delirious, and at night he appeared to sleep. From this state he never rallied, but, becoming more and more comatose, and breathing more and more laboriously, he passed into a state of complete insensibility, and died on the fifth day from his seizure.

Examination of the Body.—The brain appeared shrunken, and did not completely fill the cavity of the cranium. Under the arachnoid, and in the layers of the pia mater, there was a thick layer of gelatiniform fluid. The colour of the brain was natural; but its substance was particularly soft, and of singular flexibility, although it did not readily tear. The thoracic viscera presented nothing worthy of remark. Upon opening the abdomen, the convolutions of the small intestines were seen; but the stomach, the liver, and the spleen were invisible, being pressed upwards under the cartilages of the ribs, towards the diaphragm. Upon separating the small intestines from the colon, the kidneys became apparent through the adipose structure. They were of extraordinary size, and of singular form; the right extended from the cæcum into the hypochondrium, behind the pyloric end of the stomach; the left extended from the iliac region to the diaphragm behind the spleen. Their whole substance was occupied by cysts similar to what has been already described, and represented in Rayer's Atlas. Some of the cysts were as large as a pigeon's egg, others were not bigger than a grape-seed. The disorganization ceased at that part of the renal structure known as the calyces; the pelvis, ureters, and bladder, the renal arteries and veins, were precisely in their normal condition.

This disease must be distinguished from the degeneration of the kidney, consequent upon obstruction to the flow of urine through the ureters, in which case the dilatation commences about the pelvis of the kidney, and, extending thence along the infundibula with the accumulation of the obstructed urine, gradually causes absorption of the cortical substance. In the morbid change now under consideration, the dilatation commences at the peripheral extremities of the minute tubules, and is wholly unconnected with mechanical obstruction to the flow of their secretion through the larger channels. Indeed, in some cases the amount of urine voided daily, up to the last phase of the patient's existence, seems to have been beyond the natural standard. To what cause, then, may be assigned the primary dilatation of the capsules around the Malpighian bodies? It would be easy to invent an hypothesis, that this and that urinary tubule, becoming obliterated by extravasated blood, by

tuberculous deposit, or by fat in the epithelial cells, enlarged beyond the point of obliteration, with the accumulation of its imprisoned secretion; and probably some such supposition may not be wholly without foundation; but, as at present it is destitute of proof, it must not be considered admissible. If, however, we may be allowed to infer from what we learn of the development of cystic disease, as it occurs in the mammary gland,—its most frequent seat,—it would seem that the first change consists in a loss of elastic and contractile power in the tube walls, in consequence of which the flow of the secretion is retarded; and causes of obstruction, which in the healthy organ would be easily removed, become the means of its complete arrest. Thus, in cystic disease of the mammary gland, the lactiferous tubes, dilated to a diameter beyond that of a writing quill, by a thin and almost watery secretion, have lost the power of overcoming the very slight resistance offered by the sphincter of elastic tissue which surrounds their orifice upon the nipple, and the fluid is retained in the duct, although the dilatation extends to within a few lines of its orifice. I have never yet examined an instance of cystic degeneration of the mammary gland, in which the dilatation of the tubes could be referred to an obstruction to the escape of their secretion greater than usual; bristles readily passed into them by the natural passages, which were often visible to the naked eye. Indeed, in the progress of this disease, sudden discharges of fluid from the nipple are of not infrequent occurrence, and they serve as a very useful means of diagnosis. Unless all tubes possess some power of contraction, by which they might expel their contents, there is no reason, in almost any instance, why secretions should ever escape at all, and the condition of a gland is healthy, its functions go on uninterruptedly, when, with a free circulation of blood in the secreting structure, there is maintained a proper relation between the stimulus of the accumulating fluid, and the contractile re-action of the tube-walls. When, from any cause, this just balance is destroyed, morbid changes inevitably ensue. At first, imperceptibly small, and slow in their progress, they pass unnoticed, but they are inevitably followed by functional disturbance, which is serious in connexion with the nature of the organ in which it ensues. In the mammary gland the disease produces only local mischief; the mass may be inconvenient from its bulk, or it may present a painful, bleeding, and ulcerating surface. With the extirpation of the gland the evil ceases. But when it occurs in the kidney, microscopically minute as are its first manifestations, it fails not, with unerring certainty, to destroy life, and that, too, in a way most to be dreaded, by producing morbid changes in the brain, by which the natural feelings may be perverted, passion gain the mastery, and the intellectual faculties be annihilated, before release is afforded by death.

ON THE TREATMENT OF HÆMORRHAGE WITH ABORTION.

By SAMUEL GIBBONS, M.R.C.S.

North Dispensary, Liverpool.

WHEN we consider the consequences of this severe and not unfrequent affection, (hæmorrhage from the uterus, with abortion) there can be little wonder at fear being in the minds of those called to treat it. The responsibility and anxiety are increased by the treatment generally recommended being insufficient for the contending difficulties. It is, therefore, unfortunate, that a happy and dexterous line of practice has not been proposed. On reading various accounts, the practitioner, and especially the juvenile, is perplexed as regards his choice of remedies to check this affection, and in the adoption of the orthodox practice, patients often unfortunately hang between life and death for days and even weeks. For these reasons, it is much to be regretted, that if death has not been the invariable result, mothers, in after-life have been rendered unfit for their accustomed duties, a burden to their families, and their days have been days of mourning and sorrow. To depict the serious consequences fully would occupy considerable space.

I deem it important to remark, that the cases I have met, have not been sufficiently numerous to enable me to speak with the confidence to be expected before giving my thoughts publicity; for to make a paper complete on this

or any other subject, requires many years and considerable practice; and this is fully proved by the fact, that almost every case has with it some fresh point to guide in the treatment of subsequent ones.

I am so hopeful of my suggestions being propitious, that I fearlessly ask practitioners in midwifery to assist me by adopting the treatment I shall recommend, and reporting by the *Medical Times* the result. I may also state, that the plan of treatment I have to propose was with me original only so far as regards the application of the same principle to miscarriage as that proposed by Professor Simpson, of Edinburgh, in the treatment of placental presentations; and the importance of it first became manifest while treating a respectable lady for whom I had considerable regard. (*Case 1.*) It is only right for me to observe, that since I commenced the practice to which I allude, that I have found it has in part only been occasionally adopted by some practitioners in London; and that it is not the invariable rule is certain from what I have seen and heard.

To be brief, I shall mention that the signs of hæmorrhage are apparent at different periods of the abortive stages, both before and subsequent to the protrusion from the uterus of a part of the embryo or foetus.

In the stage where there is no protrusion, a variety of treatment has been proposed, the most important of which are absolute rest, external and internal applications of cold, venesection, opiates, astringents, and turpentine. In the choice and application of these, the practitioner is to use his own discretion, and if he be well acquainted with his profession, can have no difficulty. A blunderer and an ignorant man ought by no means to engage in the treatment of these important cases. Plugging is another remedy, on which some authors lay great stress; but I am opposed to it, as it causes uneasiness, increases the liability to abort, and cannot be employed long enough to be of any important avail. The foregoing means may prove sufficient at the beginning; and it may be observed, that hæmorrhage, in the first instance, is not so immediately dangerous as when protrusion has happened. The losses of blood are not fearfully large, nor the effects on the system so manifest in the earliest stage, and I am not, for these reasons, disposed to dread them.

The stage of protrusion which differs in extent at the period of the visit is treated, according to authors, in much the same way; though when the embryo has been retained a very considerable time, there is the addition of interference proposed with a small crotchet, instead of using the hand and fingers, which is looked on as "a most dangerous, if practicable, operation, and would most probably lacerate the organ, and excite fatal inflammation." That the use of the hand or fingers in removing an embryo or foetus is more dangerous than the use of the crotchet, (an instrument without sensibility,) or is even so dangerous as represented, I have yet to learn from practical experience. I can form only one conclusion in reference to the crotchet, which is, that it is a barbarous instrument. I have heard, also, for the purpose of extracting a protruding embryo, that it has been suggested to employ the indelicate speculum. It is too clear to me that the inventive faculties have been too much engaged in these emergencies, and that it would have been best to have trusted much more to the provisions of kind nature.

I shall now introduce a few of my cases, and give my conclusions as to treatment specially necessary afterwards, as I have learned them from practical observation.

Case 1.—August, 1849.—I was sent for to the wife of a missionary, who for twenty-four hours had been suffering from uterine hæmorrhage. She was weak, irritable, and hysterical, and therefore likely to suffer considerably from small losses of blood. I found her suffering from pain in the back and abdomen, faintness, with a small and weak pulse. She was anæmic, and had advanced three months in pregnancy. On introducing my finger up the vagina for examination there was a gush of blood. The os uteri was partly dilated, and the embryo partly protruding but not unattached from the inner surface of the womb. I did not remove the embryonic mass, thinking it might come away by the efforts of the uterus in the course of the day, but I plugged the vagina and gave wine, opiates and secale. She was to be kept cool and quiet. The patient remained in this state three days longer, occasionally losing blood though the remedies were continued. At the end of this time I considered her to be in a very dangerous state, as she grew weaker, and if moved in the least, quite faint. At the close

of the third day I succeeded in detaching the embryo with my fingers. Little effort was necessary; she improved gradually; the bleeding ceased soon after. She was several weeks unable to engage in her usual household duties. She had had one or two miscarriages previously.

From this case I first learned the importance of removing the embryo in every case where there was protrusion as soon as possible, because the hæmorrhage ceased in a few hours after the offending body was removed.

Case 2.—April, 1851.—A poor delicate woman, and mother of a large family, having injured herself by a long journey, was taken on Tuesday with slight hæmorrhage, being two months advanced in pregnancy. The usual symptoms of abortion continued till Thursday, when the child and placenta came away with a considerable quantity of blood. Finding that there was considerable bleeding two days subsequently, and that she was getting very feeble and weak, she sent to the dispensary for medical aid. I attended, and on examination, found protrusion through the os uteri, and, not knowing that the foetus had previously come away, I prescribed secale, to see if it would answer to expel the offending body. She took three large doses in four hours. The following day I found that the hæmorrhage had continued through the night, and the offending body was retained. I extracted it with my fingers without difficulty, and found that it consisted of membrane, in a fold of which blood had coagulated. It was evident that though the foetus and placenta had been separated, a part of the membrane had been retained. Hence the continuance of the hæmorrhage.

Case 3.—January, 1850.—In my capacity as visiting surgeon to the North Dispensary, I was called to a woman with severe flooding. She was aged 39, strong, had been delivered of eleven children, was eight weeks advanced in pregnancy. On Monday she had slight pain and flooding. On Tuesday the same. On Wednesday the same, but the hæmorrhage increased. On Thursday the pain and flooding increased, owing to having carried a heavy load of fish, and walking some distance. On Friday the symptoms returned and increased, and she described the flooding as having been very great. On this day I first saw her, I found her not so low as the first female, though she was weak, faint, and complained of fluttering about the heart, pain in the back and abdomen, and slight hæmorrhage. On examination I found the embryonic mass partly protruding through the os, but I did not think sufficiently so for me to attempt removal. I therefore prescribed quiet, opium, and tincture of muriate of iron. Little relief was afforded, and on Saturday morning the hæmorrhage returned. The general symptoms were the same, but the embryo protruded a little more. I extracted the mass in the following way:—The patient was laid on her left side, and the nurse told to support the back and abdomen. I greased my right hand, and introduced it slowly and carefully into the vagina. Having done so, I as cautiously introduced two of my fingers into the uterus, and extracted, taking care, on withdrawing my hand, to bring away the embryo. I had no difficulty. The hæmorrhage continued slightly during the day, but from that time she recovered without a bad symptom. I treated her, of course, subsequently, as I always now do, as though she had been delivered of a living child at the full period.

Case 4.—Feb., 1850.—On the Sunday but one following the extraction of the last embryo, I was sent for to a somewhat different case by my colleague, Dr. Talbot. On his arrival the foetus had been expelled. On endeavouring to remove the placenta, it was torn, and for this reason I was sent for, to assist in the extraction. I found the woman not very weak. The hæmorrhage had not been excessive. She was between four and five months advanced in pregnancy, was mother of five children, and had had no previous miscarriage. The cause of this was said to have been a fall while carrying a heavy weight.

On introducing my finger for examination, there was a gush of blood, the placenta was torn, and a portion protruded through the os uteri, which was somewhat contracted. I had a difficulty in introducing my hand into the vagina, but when I had done so, failed to reach the placental attachment, the os not being sufficiently dilated for the introduction of three fingers. I removed as much of the placenta as possible, leaving only a little behind. Before withdrawing my hand, however, I again failed to reach the remaining portion. We then concluded, to allow what remained to

come by natural efforts; and prescribed quiet, tincture of muriate of iron, and laudanum.

Early next morning she had suffered from rather severe hæmorrhage, but on my visit a few hours later she was pretty well and free from pain. The medicine, etc., were continued.

The next day the remaining portion of placenta came away; and she was so much recovered on the following afternoon that she was dressed and sitting up. She recovered remarkably well, had no pain or return of hæmorrhage, nor complained of the least uneasiness.

After the third day no additional medicine was necessary.

Case 5.—July, 1850.—A female, mother of one child, aged 25, of weakly constitution, with slight pectoral affection, and occasional attacks of dyspepsia, complained of slight febrile symptoms, with pains in her back of rather a severe kind. She stated, that she had not had a menstrual discharge for three months till the present, when there appeared a little, sanguineous in appearance.

As she appeared bashful in naming her suspicions, I was misguided on my first visit as to the precise nature of her ailment. I recommended her to bed, gave her saline medicine and small doses of laudanum. Ten hours after, the patient's mother came in terror, stating that her daughter "was flooding away," and that she was afraid of a miscarriage. I found the woman in bed, weak, and a little faint. I found the ovum half protruding through the os uteri, and the hæmorrhage slight. Having recommended the removal of the embryo, after some time and persuasion she consented. I had little difficulty in accomplishing my aim, though she had great pain at the time. On extracting my hand with the ovum, I found her fainted. I could feel no pulse at the wrist, but she just breathed. On applying cold to the face, and administering a little wine, she shortly recovered.

The following day she was much better. Through the night she had suffered slight pain and had had slight hæmorrhage, which stopped by degrees and completely in twenty-four hours.

She recovered very soon, without a bad symptom, and expressed herself perfectly satisfied with my treatment. The dangerous symptoms, the result of my treatment, viz., fainting, has taught me in such future cases to administer a stimulant.

The miscarriage was attributed to unusual exertion in removing from one house to another, not being accustomed, though poor, even to wash her own clothes.

Case 6.—March, 1851.—A female, aged 35, mother of two children, applied at the dispensary for medical aid. She complained of slight pain in the back and thighs, pain at the stomach, nausea, vomiting, loss of appetite, fluttering about the heart, and great weakness. She had not menstruated for nine weeks; fancied that she was pregnant, and, if so, was afraid of a miscarriage. I prescribed rest, mild, nourishing diet, and soothing medicine. She improved the four following days; when, two hours after my last visit, she had severe hæmorrhage and fainted. I was not sent for, and did not see her till the day but one following, when she told me of the circumstance, and that she had been flooding more or less since. Previous to the first severe attack she had only perceived a slight show. I proposed an examination, and she readily consented. I found the ovum protruding through the os uteri, but not completely detached. The uterus being low down in the pelvis, I was enabled to pass the index finger readily into it without introducing my hand into the vagina. Having done so I detached the ovum and brought it away, for which she expressed satisfaction. In a week she recovered so well as to be able to go about, but felt weak. She had no bad symptom till a fortnight afterwards, when, having exerted herself too much, flooding re-appeared; but this was owing to her debility. Turpentine, with laudanum and rest, checked the bleeding. She has taken iron since and recovered very well. Of other cases in which I extracted I have kept no notes; but I have a few which strongly indicated the necessity of manual interference in cases of hæmorrhage with protrusion, and the danger of treating them after the ordinary methods. Two of these I will record.

Case 7.—January, 1851.—Seven weeks after miscarriage I was sent for to a woman remarkably low and weak. The chief of her additional symptoms were pain at the stomach, flatulency, slight nausea, loss of appetite, and fluttering about her heart; small weak pulse, and inability to rise

from her bed. She had been in this state, better and worse, since her miscarriage, in which she almost died. When three months advanced in pregnancy she accidentally fell down stairs, and was so much injured as to induce the first symptoms of abortion, viz., pain in the back, bearing down, and slight hæmorrhage. These symptoms gradually went worse for eight days, when the hæmorrhage became of a fearful character. She fainted. In this extremity the ovum had been detached and expelled. A surgeon who had been called, seeing her danger, stripped her naked, poured cold water from a jug at a height, and administered brandy. In an hour and a half he left her recovered, having previously applied a book on the abdomen, bound down with a tight bandage. The hæmorrhage subsequent to this was only slight, and ceased altogether in two days.

I restored her strength with tonics.

Case 8.—September, 1849.—A delicate and respectable woman, aged 24, consulted me in reference to a feeling of extreme debility with which she had been troubled since her miscarriage, two months previously. The surgeon who had attended her had done nothing towards a mechanical or artificial removal of the embryo, but gave her opiates and secale. The hæmorrhage continued from ten to twelve days; more than a month elapsed before she was able to go about. Till I saw her she remained in a weak state of health, and when she consulted me she felt almost unfit for the lightest occupation. She was weak, had pains in the back and stomach. Menstruated regularly, but had great flow, especially since her miscarriage. Pulse was weak, appetite poor; complained of occasional nausea, fluttering about the heart, and other usual symptoms of excessive debility. Iron restored her, with a nourishing diet. This woman had had no children or previous miscarriage.

The knowledge I have gained from the treatment of abortion I will give as briefly as possible; and I trust that my conclusions will be so evident to the readers of this Journal that they will have no reasons to differ with me.

I have learned:—

1. That symptoms of an approaching attack of miscarriage vary in their number with different women, as may be learned from the several cases reported.
2. That in delicate females abortion is often hereditary, and often recurs.
3. That it is frequent with both strong and delicate females; but when it occurs with the former it arises from some external or internal violence, or laborious employment; and with the latter there is often some enlargement, or œdema, about the os uteri and leucorrhœa.
4. That the separation of hydatids, moles, or false conceptions are not uncommon, and are preceded, accompanied, and followed by symptoms similar to the separation of an embryo.
5. That previous and subsequent to the expulsion, or extraction, of the embryo, it is necessary to treat the patient in the manner recommended and adopted for females recently delivered, for fear, especially, of recurring hæmorrhage and the induction of an unnatural position of the uterus.
6. That the best internal remedy for checking uterine hæmorrhage is turpentine, in doses varying from mxx to $3j$; and if pain is severe, laudanum is usefully conjoined.
7. That plugging is useless, unnecessary, and injudicious.
8. That no interference is highly improper, especially when the hæmorrhage lasts several days and there is protrusion; as patients so treated, or, rather, neglected, are liable to suffer in subsequent life.
9. To extract the embryo in the manner as related in *Case 3*, in the early stages of pregnancy, is not so dangerous as authors have stated, and it has yet to be proved that it is dangerous at all.
10. That in the case of protrusion it is important, if possible, to remove every portion of the embryo before leaving the patient.
11. That the early separation or removal of the embryo is followed by cessation of bleeding and rapid recovery.
12. That the use of the crotchet, or speculum, or forceps is unnecessary, and sometimes liable to be followed by dangerous symptoms. (?)
13. That when there is no protrusion, but the mouth of the uterus is closed, and there is hæmorrhage, it would be improper to attempt artificial removal.
14. That when there is excessive debility and tendency to faint, it is improper to employ manual interference without previously administering a stimulant.

15. That there is more difficulty to extract the embryo at the fourth month, than any other period of pregnancy.

16. That in some cases, where there is only very slight hæmorrhage, and the embryo is not removed, there is putrefaction and separation in small pieces, giving rise during the process to irritative fever, which in some subjects assumes a low character.

In conclusion, I think it right to remark, that since my attention has been specially directed to abortion, I have made no trial of secale, either in repeated large or small doses, principally for the reason that extraction was the most expeditious. I may, however, at some future period, employ this remedy.

ON HYPOCHONDRIASIS,

AND OTHER FORMS OF NERVOUS DISEASE.

By H. HUNT, M.D.

(Continued from page 153.)

I must, however, here remark, that, in the preceding observations, I allude exclusively to the retention in the system of the constituents of the various secretions in an uncombined state; of the materials from which the secretions are formed, and not of the secretions themselves; a distinction of some importance, both as regards the different effects, *i.e.*, the different morbid actions or diseases they produce, and as affording an explanation of many morbid phenomena arising from the circulation of them, otherwise not very intelligible. At the same time, I by no means wish to be understood as under-rating the prejudicial effect on the animal economy of a retention of the perfectly formed secretions; they undoubtedly excite many very serious derangements of health, but of a different nature from those caused by the presence of their uncombined elements.

The next question is of great importance. Does the circulation of these noxious matters in the blood produce hypochondriasis?

A concise summary of the effects, as they arise from the causes I have enumerated, will, perhaps, facilitate the answer, I will therefore give it.

The first perceptible effect of care, anxiety, or over-exertion, &c., on the human system, is a torpor of the nervous system, loss of appetite, and sleeplessness. A dry, parched state of the tongue and fauces next succeeds, and a sensation of heat and dryness in the stomach,—not the burning sensation from the presence of acid or acrid matters, but as if the lining membrane of that organ had been scorched and dried. This state is accompanied by a feeling of weakness and sinking at the præcordia, which seeks relief from stimulants, and by thirst, which calls for cooling drinks, but with a loathing of food. (a)

The state of the stomach I have described seldom exists many days without a corresponding sensation in the head; not pain or headache, but a feeling of general discomfort and internal heat apparently in the substance of the brain itself, which dulls its faculties and impairs its energies. All the vital processes in succession appear to be arrested; the skin becomes dry and parched, the tongue and fauces have been so from the commencement, indicating a similar condition of the mucous lining of the digestive canal, which, together with the liver, cease to perform their functions; bile is not formed, the other secretions are withheld, the bowels cease to act, they become costive. The kidneys alone are active, but they only separate the more watery parts from the blood; the urine secreted at first being generally pale, plentiful, and neutral, and of a low specific gravity, in property little else than water. The countenance soon betokens the disorder of the system, the lines of anxiety and care in the face betray the inward struggles of the feelings; the dark areola around the orbits, the dull, dark, unhealthy appearance of the skin attest the retention of morbid matters in the blood. The pains and aching of the joints and nerves foretell the coming illness; the *anxietas*

(a) The relief that is afforded by stimulants, such as cold brandy and water, or brandy with the effervescing waters, frequently causes an indulgence in those pernicious drinks, in no case more decidedly pernicious than in this. The comfort and relief from them are very transient, and, in proportion as they are freely indulged in, they aggravate this unnatural and unhealthy state of the stomach, and add to the desire and apparent necessity for them.

præcordiorum, the peculiar sensation of anxiety felt in that region, foreshadows the distressing nature of the approaching mental malady; the lurking elements of disease, the innate predisposition to disorder, are no longer kept under control by the vigour of health; they either start up as it were into life spontaneously, or only require some exposure to cold, some act of imprudence, some common exciting cause, to set them in action, and general disease is the consequence.

Thus there appear to be several distinct grades from health to disease, which are in perfect accordance with the four preceding deductions; and to them I may now add a fifth, viz., that the effect of the circulation of these morbid matters on the brain and nerves, and through them on the mind, is the anxiety and depression of spirits constituting the disease under consideration—hypochondriasis. It also affords a ready explanation of the various morbid phenomena observable in that disease, viz., the apparent debility and general want of energy, the feebleness and irregularity in the action of the heart and pulse, and the dulness of the intellectual faculties,—of which the difficulty and labour experienced in thinking or making any mental exertion whatever furnishes us with sufficient evidence,—all resulting from the *absence of the natural stimulus healthy blood affords to the brain and heart*. To this morbid condition of the blood, the dingy, unhealthy appearance of the complexion and the other physical symptoms of hypochondriasis I have described may be attributed. The blood being unhealthy, the digestive organs oppressed, and the nervous stimulus absent, healthy digestion is impossible. The neglect of muscular exertion, from deficient nervous energy, prevents the waste of the materials of the body; therefore no supply is required; hence the continued want of appetite after the moral causes have ceased to act; thus imperfect materials are supplied to the already injured or imperfect machinery of digestion and assimilation, and one cause of disorder produces others, which again re-act on the first, and increase all. Congestion of the various viscera soon takes place; local disease at length arises, which adds to the complication of the general malady.

This view of the subject derives confirmation from the observation of the means used by nature for relieving the system of this accumulation of morbid matter, the loaded organs of their state of congestion, and the mind of the weight that oppressed it. I allude to what were formerly called "critical discharges,"—critical illnesses which, as their operation is favourable or the contrary, cure the disease or destroy the patient. As a familiar instance, I may mention those violent efforts of nature termed "bilious attacks." How often do we see individuals whose physical powers and mental energies have been so completely overwhelmed by the combined effect of a congested liver and a poisoned state of the blood, as to threaten a fatal termination, yet recover in a surprisingly sudden manner on the evacuation of immense quantities of dark green bile and other vitiated secretions. Not only has the energy of body in these cases been restored by the removal of the cause which oppressed it, but the mind has been lightened at the same time of a load of care equal in amount to the physical burden. This relief is sometimes the effect of the unaided or spontaneous efforts of nature; sometimes of the skilful application of appropriate remedies.

Since writing these remarks on the relief afforded by bilious attacks, I have met with a singular confirmation of their truthfulness in the following case:—

The Hon. W. S., aged 40, consulted me on the 30th July, 1850. He was suffering under many of the symptoms described in this Paper. He told me that formerly he was liable to violent bilious attacks, which invariably relieved him of all his ailments; but during the last few years they had ceased to recur, and since their cessation he has scarcely ever been well, always suffering more or less from a general malaise of body, and an irritability and despondency of mind.

In the same manner as the whole system is disordered and oppressed by the retention of urea in suppression of urine, we find the functions of the brain annulled by the circulation through it of black unoxxygenised blood in cases of temporary asphyxia. Here the causes are sufficiently obvious; but it by no means follows, that because in other cases,—as the one under consideration,—we are unable to see, understand, and explain the mysterious workings of the latent agents which affect the body, and the mind through the body, that none exist. We too clearly perceive how imperfectly the functions of physical life are performed with

imperfect materials, *i. e.*, unhealthy blood,—how the mental faculties are deranged and obscured by the same cause, how both mind and body are at once relieved by the removal of the physical ailment, to admit the existence of a doubt of the intimate connexion between the disordered physical and mental state of the hypochondriac, and the dependence of one on the other.

A further illustration of the degree to which the mind, as well as the body, may be disordered, and their functions impeded, where the blood is impregnated with any principle capable of exercising a powerful influence over them, is afforded by the operation of anæsthetic agents on the nervous system. We have long known that the inhalation of nitrous-oxyde gas exhilarates and intoxicates, but have only recently learned how completely both mental and physical powers are overwhelmed by the action of chloroform. These remarkable phenomena taken in conjunction with the examples above cited, of the effect of poisoned blood on the animal economy, appear to me to be strongly confirmatory, if not conclusive, of the correctness of the theory propounded in this inquiry, viz., that the peculiar state of mind in hypochondriasis arises from and depends on the admixture of some deleterious principle in the blood, from whatever source it may have been derived, (whether it be a product of mal-assimilation or the retention of some excrementitious matter in the system, perhaps in some new state of chemical combination at present unknown to us;) especially as we have strong grounds for believing that the commencement of the mental part of the malady is coeval with the physical, and the physical with those causes which, I have endeavoured to show, produce this unnatural state of the blood. If additional proof be required it is afforded by the converse. In proportion as the blood is purified, the symptoms of physical disease diminish and the mind resumes its normal sway.

Whether this alteration in the blood is owing to the production of some *materies morbi sui generis*, such as there is reason to believe exists in other and somewhat analogous diseases, *i. e.* lithic acid in gout, lactic acid in rheumatism, or both combined in rheumatic gout, (a) I will not venture to speculate. But whatever may be the chemical nature of this matter in hypochondriasis, there is sufficient evidence to warrant the presumption that the cause of the mental disorder is uniform. For it is proved that, however the physical symptoms may vary, under whatever changes of character the physical malady itself may appear, or on whatever part the morbid action of the poison may be concentrated, the disordered condition of the mind remains unchanged. There is the same despondency, the same incapacity for mental exertion, the same anxiety about the health; and to adopt a suggestion of Dr. Holland's, whilst treating of the *materies morbi* of gout, "this uniformity" (in the mental condition of the hypochondriac) "can scarcely be explained but by identity of physical cause."

The relation which hypochondriasis bears to gout, rheumatism, neuralgia, and other cognate disorders, and the fact that they are often met with in conjunction, may be thought by some to militate against the notion of its cause being uniform; yet a closer inquiry into all the circumstances of these complicated cases will show that this objection is more specious than valid, and that this diversity of effect (the simultaneous occurrence of other diseases with hypochondriasis) is the result, not of identity, but of an association of remote causes. It is generally admitted that when the system is surcharged with acid and other deleterious products of mal-assimilation, or of imperfect excretion, it is rendered obnoxious to the influence of causes of disease against which it would be proof in a state of health. The nature of the disease depending on the predisposition of the individual,—the pre-existing tendency to generate one or another kind of *materies morbi*, either lithic or lactic acid, or both, or perhaps some other poison.

There are also sufficient grounds for the belief in the possibility of the generation, or at least the co-existence of *materies morbi* of more than one sort under the circumstances I have described; and, consequently, of the co-existence of various diseases. In confirmation of this view of the matter, we have the well-known fact, that all diseases

(a) I have adopted the terms lithic acid and lactic acid as the most convenient for defining the special states of the system in which these acids are found in the urine, and their constituents in the blood, and as indicative of a gouty and rheumatic diathesis.

in malarious districts are more or less modified by the malarious poison in seasons when it is very rife, and that it becomes necessary to modify the treatment by the addition of anti-malarious remedies. Also, the modification of various diseases by the gouty virus, and the necessity of adding to the other remedies those which exert specific action on that disease, in order to cure them, may be cited as another example of this association. The gouty and malarious poisons are each a principle *sui generis*, each producing disease of a specific nature, gout or ague; and as these exist in association with other diseases, they afford strong presumptive evidence in favour of the point I wish to prove,—that elements of different diseases may co-exist without being identical. As these elements are remote causes of disease, and as their physical properties vary, so the diseases they produce must also vary.

Thus, a plausible explanation is afforded of the fact, that, though the remote causes of rheumatism and other kindred maladies are different, they may be roused into activity by the same exciting cause.

Let us assume that hypochondriasis, as I have attempted to show, is essentially a malady of the whole system, in the propagation of which the circulating fluids are more especially implicated; that anxiety and mental emotions of a painful nature, loss of rest, over-exertion of mind or body, and whatever causes a suspension or interruption of the vital processes in general, and of the secreting and excreting organs in particular, are among the chief causes of it; as every individual is exposed, at some period of life, to the injurious influence of those causes, we have a satisfactory explanation of the fact, that hypochondriasis is found in persons of every kind of diathesis, in every grade of society, and in every variety of constitution; and we can thus also see how it happens, that individuals already labouring under some organic disease may also be affected with it. Experience also proves, what would be generally anticipated, that those causes operate in a different ratio on different persons. Hence it happens, that, while those who are of a delicate and feeble constitution, natural or acquired, fall into a state of hypochondriasis, others of a more robust nature, though equally exposed to the influence of the same causes, escape altogether unhurt, or are so little affected, that any temporary ailment thus induced will either disappear simultaneously with the causes which produced it, or be easily removed by appropriate remedies.

This view of the general nature of the malady affords, also, a satisfactory solution of a difficulty, which would otherwise appear to be inexplicable, namely, the infinite variety in the morbid sensations and symptoms experienced and described by the hypochondriac.

The whole system being disordered, every part of it must necessarily participate in the disorder; and, as it generally happens that one particular organ or part of the mechanism of the body is more prone to disorder than others, either from accidents or previous disease, those organs or parts will naturally yield to the morbid influence of the general malady more readily, and in a greater degree, than the more sound parts; and the most prominent local symptoms will necessarily vary and have reference to the organ on which the morbid action is most strongly concentrated, and will manifest a character peculiar to it.

This hypothesis is supported by the phenomena exhibited by other analogous diseases. In whatever form hysteria manifests itself, no doubt can exist that the whole system is in an unnatural condition; but the part specially affected is determined by some accidental circumstance, in which case, the symptoms will be such as belong to disorder of that particular part. We have the highest authority for asserting, that the symptoms of local hysterical affections, either of internal organs or external parts, are so similar to those of organic disease, that they can be with difficulty distinguished.

The following cases, among others, have fallen under my own observation:—A young woman, Miss B., of an hysterical habit, slightly bruised her knee; in a short time the joint became swollen and painful, indeed, exquisitely sensitive to the slightest touch, causing a degree of suffering far exceeding in severity the pain which would have been caused by actual disease. While this affection of the knee continued, all other hysterical symptoms ceased, but returned as soon as the knee was cured. Another young woman, under similar circumstances, slightly bruised her right breast, which immediately became exceedingly painful and much

swollen, without any defined lump or tumour in it; after suffering severely for more than a year, the breast was amputated, in spite of every remonstrance on my part, her medical attendant acting under the impression of its being cancer. The wound was scarcely healed when the other breast became spontaneously and similarly affected. In this state it continued for some time, the morbid action was then transferred elsewhere, and resisted all local treatment until her general health was restored; but no sooner was this accomplished than all these local hysterical affections ceased.

Gout, like hysteria, affords additional proof of the position, that the localization of morbid action may be influenced by accidental, though not always apparent causes.

An individual, full of the virus of gout, happens to strain his ankle or bruise his toe; gouty inflammation is the consequence, or, in other words, he is attacked with a fit of gout to the relief of the constitutional malaise. Another person, similarly circumstanced, exposes himself to the influence of a raw cold easterly wind—bronchitis succeeds, which will altogether resist the usual treatment, and obstinately persist until colchicum, or some remedy appropriate to gout, be added to it.

In 1841 I was consulted for the first time by Mr. H., aged 68, who had been attacked with bronchitis after exposure to cold, which usually readily yielded to the ordinary treatment; this attack, however, resisted all the remedies I recommended, until I was incidentally informed that he was also liable to gout; I immediately added twenty minims of the vinum colchici to each dose of his medicine, which completely relieved him in forty-eight hours. I might quote a multitude of similar examples of this form of bronchitis, but this modification of it by gout is too generally admitted to make it necessary. As in hysteria, so in gout, when it is misplaced, *i.e.*, when it attacks internal organs, though the symptoms may be ambiguous, they will always show a great similarity to those which characterize other diseases of the part, even when their nature is organic; of this the following case affords an illustration:—An elderly gentleman, by whom I was often consulted, and whose health I had especial reason for closely and anxiously watching, would often express alarm at the extremely irregular action of his heart; his pulse would beat in the most frightfully irregular manner; his breathing would be short and embarrassed, and he would complain of a singular feeling of oppression in the region of his heart, which threatened speedy dissolution; his legs would, at the same time, swell and be oedematous; in short, there was every indication of serious disease in the organs of circulation and respiration; when suddenly he would be attacked with gout in the extremities, to the immediate relief of all his alarming symptoms. It is right to state, that there was some imperfection in the valves of the heart, which caused a regular intermission in the pulse at every third beat, and he was unable to walk up hill without shortness of breath, so that, although the gouty poison could not be regarded as the original and sole source of the alarming state I have described, the danger was very much increased by it. Occasionally, an attack of hypochondriasis would be the antecedent of gout, which, in turn, would be relieved by the paroxysm of gout in the hand or foot.

As hypochondriasis may in like manner be complicated with local diseases, either existing previously, occurring simultaneously, or subsequently, a careful consideration of the history of the patient and his disease, as well as an equally cautious examination of the various symptoms, will be necessary to arrive at a correct diagnosis; and much discrimination and some firmness will also be required to prevent falling into a not uncommon error of directing our attention too exclusively to the local malady, on which hypochondriacs are so prone to dwell, at the risk of neglecting the general constitutional disorder, on which possibly it may almost entirely depend.

With these observations I shall conclude my consideration of the general nature of hypochondriasis, and proceed to that of its general treatment.

DIET.

Having shown how injuriously the circulation of unhealthy blood operates, both on the health of body and mind, and the necessity that exists of removing from the system the noxious matters which contaminate it, the importance of the next step will be obvious, *viz.*, the replenishing the body

with blood of the purest quality, the true object of diet and dietetic measures.

Observing, however, that the attention both of the physician and patient is generally too exclusively given, when the question of diet comes before them, to the quality and quantity of the food, I propose to consider separately the various accessories to digestion included in the terms diet and dietetics.

I wish it to be understood that in using these terms, I shall consider them to include air, exercise, bathing, friction clothing, regulation of the meals, both as to quality and quantity, a due regard moreover being had to the age, constitution, and habits of the patient, and every other circumstance which may exert an influence over the digestive process. My remarks on them must, however, from the nature of this essay, be brief and general.

To insure the object we have in view, viz., the formation of healthy blood, various qualifications are necessary. In the first place there must be healthy digestion, and this is impossible unless the apparatus of digestion be in a healthy condition, and the materials, the food supplied to the animal machine, be of the purest quality, and given in proper quantity and at regular intervals.

It has been already shown, that in hypochondriasis the digestive organs are invariably disordered; therefore, before we can expect any improvement in the performance of their functions, they must be put into a more healthy state. The medical treatment being especially directed to the attainment of this object, I need not now further dwell on it, but proceed to the consideration of the other part of the subject, viz., diet and dietetics, prefacing my observations by a few remarks on appetite.

The question may be fairly asked, what is meant by the term appetite? We may consider appetite (I mean hunger, the desire for food in a perfectly healthy person) to be the expressive, though silent, exponent of the wants of the system; the language of the stomach, in short, which may be regarded as the interpreter of the requirements of the body. This may appear a far-fetched definition of appetite, but the correctness of it is borne out by the consideration of its kindred sensation or desire, thirst, especially under disease.

"The experiments of Orfila and other physiologists," remarks Dr. Holland, "have shown the connexion between thirst and the proportion of water present in the blood, by the relief given to this sensation from the injection of different fluids into the veins." (a)

In the same page I find the following passage, which bears so strongly on the subject, that I am tempted to quote it at length. "In that intense thirst passing into the febrile state, which follows the long privation of liquids, and appears to be the most vehement of all appetites, there is every reason to suppose that these feelings are the results of changes in the blood itself, depending on the altered proportion of its fluid and solid parts, and affecting the vascular system to its most minute extremities." If, then, thirst depends on the altered state of the blood,—on the deficiency of its watery particles,—we may reasonably infer that natural appetite is created by a general deficiency of all the materials of the body, which are wasted or dissipated by the exercise of its various organs and parts, whilst obeying all those natural laws by which health is sustained, but to which fashion and our present artificial modes of life are in constant antagonism.

Striking illustrations of the correctness of this definition of appetite are afforded by disease. In scrofulous enlargement of the mesenteric glands, and obstructions of the thoracic duct, though the digestive organs may perform their part of the process of digestion, termed chylication, sufficiently well, the chyle is, in a great measure, intercepted in the lacteals; and due nourishment of the body being thus effectually prevented, the whole body rapidly wastes away, and quickly bears the appearance of starvation; yet the appetite continues, in many cases, not only perfect, but more than ordinarily good; the food is often enjoyed with the zest of health, and digestion is performed not unfrequently without any indication of dyspepsia.

But this language of the stomach not only serves to announce the general requirements of the system, it is also capable, as experience proves, of expressing any particular or special want, and of exciting a desire, or longing, for the kind of food containing those elements in which the system

may be at the time deficient. This is observed both in health and disease. The sailor having been deprived of fruit and vegetables for many months, will, on reaching land, evince an inordinate craving for them, and consume an almost incredible quantity, until his system has been replenished with the elements they afford, and when that is effected the craving ceases. The practical physician sees this inordinate appetite for particular kinds of food too often in disease to make it necessary for me to adduce any examples in confirmation of the assertion.

I may add, that this appetite should never be disregarded by the medical attendant, as it may indicate a necessity for, or want of, some particular kind of aliment, and its gratification may be beneficial to the patient; although judgment and discretion will be required in such cases, not only to regulate the quantity of the desired food, but to ascertain whether this great craving for any particular kind simply announces a natural want, or is the result of an unhealthy action in the stomach.

The importance of healthy appetite cannot be over-rated; the nourishment of the body depends on it; for without it, the necessary quantity of food will not be taken into the stomach; therefore our dietetic measures should be directed to its restoration as our primary object.

To assist in the selection of the proper means to effect this with certainty and facility, we must bear in mind the causes which concurred to destroy it, 1st. *the action of the secreting and excreting organs* (which may be considered those of waste) *having been interrupted, there is little or no expenditure of the materials of the body, consequently little supply is required, and the appetite is therefore impaired or lost*; 2nd. it may be further attributable to the impurity of the blood, which, not affording the natural stimulus to the secretions of the gastric juice, or to the stomach, the absence of its natural sensation, i. e., appetite, will necessarily follow.

The effect of medicinal treatment tends to confirm both views of the subject. It will be seen, that its *modus operandi* is to excite excretion, by which expenditure is created, and the blood at the same time purified; thus, healthy action of the stomach will be restored, and supply be required, and in other words appetite will be renewed.

Although I must be satisfied with making these general observations on natural appetite, I may be allowed to mention, for the purpose of exposing their injurious effects, the means commonly practised for its recovery, than which, in many cases, nothing can be more injudicious or improper. I allude to the employment of stimulating medicines, exciting beverages, and tempting viands; which, though they may occasionally be proper, and sometimes succeed for a time, it will be at the expense of increasing disorder, injuring and weakening the powers of the stomach, besides incurring the risk of producing repletion.

It would be foreign to my purpose to enter into further disquisition on this subject, or on the causes of depraved or deficient appetite arising from local disease of the stomach.

(To be continued.)

ON THE PATHOLOGY OF THE UTERUS, ITS ANATOMY AND PHYSIOLOGY.

By T. SNOW BECK, M.D. Lond., F.R.S.,

Fellow of the Royal College of Surgeons of England.

Physician to the Farringdon General Dispensary and Lying-in Charity.

[Continued from page 145.]

IN the condition of the uterus, which depends upon deficient absorption of the tissues after the birth of the child, the appearance which the organ presents varies according to the period at which it is examined after the parturition. These appearances are again modified by intercurrent attacks of subacute inflammation, which are of frequent occurrence, and by the subsequent changes which occur in the organ as the sequence of the inflammatory attacks. I can only here sketch a few of the chief varieties, some of which have been described under the term of hypertrophy of the uterus.

Examined soon after an abortion, or labour at the full period, in consequence of repeated attacks of hæmorrhage, or from other causes, the uterus is found large, soft, and flabby. The orifice is open, and the finger passes into the

cervical canal, as into a glove; the arbor vitæ are well marked; the sides of the canal are soft and yielding; the body of the organ is also smooth and soft. There is no tenderness complained of, no heat of the part, nor do the arteries pulsate perceptibly under the finger. When an opportunity offers to examine this condition of the uterus after death, the organ is enlarged; but without any other morbid alteration of structure, except the muscular tissue of the uterus being developed to a greater degree than is natural to the unimpregnated organ. This increased development of the muscular tissue in the walls, causes the uterus to have somewhat the characters of a hollow organ, and produces the patulous condition of the orifice.

When in this condition, the uterus not unfrequently becomes the seat of a low inflammatory action, and the preceding characters are modified. The organ is now further increased in size; the orifice is open, and has more of a circular form, from the tension of the surrounding lips, which are round, smooth, projecting, and not unlike an elastic ring, surrounding an open orifice. The whole of the organ communicates to the finger somewhat the idea of a soft elastic gum-bottle, with thick sides. The body is round, smooth, elastic to the touch, and tender to a varying degree. The natural heat of the part is somewhat increased, and the arteries may be felt to pulsate with increased force. The uterus usually lies low in the pelvis, and is commonly retroflexed; it may, however, be anteverted, anteflexed, or inclined to either side of the pelvis, with varying degrees of obliquity. Examined by the aid of the speculum, the orifice is round and open; the lips are round, full, and prominent; of a uniform dusky red, or mottled with varying shades of the same colour; the mucous membrane at the orifice of the cervical canal being also of a dusky red hue. There is no abrasion or ulceration, although I have known the uterus, in this condition, described as "extensively ulcerated," a few weeks after a healthy confinement at the full period.

Instead of the inflammatory action involving the whole of the organ, as in the preceding form, it may be confined to the fundus, or to the cervix, or to either side, or, as I have seen, it may occupy a circumscribed portion of the organ. When confined to the fundus, the body of the uterus has the same characters as already described; but the cervix is small in proportion, and is soft and free from tenderness on pressure. The organ, as a whole, has much similarity in shape to a pear, with the enlarged fundus and gradually tapering cervix. Should the cervix be the chief seat of the inflammation the part becomes enlarged, and is tender to pressure. The lips are also enlarged, swollen, and distended; smooth and uniform on the surface; and, after a time, they become everted. Seen by the aid of the speculum the orifice is open, and frequently filled with opaque white-of-egg mucus; the lips are large, smooth, distended, of a dusky red colour, or mottled with shades of red, and frequently towards the orifice presents patches of brighter red. These patches have a raw appearance, and have been described as ulcerations, though, in reality, no abrasion or break of surface is to be found. Should the inflammation be confined to either side, or to a circumscribed portion of the organ, it will be readily diagnosed by the description already given. It has, however, this peculiarity, that the shape of the orifice becomes altered, and assumes, frequently, a crescentic form. This arises in consequence of one portion of the lips being enlarged and firm, whilst the other remains soft and thin, and is drawn round the enlarged and firm portion.

Under the combined influence of the causes enumerated, that is the unusual development of the natural tissues of the organ the increased amount of blood circulating in it, and the recurring attacks of inflammation, the uterus undergoes various changes. The fundus sometimes becomes irregularly enlarged, and has a firm fibrous feel to the finger. The irregularities are rounded and smooth, which distinguish them from carcinomatous disease; but, when considered in combination with the hardness, render it extremely difficult, if not impossible, except by the course of the disease, to form a diagnosis between this state and non-malignant tumours of the uterus. The lips present many varieties of appearance. They may be round, circular, prominent, distended, and have something of the character of a thick, firm, fleshy cup surrounding an open orifice, which is usually filled with opaque white-of-egg mucus. Or, instead of being thus regular and prominent, the lips may be contracted in some parts and prominent in others; the effect of which is, that

various irregularities are formed, having sometimes a stony hardness. The irregularities may represent the appearance of the extremities of three irregular and large fingers, closely applied to each other, which causes the orifice to be somewhat triangular in shape; or, they may present the feeling of four or five smaller fingers applied round a common centre. The lips may again be either large, irregular, everted, or they may be, more or less, flat and closely approximated together. It has been stated that these irregularities depend upon the contraction of the cicatrices of former lacerations produced during labour, or miscarriage, as the case may be. That they are not always produced by this means, I feel assured, as I have traced their gradual development in cases where the lips have been previously round, smooth, and even; whilst, in other cases, when examining the organ after death, I have found them to depend upon the occlusion of the orifice of the mucous glands seated in the cervix, and the consequent distension of these glands into small cysts by their natural secretion. That these irregularities are ever produced by the contraction of the supposed cicatrices, appears to me doubtful, as I have never met with them in the numerous examinations of the organ which I have made; nor have I been enabled to find any case where this contraction, following previous lacerations, has been actually observed by clinical experience.

After these conditions of the organ have existed for a lengthened period, it sometimes happens that ulcerations appear on the lips, being apparently produced by the congestion and partial stagnation of the circulation, and consequent modification of nutrition of the part. As an occasional occurrence, ulceration has been long recognised; but the practice lately introduced, of applying this term to a reddened portion of mucous membrane, cannot be too much condemned, as being a total misapplication of the word, arising from an erroneous pathology.

The attacks of acute inflammation of an organ, enlarged in consequence of deficient absorption after child-birth, will be readily recognised by the signs of acute inflammation, already detailed, combined with those which indicate the latter condition. But apparently, when these attacks have been different times repeated, and only partially subdued, a state of the uterus is induced, which it is important to recognise. The organ is much enlarged, and is acutely sensitive to the touch. The lips are large, flat, smooth, and everted; the orifice is nearly closed from the swelling of the surrounding tissues. The neck is large and doughy, covered with circular folds of mucous membrane, and the arteries pulsate with increased force. The body, when it can be felt, is also much enlarged and doughy to the feel, being equally sensitive with the neck, whilst the organ usually lies low in the pelvis, and has various degrees of retroversion, anteversion, or oblique displacement. Viewed by the aid of the speculum, the lips are large, flat, smooth, everted, the mucous membrane of which is red; often it is swollen, and raw-looking. The latter appearance is most marked near the orifice, which is nearly obliterated by the swollen tissues. Although no breach of continuity exists in the membrane, still this raw appearance has been likewise denominated an ulceration.

On reviewing the symptoms produced by the existence of uterine disorder, we cannot but remark, that the nervous system is that which is first and chiefly affected. No sooner does a local disease occur, than its presence is marked by the existence of pains reflected along the nerves which are in connexion, through the medium of the spinal cord, with the part affected. It may be that there is no further evidence of the local disorder than the existence of these reflected pains. This, however, is the exception, and only occurs when the disease is of recent date, and is trifling in degree; for in the great majority of cases a feeling of languor and depression, slight headache, disturbed rest in the night, and slight irritability of manner and temper, occur almost coincident with, or very soon after, the appearance of the reflected pains. In a short time, disorder of the digestive apparatus is noticed, but, as yet, the pulse is unaffected; nor is the breathing in any way altered from that of health. After a further lapse of time, the disorder of the nervous system is increased, the derangement of the digestion becomes more apparent, and the general health visibly suffers. How is this course of events to be explained?

In a former part of this inquiry it was mentioned, that the uterine organs, including the vagina, were connected with

the cerebro-spinal nervous system, by branches of spinal nerves sent inwards to be distributed to these viscera, in company with the branches from the sympathetic nervous system; and that the abdominal viscera received, in like manner, branches from the cerebro-spinal system, derived from the same part of the spinal cord as that which gave origin to the special nerves of the uterus. These facts, it appears to me, offer a ready explanation of the course uterine affections are observed to take. Thus, the existence of an uterine affection is first indicated by pains occurring in the sides of the abdomen and lumbar region, or in the sacral region and round the hips, or in other parts, according to the exact situation of the disease. If the disease be of trifling degree, the pains may be felt only at the terminal extremities of some of the nerves in connexion with the part, and no constitutional disturbance may accompany these pains; but, if the affection be severe, the pains are then felt along the course of all the nerves derived from the same part of the spinal cord as gives origin to the spinal nerves distributed to the uterus, the constitution sympathises, and the nervous system is especially disordered. Such being the facts, as established by clinical experience, it seems fair to infer, that the part of the nervous system, through the medium of which these pains are reflected, has itself undergone some change; and that this change, induced in one part, may be extended to the remaining parts of the same organ, and may induce one of the functional alterations to which we are accustomed to apply the indefinite term of "irritation." Should these inferences be admitted, they afford a ready explanation of the clinical observation, that almost coincident with the beginning of uterine disease, an irritable condition of the nervous system is observed, as evinced by the irritability of temper, the disturbed rest at night, the slight headache, the feeling of languor and depression, and other symptoms. The disorder of the digestive system, which is noticed after the lapse of a short time, can also be explained upon the same principles. The pains felt along the course of the nerves derived from the lumbar plexus and distributed to the back, the walls of the abdomen and the lower extremities, is sufficient evidence that the healthy condition of these nerves has undergone some change. We may also fairly infer, that this change will not be confined to a portion of the nerves derived from the plexus, but that it will be communicated to all the nerves having the same origin; and, as a consequence, that it will affect equally the spinal nerves which, arising from the lumbar plexus, are distributed to the abdominal viscera. From this it appears a legitimate deduction to state, that when the healthy condition of the nerves distributed to an organ is altered, the functions of this organ will be deranged in a like degree. By this reasoning we not only offer an explanation of the derangements of the digestive organs which accompany these affections, but we also account for the fact, derived from clinical observation, that the organs of respiration and of circulation are, at first, not implicated in the morbid action; for, the spinal nerves distributed to these organs, arise from a different portion of the spinal cord, to that which gives origin to the uterine nerves. They are thus not implicated in the reflex actions which are going on. It is no objection to this theory to say, that the derangements of the digestive organs being different in different individual cases, the causes which produce this derangement cannot always be the same, but must be different likewise. For there are two evident answers to this reasoning; first, the uterine disease does not always affect the same part of the uterus; and hence the organs, in relation with the part affected, and which will be disordered, will also differ; and second, not only the digestive organs as a whole, but certain parts of this apparatus, is more easily sympathetically affected in some individuals than in others.

When the constitutional disturbance which accompanies uterine disease has once been induced, by the irritation communicated to the nervous system, through the media of the spinal nerves distributed to the uterus, and by this irritation being reflected to the abdominal viscera, producing in them functional derangement,—a series of morbid phenomena is henceforth called into action which greatly increase the primary constitutional disturbance. These are (1.) The irritation to the general system produced by the constant pains in the back, sides of the abdomen, &c., which pains are periodically much increased by the recurrence of the catamenia. (2.) The irritation communicated to the nervous centres through the spinal nerves distributed to the part.

(3.) The distress caused to the system by the want of sleep, or by the harass from frightful dreams. (4.) The want of sufficient nourishment for the body by reason of the impaired appetite. (5.) Or the want of proper nourishment, in consequence of imperfect digestion and imperfect elimination from the blood of the various secretions, by reason of the functional derangement of the secreting organs. (6.) The loss of blood caused by the too abundant flow, or the too frequent recurrence of the catamenia. (7.) The anemic condition of the system which is subsequently induced. (8.) Not unfrequent mental distress or mental anxiety is added, which seriously affects patients suffering from this state of health. (9.) Too often the bodily exertion is greater than can be endured with impunity. (10.) To these must be added the mental anxiety, the pains, the feverish attacks, the direct loss of blood, the disturbance to the circulation of the pelvic viscera, &c., which attend child-bearing. And, (11.) the hygienic condition of the sufferer, including the habits of life, the situation of the residence, the temperament, the hereditary predisposition, the diathesis, &c. These circumstances, variously combined, exerting in different individuals a varying amount of influence, can readily be understood to produce very varying morbid conditions of the system, which may all, however, take their origin from disorder of the uterine organs; yet, when induced, form of themselves important diseases in practice. Moreover, the state of the general health, induced by uterine derangement, may remain after the primary disease has passed away, and constitute a morbid state requiring distinct general treatment. The correctness of this remark is frequently verified in practice. While these considerations are sufficient to show the fallacy of the treatment, which, neglecting the constitutional state, directs the attention almost exclusively to the uterine organs, they naturally lead the attention to the development which the employment of the speculum has of late received, and to the confident statements which have been put forth of the frequent existence of ulceration of the uterus at all periods of life, requiring the use of this instrument.

In examining the grounds for these statements, I will take Dr. Henry Bennet's recent work "On Inflammation of the Uterus. 1849," as containing a strong expression of those opinions.

9A, Langham-place.

(To be continued.)

CASE OF ANEURISM OF THE DESCENDING THORACIC AORTA,

ATTENDED WITH

INTRACTABLE DERANGEMENT OF THE DIGESTIVE FUNCTION, WITH REMARKS.

BY JOHN GREGORY FORBES,

Fellow of the Royal College of Surgeons of England,
Surgeon to the Western General Dispensary.

A. F., a gentleman 53 years of age, who had enjoyed good and robust health, began to complain of illness after close and fatiguing attendance upon a sick relative in the month of May, 1843. From this date, he suffered from disorder of the digestive organs, characterised rather by irritability of the intestinal tube than by symptoms more immediately referable to the stomach itself. The passage of the food and its products through the alimentary canal was attended with flatulence, griping pain, and general uneasiness. The bowels were capricious in their action, but usually, small doses of the mildest laxative medicine produced much irritation and pain, the evacuations being generally lumpy and hard, but of proper colour. The urine was occasionally loaded with lithates. These, with pains at the precordia, great sensibility to cold, and emaciation, were the prominent features of the case. Like many sufferers from this complaint, who can get but little relief from medical art, the patient read books on the subject, and at length described his case in the words of the late Dr. James Johnson, as one of "morbid sensibility of the intestinal nerves," perhaps as apt a designation as could be given to it.

Various medicines, usually found serviceable in dyspepsia,

were prescribed for him, and he paid the most diligent attention to his diet and regimen, and in the summer of 1845 he went to Ems, and drank the alkaline waters. The relief he obtained from all these measures was but temporary; and he declared that he received more benefit from strict attention to diet, warm bathing, and clothing, than from any medicinal treatment.

In the autumn of 1846, he consulted Dr. Mac Intyre, who found his pulse 70 and regular, with total absence of any indication of pulmonary or cardiac disease. His urine was now found to contain crystals of oxalate of lime, and those of uric acid in abundance.

Although the obstinacy of the dyspeptic symptoms, and the vague and constant pains in the back, gave rise to the apprehension of something more than mere functional derangement, they were not calculated to lead to a suspicion that the patient was the subject of so fatal a malady as internal aneurism, which remained undiscovered until after his death. In a letter which I received from him a fortnight before this event took place, he says, "The complaint, you know, is Protean, assuming different appearances at different times, but always showing depraved secretions. The pain and distension is often eased at the time of taking food. The pain which I now feel after being two or three hours in bed, is generally relieved by getting up and walking about the room. From the debilitated state of the internal nerves and muscles, all medicine irritates so much, as to make me suffer much from constipation rather than fly to medicine, which only gives temporary relief, and is usually followed by more obstinate constipation, so that I can only get a passage by injections, the fæces being in hard lumps, mixed with viscid mucus, and stringy fatty-like matter. My appetite is generally good, and what passes seems thoroughly digested, as if the damage was in the passing of it. Dr. Macrobin does not think any of the organs, such as heart, lungs, kidneys, or liver, are at present affected."

Dr. Macrobin, of Aberdeen, who attended him for many years, and up to the time of his death, was kind enough to favour me with the following report. He states, "that a month or six weeks previous to the fatal event, the patient complained more than usual of the irritation and oppression of the stomach and abdomen generally, and of pain along the posterior part of the left side of the chest, apparently situated in the muscles, shifting its place, and intermitting during the day. The pulse, from being always slow, soft, and equable, became quickened and rather fuller. The bowels also became obstinate, and, instead of being easily moved by a very small dose of laxative medicine, were moved with difficulty by full doses. He had no cough, no difficulty of breathing, no dullness on percussing the thorax, no change in the respiratory murmur, and the action and sounds of the heart were natural. He was easily fatigued, was restless and uncomfortable, and was nervous and fluttered in his manner when he attempted to walk quick. On the whole, however, he seemed better the night before his death, which took place under syncope, whilst sitting up in bed, after taking a cup of tea at 7 o'clock in the morning of October 24th, 1847."

The following is the report of the *post-mortem* examination of the body:—

"In the left side of the thorax there was found not less than a small wash-basin full of newly coagulated blood, which had escaped from an orifice in the sac of an aneurism of the thoracic aorta, nearly three inches below the arch. The sac had contracted adhesions to the bodies of one or two of the dorsal vertebræ, close to which it had given way. There were no fibrinous coagula or laminæ lining it; but the coats were ulcerated and nearly perforated in various directions, and its pressure had produced absorption and caries of the vertebræ to a considerable depth. The aorta, after leaving the heart, and as far as the arch, was similarly diseased in its coats, though in a less degree, and was considerably dilated.

"The lungs were perfectly healthy, as well as the heart and its valves, and there were no pleuritic adhesions.

"The abdominal viscera were sound. There was a slight blush of redness in the large curvature of the stomach, which was certainly not inflammatory. The cæcum was distended with flatus, but there were no traces of inflammatory action in the mucous or serous membrane. The liver and kidneys were healthy."

The difficulties which attend the diagnosis of aneurism occurring within the thorax, is acknowledged by all writers

on the disease. Though from various symptoms, produced by pressure on adjacent structures, the existence of a "tumour" may frequently be inferred with tolerable certainty, it is admitted that these alone are insufficient to determine its nature, and that it cannot be known to be aneurismal until an external pulsating swelling appears. "We must admit," says Laennec, (a) "that aneurism of the aorta has no signs peculiar to it; all those noticed by authors, and especially by M. Corvisart, being indicative merely of change or compression of adjoining organs." And Mr. Hodgson, in his well-known work, (b) states "that aneurisms of the thorax frequently prove fatal before a knowledge of their existence is confirmed by that evidence which the appearance of the tumour externally generally affords." If these remarks apply to aneurisms, taking their rise from the upper part of the thoracic aorta, surrounded as it there is by such important structures, it is not surprising that when the disease is connected with its straight descending portion, it should pass unnoticed during life. From the relations and connexions of the vessel in this part of its course, it frequently happens that in such instances, no symptoms occur in the progress of the malady, which lead to a suspicion of its existence.

Though the peculiar symptoms which presented themselves in the foregoing case, cannot in any way be considered as diagnostic of the affection, they appear to have been intimately associated with, and were probably produced by the "tumour" in the posterior mediastinum, and may justly claim attention in connexion with it.

In the observations of those who have written upon the subject of thoracic aneurism, derangement of the digestive function has not been specially referred to as consequent on the pressure of the tumour in this situation. For this reason, therefore, and the interest which attaches to the case in its physiological and practical relations, it appears not undeserving of notice.

The symptoms which arise from aneurisms of the thoracic aorta, independently of their situation, necessarily vary according to their size and the direction in which they expand. When they have originated low in the descending portion of the vessel, beneath the root of the lung, and when enlarging in a direction away from the oesophagus, respiration and deglutition are not interfered with, and the bodies of the vertebræ, with the adjacent nerves and ganglia, are the structures then most likely to suffer. In this latter class of cases, thoracic and lumbar pains are frequently the only symptoms; and it is not probable that these alone will, without further evidence, lead to the diagnosis of so formidable a disease, dependent, as they usually are, on other and more common causes.

Dr. Harrison, in a communication to Dr. Stokes on the subject of the Diagnosis of Aneurisms of the Thoracic Aorta in the Posterior Mediastinum, says: (c) "The tumour in some cases proceeds through all its stages to its final termination, without much accompanying local pain or decided premonitory indications; whereas in others, acute spinal irritation, difficult and painful respiration and deglutition are almost constant concomitants; attention to the anatomical connexions of the vessel in this situation, and to the different directions it may take in different instances, may explain the variety of symptoms which present in different cases."

The prominent features in the case above related, were those of dyspepsia; but, upon a careful review of them, it will be seen that certain peculiarities presented themselves in the non-appearance of some of the usual symptoms attendant upon this complaint. The absence of nausea and vomiting, and pain or uneasiness soon after taking food, indicated that the "stomach" was but little involved in the disorder, and that its functions of converting the food into chyme, and expelling it into the duodenum, were performed without much, if any derangement. The burden of the complaint was thus, as it were, thrown upon organs beyond it in the digestive process, and which derive the greater portion of their nervous supply from a different system. The "intestinal canal" appears to have been considerably implicated; for the griping pains experienced during the passage of the food through it, the emaciation, and the constipation, may justly be attributed to defect in its secreting

(a) Laennec on Diseases of the Chest. Translated by Dr. Forbes, p. 690.

(b) Hodgson on Diseases of Arteries and Veins, p. 88.

(c) Dublin Journal. Vol. V., p. 434.

and absorbing powers, and to imperfection in its peristaltic action. From the character of the stools, it is probable that the functions of the liver were also, to a certain extent, disturbed.

In Dr. Harrison's communication, from which I have before extracted a passage, he says, "that in aneurisms of the abdominal aorta or its branches, in consequence of the way in which each is surrounded by a continuous nervous net-work, we should expect much pain and functional derangement, and such is generally but not uniformly the case." The truth of this remark is exemplified in A. F.'s case, as far as pressure on the larger trunks, which contribute to form this nervous network, is concerned, for it is not unreasonable or illogical to suppose, that the same cause which could irritate and compress the intercostal nerves, and so give rise to the dorsal and thoracic pains, could, by a like irritation and compression of the great splanchnic nerve, though of one side only, in its course downwards to join the solar plexus, disturb the function of those organs, to the nervous supply of which it so mainly contributes. The persistence of the symptoms of indigestion, in opposition to all the modes of treatment adopted, though no organic visceral disease was found after death to account for them, points to causes more remote and permanent than those upon which the ordinary and manageable forms of the disorder generally depend.

The effects observed in this case, moreover, are quite consistent with those which result from the direct experiments of physiologists. Valentin, in his researches on the influence of the nervous system upon the contractility of the alimentary canal, found that contraction of the stomach and intestinal tube might be induced by irritation of the spinal cord and sympathetic system, varying in place according to the parts of these nervous centres experimented upon. Muscular contractions of the stomach in the rabbit, were excited by irritation of the roots of the 4th, 5th, 6th, and 7th cervical, (a) and 1st thoracic nerves, as well as the first thoracic ganglion of the sympathetic; and the intestinal tube may be excited in the same way to contraction, by irritation of the roots of the dorsal, lumbar, and sacral nerves, and of the trigeminus, as also of the thoracic, dorsal, and lumbar portions of the sympathetic, of the splanchnic, and of the gastric plexus.

Perhaps it is unnecessary to refer further to authorities in proof of the functional disturbance consequent on pressure and irritation of nerves; but the following remarks of Dr. Greene bear so aptly on the subject, that I may be pardoned for introducing them here. In speaking of aneurisms in the chest, he says: "If we adopt the opinion that the bronchial tubes are endowed with contractile properties, the irritation of the nerves composing the pulmonic plexus would still further have aggravated the dyspnoea. Perhaps we might extend the explanation to account for the violent dyspnoea which is often one of the earliest symptoms of aneurism of the thoracic cavity, recollecting that any deposit in the coats of the aorta, particularly an osseous one, will prove a source of irritation to the nerves with which it may be in contact." (b)

A case in many respects analogous to that now under consideration, is published by Dr. Proudfoot, in the 22nd volume of the *Edinburgh Medical and Surgical Journal*. The patient was a man 39 years of age. The symptoms were at first pains in the back, white tongue, constipation, and cardialgia. They were treated as dyspepsia, and for a time relieved. They shortly, however, returned with increased severity, accompanied with a sallow complexion, and a benumbed feeling of the lower limbs. The pains in the back, and especially over the left kidney, were most violent; but the real disease was not detected, though relief was again afforded by warm baths and other judicious treatment. A pulsating tumour at length showed itself to the left of the inferior dorsal vertebræ, and the patient expired suddenly from rupture of the aneurismal sac into the left pleural cavity, sixteen weeks after its appearance.

These cases fully attest the necessity for cautious prognosis in a complaint so frequently met with as inveterate dyspepsia, especially when associated with the constant thoracic and lumbar pains; and they suggest the propriety of a rigid search for any cause which may directly affect the influence of the nervous system over the abdominal viscera. With reference to the latter point, the present amount of

knowledge does not, perhaps, justify a very decided opinion; but as physiology deduces many of its surest and most perfect doctrines from observation of the results of disease, the complicated operations concerned in the important function of digestion, may in some degree be elucidated by watching the effects which follow interference with the supply of nervous power to the organs subservient to it.

"Disease," says Dr. Latham, (a) "is a great physiological teacher. Perhaps it is the greatest of all. It institutes experiments which we cannot imitate, and tells us many things which, but for it, we should never know."

TO ADVERTISERS.

Terms for advertisements (which should be sent to the Office before 2 o'clock on Thursday):—

	s.	d.
For eight lines or less	6	0
Each additional line	0	6

TERMS OF SUBSCRIPTION.

	£	s.	d.
Twelve Months (pre-paid)	1	10	0
Six Months (do.)	0	16	0

And regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Having received several complaints from Subscribers, of the difficulty they experience in regularly obtaining the *Medical Times*, and some even from Liverpool, the Publisher recommends all such parties to apply direct to the Office, transmitting the amount by

Post-Office Orders made payable at the Post-Office in Coventry-st., to Mr. JAMES LUCAS, 46, Princes-st., Soho.

TO SUBSCRIBERS.

Portfolios for holding the Numbers of the current Volume have been prepared, price 2s. 6d. each. May be had by order of any Bookseller.

Cases for binding the Volumes, in cloth, gilt lettered, are now ready. Price 2s.

Orders should be given, without delay, for back Numbers or Volumes that may be required to complete Sets.

THE MEDICAL TIMES.

SATURDAY, AUGUST 23.

SECRET REMEDIES.

AMONG the numerous incidents of romance and melodrama effete from continual use, perhaps one of the stalest is the sudden elevation to rank and wealth of some obscure person, the fortunate possessor of a secret remedy, by which, in the very nick of time, he (or she) cures the dying monarch after he has been given over by the physicians, and is rewarded by a splendid marriage and the revenues of a province. It is a pretty means of apotheosis, but a very improbable one; and on this account is, on the whole, inferior to the threadbare plot of saving the great man's life from wild animals or assassins.

But, though nine in ten, or perhaps ninety-nine in a hundred, of the secret specifics continually announced turn out worthless, and only serve to show that many of the Profession and almost all of the laity are utterly incapable of distinguishing cures from recoveries—the *post hoc* from the *propter hoc*; yet, after all, the statistics of the past, while they make out an *a priori* case against a particular nostrum, cannot demonstrate its worthlessness. The history of therapeutics does exhibit instances of valuable additions to our store of pharmaceutical weapons, which have been thus smuggled (so to speak) into the domain of medical science;

(a) "Carpenter's Physiology," p. 292, s. 333.
(b) *Dublin Journal*. Vol. VII., p. 243

(a) "Lectures on Diseases of the Heart." Vol. II., p. 17.

and it seems probable enough that botany and chemistry have yet many drugs to offer to a more careful system of therapeutical research, which may equal if not surpass those of which we already know.

Still, with the limitations thus set to its use, past experience justifies us in entertaining a strong suspicion against any new secret remedy. It is scarcely all it is vaunted; it is possibly a useful drug; it is probably no medicine at all.

When despotism covered the earth,—when civil rights, commerce, and science were all monopolies of a favoured and small class, secresy was a recommendation. It still has its charms for the vulgar; and, in imaginative constitutions, may perhaps assist the operation of drugs. In our times, however, medicine is far too genuine and too flourishing to need the aid of concealment. We may, indeed, say of it, as was formerly said in praise of a state,—

“μέγα και φανερον σύμβολόν ἐστι τοῦ
προέχειν, οὐχ ὅσον λανθάνειν.”

And it is undeniable, that, in the present day, both the law of the land and that moral law which an observant mind may find hidden in much that we vaguely call etiquette, alike denounce secresy as an improper means of diffusing a scientific medical remedy.

The law which patents an improved pin's head for a limited time, in order to remunerate the inventor, and then throws it open to the world, thereby proclaims, that, while the individual is entitled to a pecuniary reward of talent and industry, society has also its rights; and that he, the heir of all the ages, educated by millions of human ancestors, and only sustained by the co-operation of thousands of fellows, must give to them and to posterity just as he has received from them and from the past.

As regards medical discoveries, the same rules apply. It is, however, so difficult to estimate their value, except by experience, and so impossible to enforce the beneficial interest of their discoverer, that the law declines to interfere. But the precedent of Jenner, in our own times, and the successive purchase of the then secret drugs of Ipecacuan and Cinchona by the great Louis XIV., sufficiently indicate that it is not from any denial of this general rule that *inventions* of this kind go unrewarded.

Knowing this impossibility of applying the machinery of an ordinary patent, and that a general benefit to humanity is numerically wasted by fixing it down to the costly machinery necessary to sell a secret remedy, what is the duty of a discoverer? If he really believes the drug or operation cures or prevents such grievous ills as fever, or small-pox, or dysentery, or ague, will he sit down and say blandly, “I, John Smith, hold in my hands the life and health of thousands, give me much coin, O wretched ones! and ye shall live—if ye cannot or will not, then die!” Will he hire a booth in Vanity Fair, and a man with a trumpet to attract the attention of the mob, and sell his specific? Will he not rather say, “What have I, that I have not received? The depositary of a great benefit, which Providence has seen fit to communicate through me to mankind, it is my instant duty to deliver my message of mercy. I know that ‘the life is more than meat, and the body than raiment,’ and that this comparison, made by Infinite Wisdom, probably applies to other people's lives and bodies as well as to my own. To have discovered it is its own best reward; for all other, I look to my country and to mankind.”

We blush for any member of our Profession who would feel any doubt as to his duty under such circumstances. Such an one has mistaken his vocation, and should have entered some more congenial calling. He may be as

pious as a bishop, or as 'cute as a barrister, but we can assure him he is far too selfish for a Practitioner of Medicine.

And, if any be disposed to think that we take an overstrained or impracticable view of the ethics of medical discovery, we are satisfied to remind them of the actual conduct of those who have achieved such successes. Nay more, to leave such men as Jenner,—whose names are, or ought to be embalmed in the heart of every man and woman in this country—and descend to far more modest additions to our medical armoury, where we lie within the most ordinary routine of duty and circumstance, we may see in the conduct of Mr. Salter, of Poole, what we are entitled to expect from a man who fancies he can add an useful drug to our Pharmacopœia. He tests his remedy, supplies his friends with specimens to aid his researches by their observations, narrates his cases, and leaves the rest to the medical public. Cotyledon umbilicus may or may not cure epilepsy in a greater or less number of cases—that is not the question; at any rate, Mr. Salter's conduct is that of an honourable and scientific gentleman, worthy of the Profession to which he belongs. And the same must be said of Dr. Stevens. There can be no doubt that his discovery of the treatment of yellow fever by salines has saved the lives of thousands; and, especially in the first outbreak of cholera, that the same method was of infinite benefit. What, then, if Dr. Stevens had acted otherwise than he did, and had concealed his remedy?

If we might make so bold as to call a spade a spade, we should say candidly that all secret medicine is quackery. In so doing, let no man accuse us of hastily calling a mistaken enthusiast a knave. Who can say that Sir Kenelm Digby did not believe in his sympathetic powder; nay, more, who doubts that Paracelsus, the arch-quack, had no inconsiderable substratum of knowledge; that he really added to chemical science; and that he was the victim of many of his own delusions? The bounds of false logic, self-deception, and fraud, are often but slight ones; and it is our duty as official guardians of professional virtue to indicate the “*facilis descensus Averni*.” And we have no hesitation in stating, that the instant any man forgets the two leading motives of that abstract desire for truth which should dictate all scientific research, and that humanity which enforces the free and full publication of a discovery supposed to affect the health of thousands—from that moment, whatever be his structure, his outward garb, his social position, his voice utters but one sound to our ear—the monosyllabic and mysterious *Quack!* And any admiration we have for his audacity and success, or any pity for his self-delusion, is shared by “the Silent Friend” or the protectors of “manhood,” who, for aught we know, possess all these qualities in equal degree. Nay, if we are to admire such men at all, we prefer the vulgar street-physician of the New-cut, whose experimental soul constantly tests his medicine in a satisfactory though unsavoury manner. “Ladies and gents! Here you have the wonderful Hickupifatisimos wot cures coughs, coulds, and hall other manner hof disorders. Bite a bit, little boy! Now, stand back, for it likeways expels the wind!”

If what we have above stated be the proper method of regarding a secret remedy—if it be generally a blunder in science and a fault in morals—if good men avoid it, and bad men win by it (like the instances of Cinchona and Ipecacuanha aforesaid, where, probably, in each case, the fortunate seller stole the secret from some one else), one need scarcely add, that the upholders of the unknown drug,

and its suspicious promulgator, do not occupy the best of positions. So here, the prescribing physician and the prescribed remedy are so doubtful, one cannot very highly respect the professional man who stoops to be his dispenser, and administers the drugs and doses which such a superior has ordered. But that is no affair of our's or the public's—he chooses his own position. We only want to point out, that the one is engaged in a scandalous and hopeless contest with legitimate medicine, and that the other occupies—at least in the case of a fluid remedy—the still more ignominious position of “*bottle holder*.”

THE MEDICAL DIRECTORY FOR 1852.

It was with regret we had to allude to many errors in the current volume of the “*Medical Directory*.” The Editors' explanations plainly showed that the fault did not, in every instance, rest with them, but arose from the neglect of many members of the Profession not replying to their annual circular. The importance of a correct “*Medical Directory*” must be obvious to all; and it is equally certain, that, without the co-operation of the individual members of the Profession, this desideratum cannot be attained. We therefore urge upon every gentleman the policy of contributing his quota of help to the laborious undertaking of the compilers, by immediately returning the circular they have received.

Legitimate practitioners will also, we are sure, at the same time, record their desire that the names of those who practise Homœopathy should be altogether omitted from the list of medical men.

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF MEDICINE AND SURGERY.

[THIRTEENTH NOTICE.]

BEFORE entering on the subject of surgical instruments, which will conclude our notice of the British department of the Exhibition, we shall, in this paper, examine some anatomical models and drawings placed in their immediate contiguity. From the earliest ages, indeed it seems to be an original tendency of the human mind, men have attempted to imitate the forms of surrounding objects in marble, stone, wood, and in various mixtures of substances devised by their own ingenuity. These attempts have been more or less rude or finished, according to the greater or less degree of civilization, and the taste of the community in which they lived. The first essays in the earliest ages appear to have been those of the human form for the purpose of worship. It is not surprising, that when anatomy was first cultivated with energy, the desire of preserving the exact appearance of the structures arose, and that attempts have long been made to preserve a record of the structures of the human body both in a normal and diseased condition. These attempts have been more or less successful, but never, in our judgment, perfectly so. The art of anatomical modelling appears to have been first successfully practised at Florence, where an exquisite collection of anatomical figures may be seen. This museum of models includes not merely dissections of the human body, but many objects of natural history. We have had the opportunity of seeing in collections in this country exquisite models of the larger fungi; but we are not informed that this art has been extensively applied to Comparative Anatomy, where it would be most useful, by the Florentines, as it has by Dr. Auzoux, whose specimens we shall have occasion to notice when we arrive at the French department of the Exhibition.

It has been, and is still, we think, a matter of belief, that models of the anatomy of the human body, always excepting enlarged representations of minute organs, are of small utility in the study of that science. Especially is this the case with models of the muscles, arteries, veins, and nerves, the form, position, etc., of which can only be studied by actual

dissection. We apprehend that little would be really learned by looking at an already completed dissection; for it is difficult to command long continued attention, when nothing more is required than to fix the eyes on the object. In actual dissection much time and labour is expended before the parts are clearly and definitely exhibited to the eye. While this process of clearing and isolating the organs is going on, the mind is making a mental picture of the parts, which seems to be more permanent and indelible in proportion to the time consumed in the dissection; and such mental pictures may be recalled years after the object has been absent from the vision.

But, perhaps, the most serious objection to the greater part of anatomical models is, that while they may accurately represent the *form*, they are incapable of giving clear and defined notions of the general appearance of healthy structures; there is, in short, something about them that impresses us with the idea that they are models, and not the actual structures which they are intended faithfully to represent.

We have thus laid before our readers the most prominent objections to anatomical models, but we would not wish to deprecate them *in toto*. On the contrary, we think that their chief utility is, not to the student who has anatomy to learn, but to the practitioner who, having studied the structure of the human body in former years by actual dissection, wishes to revivify the mental pictures that he has previously acquired by actual dissection; and they appear to fulfil this object much better than drawings or plates.

The greatest utility of anatomical models is that of preserving the form and appearance of morbid parts. In this, models infinitely surpass drawings in accuracy and fidelity. In proof of this assertion, we have only to compare the beautiful collections of models of disease of the skin and other parts contained in the museums of University College, King's College, and Guy's Hospital, with the most accurate coloured drawings and plates of the same diseases. With these preliminary observations on anatomical models in general, we proceed to examine the specimens of this art contained in the Exhibition.

In the English department these are by no means numerous or varied in character; in fact, there are only four exhibitors, and the models themselves are confined to the illustration of the normal anatomy of the human body, and the process of incubation of the egg in the common fowl.

The models to which we give the preference are those in wax by Mr. Towne, (Class X., 625,) the gentleman employed to prepare the models for the Museum of Guy's Hospital. They are modelled from dissections by Mr. Hilton, one of the surgeons of that Hospital, which were evidently made with great care and skill. The first of these represents a deep dissection of the side of the head, face, and neck, exhibiting the three branches of the fifth-pair, the lingual nerves, the muscles and nerves of the orbit, the cervical and brachial plexus, Meckel's ganglion, and the other parts exposed in the dissection. The model is unfortunately placed in the back of a deep glass case, so that it is difficult for those not endowed with a long range of vision to examine the structures with great accuracy.

The most beautiful, however, is the model of the dissection of an upper extremity, the side of the thorax and the neck, in which the muscles, arteries, veins, and nerves are more accurately and naturally represented than we have ever seen, except in the case of some Florentine models in the Anatomical Museum at Oxford; and we think that Mr. Towne has fully equalled, if not surpassed those celebrated models in fidelity to nature. It would be useless here to enter into a detailed description of the preparation, because we know that the greater part of our readers are already acquainted with the subject.

Five models of the peculiarities of the cranium in the Ethiopian, Mongolian, Circassian, the Negro, and the Carib races of man, are contributed by Mr. Towne. These models are remarkable, not only for the correct delineation of the form, but also for the very exact imitation of the appearance and structure of bone; we have never before seen any model of osseous structure so true to nature.

The anatomical models exhibited by Mr. Simpson (Class X., 624) claim attention chiefly for the novelty of the material employed in their construction. They are made of gutta percha, a substance which affords many facilities for modelling, as it is easily softened by the heat of boiling water, and becomes hard and wood-like when cold; the various

colours required may be incorporated with the material, so as to require little surface-painting; and at ordinary temperatures, the model is not easily broken or altered in shape. But, with all these advantages, there are some drawbacks, the chief of which is, that the model presents a much more artificial appearance than when made in wax. This is readily seen when the gutta percha models are compared with the wax models of Mr. Towne; but then it must be borne in mind, that the texture of the latter is fragile, while the former can only be injured by very rough usage. The gutta percha models approach very nearly in appearance to those of papier maché, the material usually employed before the former was introduced. On examination, we were unable to detect any error in the delineation of the organs and structures, or in the distribution of the vessels or nerves; and we have no doubt that improvement will be made in the colouring, so as to render the general appearance more true to nature. At the same time we must remark, in justice to Mr. Simpson, that his models will serve every purpose of which anatomical models are capable. Mr. Simpson's models are three in number, one exhibiting a full length figure of the full size, consisting of a number of pieces which are moveable, so as to expose all the chief organs; the other two are sections of the head and neck in the middle line, showing the falx, the lateral ventricle, the cavities of the parts, and the mouth.

Mr. Gordon, of Bristol, also exhibits a full-length anatomical model of the human figure, about two and a half feet high, consisting of a very large number of moveable pieces, so constructed as to show the different layers of muscles. The viscera are also in separate pieces, and even the eyes, although necessarily very small, are capable of being removed. Being on so small a scale, a large amount of time, labour, and ingenuity must have been expended on this model, but we are fearful that the utility of the model will not compensate for the time and labour bestowed on it.

Two very beautiful series of models of the process of incubation are exhibited by Mr. Towne and Mr. Dinsdale of Newcastle-on-Tyne. So nearly equal in merit are these two series, that it is very difficult to decide which deserves the greatest praise. That of Mr. Towne shows the changes which occur day by day, from the egg before incubation to the escape of the chick; while Mr. Dinsdale, in addition, gives three models of the abdominal viscera of the chick from the second to the fourteenth day after hatching. Both series deserve the highest commendation.

We must not omit to mention that Mr. Highley exhibits his well-known anatomical cast in plaster of Paris of a full-length figure, with the muscles coloured after nature.

The only anatomical drawings are those sent by Dr. Paxton, of Rugby (which by some error are attributed to Mr. Dinsdale in the Illustrated Catalogue), intended to illustrate the application of painting in body-colours to the illustration of morbid specimens, as being more rapidly executed and more effective than the ordinary mode of colouring, and at the same time affording great facilities for correcting any errors in the drawing, or making changes in the general effect of the picture. Painting in body-colour resembles painting in oils, except that the colours are mixed with water instead of oils. In the ordinary mode of painting with water-colours the lights are left while the shades are painted in, whereas in body-colours all the colours are rendered opaque by being mixed with flake or Chinese white, and may in consequence be laid over each other, so as altogether to obliterate the subjacent colours. In this style of painting, the lights, instead of being left uncoloured, are painted in; and so great is the facility with which this may be done, that a great saving of time is effected. The whole of the drawings of this series are beautifully executed, and present most vivid representations of the morbid parts. They illustrate the following morbid conditions:—The kidney in Bright's disease; the effects of peritonitis, a scrofulous tumour (tubercle) projecting into the right auricle of the heart, medullary sarcoma (encephaloid) of the ovaries, cancer of the colon near the cæcum, scirrhus of the pylorus, cirrhosis of the lung, venous congestion and carbonaceous deposit in the lung, infiltrated tubercle and tubercle associated with the carbonaceous deposit so frequently found in the lungs of coal-miners from the penetration of coal-dust into the bronchi and cells, grey tubercle, honey-comb cells in the lung in phthisis, encephaloid of the lung, and gangrene of the same organ. We would especially direct the attention of our readers who are

interested in the subject to these drawings, which are equal, if not superior, to anything of the kind we have ever seen.

REVIEWS.

Somnolism and Psycheism; or, the Science of the Soul and the Phenomena of Nervation, as Revealed by Vital Magnetism or Mesmerism, considered Physiologically and Philosophically; with Notes of Mesmeric and Psychical Experience. By JOSEPH W. HADDOCK, M.D. Second Edition, enlarged; with Illustrative Engravings. London: 1851.

"Somnolism" and "Psycheism!" Well, we will not quarrel about names; but this, the Author assures us, was the original title of his book, which, some how or other, found its way across the Atlantic, and there, in the City of New York, fell into the hands of an American bookseller, who sacrilegiously republished it, and changed its title to that of "Psychology; or the Doctrine of the Soul." Now, to filch away the title of a book, and substitute another in its stead, is, we opine, "flat burglary as ever was committed;" and we therefore think the Author quite right in publishing a second and enlarged edition of his work in this country. Moreover, for the sake of posterity, it was quite right he should revert to the original title. How else could the identity between the two editions have been preserved? "*Somnolism and Psycheism*," therefore, is the title of this mystic volume, which any modern Faustus, prying into the mysteries of the spiritual world, might study with advantage. Here we are carried at once into the very "thick of the witch element," the film of mesmerism obscuring the ordinary vision and powers of the human understanding. Alas, for the credulity of fallen man! Yet, we must not wax wrath; "it is not ours to judge, far less condemn;" but we confess we become impatient, and cannot tolerate the perversion of the plainest anatomical facts to dovetail into and support the fantastic theory of mesmerism. Here we have an author—aye, and a physician to boot—describing the fibres of the brain—going over the old story of the converging and diverging fibres propounded by Gall, giving engravings, too, illustrating these nice points of anatomy, to justify such a mesmeric revelation as the following:—"On the Monday, I found Emma very dull and heavy, hardly able to keep herself awake. About ten a.m., I put her in the 'sleep;' and was then informed that the change had passed over her, and that the fibres of the brain had fallen more forward, and that the forward movement was communicated to the cerebellum!" Admirable anatomical illustration! Who could have understood this without an engraving? To return, however, to the "psycheism" of Emma. This marvellous young woman, mesmerised in Bolton, A.D. 1850, sent her soul out of her body in search of Sir John Franklin. Thrown into a state of profound mesmeric sleep, off she went; and she described to our author the dreary aspect of the arctic regions. There, fast asleep in her arm-chair in Bolton, she told her astonished auditors that she was beholding fields of snow and rocks of ice, and snow-huts, and Esquimaux dressed in skins, and Sir John Franklin's ships jammed in among the icebergs, and a white-headed man going in to his relief; and she likewise gave a description of the rainbows and magnificent northern lights which illumine those regions of eternal ice and snow, all which our author records with becoming gravity and implicit faith. There is clearly no end to human credulity. Why did not the operator request the fair Emma, while she was perambulating the North Pole, to tell us something we did not know? Why did she not reveal to us the secret of the North-west Passage? Why describe only pictures of snowy desolation and stunted Esquimaux—figures which are familiar to every child who has read any story-book about the Polar Regions? Nay, since Emma is so great a mesmeric prodigy, and since space and time appear to be annihilated during these spiritual flights, why, even now, will not the operator "will her" to inform us of what is going on in the moon, and what sort of people the Anthropophagi really are? If she were only induced even to give us the benefit of her clairvoyance nearer home she would be more useful even to the Government than the telegraph at the top of the Admiralty. Jestings apart, in the book before us we recognise nothing new respecting the history, preten-

sions, and wonders of mesmerism. There is, however, one significant fact—*ecce signum*—Dr. Haddock *advertises*, at the end of his Preface, that he “may be consulted personally or by letter in *all* medical cases,” and the “terms and conditions” may be learned in the usual way, by letters under stamped envelopes from persons desirous of enjoying the faculty of clairvoyance! *Verb. sat.!* This puts his “Somnolism” and “Psycheism” out of the pale either of science or philosophy; thoroughly well *prepaid*, the information must be valuable.

Surgical Anatomy. Fasciculus IX. By JOSEPH MACLISE. F.R.C.S.

We have the pleasure of announcing, the ninth fasciculus, and with it the completion of Mr. Joseph MacLise's work upon “Surgical Anatomy,” containing a series of highly finished coloured plates, in which the different important regions of the body are delineated with an accuracy as well as with an *artistic* taste meriting our warmest encomium. The price is so moderate, that the work is within the reach of all, and should, undoubtedly, form part of the library both of the practitioner and of the student. Although plates can never supersede the necessity of dissection, yet they serve two purposes; the first, to convey a clear idea of regions, such as the perinæum, whose investigation is tedious and difficult; and secondly, in after years, when the business of life has rendered dissection impossible, to recall to the memory the relations of important parts, or the distribution of vessels and nerves. We cannot specify any one fasciculus superior to the rest; the ninth is equally good with the first; perhaps, in some respects, it exhibits a freer touch, corresponding with Mr. MacLise's increasing confidence in his abilities to accomplish this important task, in a manner appreciated by his professional brethren, and in every way honourable to himself. It would be an omission, however, not to call attention to the plates representing the perinæum and the bladder, both in a healthy and morbid state. We allude especially to the perinæal dissections, which render that region as simple and as easy of comprehension as if neither fasciæ nor muscles had been invented by practical anatomists, nor perinæal hobbies ridden by practical surgeons. The student may see the perinæum in these plates represented as constructed by Nature and not by man, and will discover, to his surprise, that its anatomy may be learned with the same facility as that of any other part of the body.

The passage of the catheter along the urethra, and the obstructions which it may encounter from strictures and changes of structure in the prostate gland, are subjects exhibited in a series of very beautiful drawings.

The parts of hernia, both femoral and inguinal, are portrayed from dissections in the same clear and accurate manner; the course taken by an intestinal protrusion, and the coverings which it receives, are illustrated by diagrams, by which the student may understand at a glance the structures to be divided before reaching the sac, and the situation of the stricture which opposes the return of the hernia.

The Author and Publisher have in every way fulfilled the conditions with which this interesting work was offered to the Profession.

The Therapeutic Application of Electro-Magnetism in the Treatment of Rheumatic and Paralytic Affections. By ROBERT FRORIEP. Translated from the German, by RICHARD MOORE LAWRENCE, M.D. London. 1841.

However apocryphal may be the facts of what is called vital magnetism, or, *par excellence*, mesmerism, there can be no doubt that electricity and mineral magnetism produce certain effects on the nervous system; and from the evidence before us it would appear, that, in rheumatic and paralytic affections, electro-magnetism has been applied with benefit. There can be no doubt, as Dr. Golding Bird has observed in his Lectures, that electricity, under all its modifications, is a most energetic agent in exciting muscular contractions, as well as the contractility of other tissues; consequently, we may upon sound pathological principles expect that the direction of the electro-magnetic current upon limbs which are partially paralysed or affected with chronic rheumatism, will be attended with some well-marked therapeutic effects. The experience of Dr. Froriep, the Professor of Surgery in the University of Berlin, seems to be conclusive on this

point; and the Profession is much indebted to Dr. Lawrence for the translation before us. The author begins by pointing out the use of electro-magnetism in the treatment of rheumatic effusion in the cutis, subcutaneous cellular tissue, muscles, and periosteum. He then lays before us the details of fourteen cases of rheumatic affections in different parts of the body, complicated with paralysis, exemplifying the importance and efficacy of the electro-magnetic plan of treatment. The machine used by Dr. Froriep was that of Saxton, which was exhibited in June, 1833, at the meeting of the British Association in Cambridge. Desirous of testing the therapeutic value of electro-magnetism in the treatment of these diseases, Dr. Froriep seldom employed other remedies at the same time; but he fairly acknowledges that there are many remedies which, when judiciously employed, may, along with electric-magnetism, very materially assist the cure. Facts are better than theories; but the electro-physiological discoveries recently made by Matteucci certainly encourage us to advise a fair trial of the electro-magnetic treatment. We therefore recommend the cases recorded in Dr. Lawrence's work to the serious attention of the Profession.

A Compendium of Materia Medica and Pharmacy, Adapted to the London Pharmacopœia, embodying the new French, American, and Indian Medicines; and also comprising a Summary of Practical Toxicology, with the Abbreviations used in Prescriptions. By J. HUNTER LANE, M.D., F.L.S., etc., etc. Second Edition. Pp. 310. London: 1851.

Dr. Hunter Lane's work is supplemental to the new Pharmacopœia, to which it is also a very valuable and necessary companion. Modelled upon “Thompson's Conspectus,” it is far superior to that once standard work,—supplying its deficiencies, and forming an admirable Manual for reference both to the student and the practitioner.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

ON THE LONDON AND DUBLIN MIDWIFERY INSTITUTIONS.

By Professors LEVY and MICHAELIS.

Professor Levy, of Copenhagen, having some little time since published an account of his visit to the London and Dublin obstetrical establishments, Dr. Michaelis, of Kiel, found his statements so entirely in accordance with what he himself observed at a subsequent visit, that he has communicated a translation of the essay to the *Zeitschrift für Gebertskünde* in place of any original observations of his own. Our readers will doubtless wish to learn the opinions of these two distinguished observers; and we are glad to be able to inform them that their report is, upon the whole, a very favourable one. Each hospital is described in detail, and its statistical history furnished, as far as obtainable; but we only give the general conclusions which are drawn from an examination of the four London establishments—merely premising that the authors much prefer our plan of independent management, by means of weekly committees of governors, to the tedious and complex procedures which prevail on the Continent. 1. The London establishments are well placed as regards high and dry sites, except the Westminster, where, however, the filling in of the foundation, and the introduction of improved ventilation, seem to have neutralised any ill consequences that might have been expected to arise from the site. 2. There are so many more beds than patients, that scarcely one-half are filled; and the authors believe, from the structure of most of the buildings, the ventilation would be found very defective if all the beds were kept filled. 3. The lying-in rooms are distributed over different parts of the building, to which the English physicians attach great weight. 4. The patients are, for the most part, married women, and by no means taken from the lowest classes. Clean and healthy in person, they enter the establishment knowing they will be well taken care of. 5. In all the female *personel* of the establishment, and especially with the matrons, there prevails a scrupulous sense of cleanliness and order, that, founded in the national character and education, is only met with in that degree in English women, and is so difficult of development elsewhere, however

strong the precepts laid down. 6. Education is pursued at these establishments only to a very limited extent, or rather, not at all, being confined to the permission of the occasional residence of a male or female pupil, who takes part in the delivery of the patients. 7. The independent position of the physician is of essential benefit to the English establishments. He controls all the medical relations, and, as the directing agent, orders all appertaining to these, according to his own convictions.

Two questions, however, presented themselves to the authors. 1st. Seeing that there are not many more than 1000 persons delivered annually in the united establishments, how are the necessities of the poorer lying-in women, who on the continent fill the large hospitals, provided for? This is in part accomplished by the infirmaries attached to every Poor-law district, and to which the poor, and especially the unmarried poor, can resort; and in part by the practice of attending women at their own homes, which prevails to a vast extent in London and the large towns. 2nd. How, in the absence of a comprehensive system of education at these establishments, is the practical instruction of accoucheurs and midwives accomplished? The authors truly remark, that however great may be the renown of the London medical educational institutions in general, the obstetrical portion of them are very defective. In the first place, none for the education of midwives exists, and they must rest contented with the little they can pick up in Maternity Societies, the attending which is not compulsory; and even the male pupils receive no clinical instruction properly so called, only attending women at their own homes, unassisted except upon emergencies—the consequence of which is, that the *scientific* study of obstetricity is at a lower ebb than on the Continent. In this respect, Dublin contrasts very advantageously with London. Thus, comparing the two capitals, —while in each, the plans for the delivery of poor lying-in women seem best adapted to the manners and wants of the respective countries,—as regards obstetrical education, Dublin possesses an infinite superiority. The case of Dublin is important too, as regards the question of the influence of large establishments on the production of mortality. The mortality of the large hospitals of Dublin is rather less than that of the small institutions of London (that of both being infinitely smaller than the mortality of the great continental hospitals), although they admit a much lower and more necessitous class, of whom a greater number enter one hospital annually than is equal to that of the patients of the united London establishments. Thus, Dublin, besides forming a celebrated practical school, where thousands of pupils have been efficiently educated, proves to us that with care and attention, especially at the period of commencing epidemics, a large proportionate mortality does not necessarily attach to large midwifery establishments.—*Ibid.*

BLISTERS IN PLEURITIC EFFUSION.

M. Valleix expresses his conviction that the advantage of blistering in the effusion from pleurisy has been much overrated. When the patient is enfeebled, or otherwise placed in unfavourable conditions, blisters may be even mischievous. Frequently, after remaining stationary for several days, the effusion disappears in a very rapid manner; and in general, with patience, it would be absorbed without their aid—their resolvent action being in fact anything but proved.—*L'Union Medicale.*

TRANSPARENCY OF HYDROCELE.

M. Michon observed, in reference to a case of disease of the testis combined with a collection of fluid, that whenever excessive transparency prevailed we should be always on our guard, and not mistake the case for one of simple hydrocele—the fluid being then a mere complication. A tumour should be distrusted when it offers very great transparency, and the limited opaque point, indicative ordinarily of the presence and position of the testes, is not discernible, especially when the tumour feels denser than usual.—*Gaz. des. Hôp.*

KREOSOTE IN MALIGNANT PUSTULE.

Eulenberg relates a case in which the most decided good effects resulted from the internal administration of small doses of kreosote, and the application of the following to the mortified parts. R Kreositi, ol. tereb. aa ʒss, sp. camph. ʒiv. —*Med. Zeitung.*

STRANGULATION OF INTESTINE BY OMENTUM.

In a case of death from suspected poisoning, in a child aged 10, who died soon after eating soup, Dr. Casper found acute peritonitis produced by six inches of intestine (in a sphacelated state) becoming strangulated by means of the mesentery within the abdomen. In the same case, a strong adhesion existed between the upper surface of the liver and the diaphragm.—*Cooper's Wöchenschrift.*

REVACCINATION IN SYPHILIS.

Dr. Fouquet, of Freiburg, having observed the favourable influence which small-pox exerts upon the progress of an existing syphilis, primary or secondary, was induced to try the effect of revaccination as a preventive of secondary syphilis; and although, owing to his being attached to a military hospital, where most of the soldiers have been revaccinated already, his experience has been limited, yet he believes he has derived sufficient benefit from the practice to justify calling attention to it.—*Med. Zeitung.* No. 20.

YELLOW WAX FOR THE PREPARATION OF OINTMENTS.

Dr. Haenle calls attention to the great rapidity with which ointments prepared with white wax turn rancid. An ointment which turned rancid in fourteen days, kept well for two months when prepared with yellow wax. He thinks the white should no longer be employed for the preparation of ointments or emulsions.—*Buchner's Repert.*

SOLUTION OF GUTTA PERCHA IN CHLOROFORM.

Dr. Rapp, of Bamberg, having observed that collodion, when applied for surgical purposes, loosens if the skin is moist or transpiring, or if blood trickles down, has therefore, in place of it, employed a solution of gutta percha in chloroform, 7 grs. to ʒj, and speaks of it as forming a very pleasant and effectual adhesive dressing. A solution of one part to eight or nine, is as easily applied by a pencil as collodion.—*Ibid.*

POSITION IN MIDWIFERY OPERATIONS.

Dr. Mayer relates a case in which the application of the forceps being impossible while the woman lay on her back, was easily accomplished after she was placed on her hands and knees. Dr. Genth, too, relates another in which he could not succeed in effecting turning until he had adopted a similar procedure.—*Schmidt's Jahrb.*

TURNING WITH ONE OR TWO FEET.

Dr. Genth observes, that in extracting the child by turning, he finds that one foot suffices if the child's body lies downwards and forwards; but that both feet are requisite if it lies with its back downwards and forwards.—*Zeitschrift für Geb.*

POISONING BY SULPHURIC ACID.

Dr. Casper states that nine-tenths of all the poisonings that occur at Berlin are effected by the common oil of vitriol of commerce. He relates a case in which, while the œsophagus and stomach were half charred by it, the tongue and palate exhibited no unusual colour or change in texture!—*Wochenschrift.*

CHLOROFORM IN CHOREA.

M. Gassier relates a few cases to show the great benefit derivable from frictions along the spine, made with equal parts of chloroform and oil, employed night and morning. Relief was usually nearly immediate, and the cure accomplished in a few days.—*Bull. de Therap.*

GENERAL CORRESPONDENCE.

THE COFFINITES AND THE PRESIDENT OF THE COLLEGE OF SURGEONS.

[To the Editor of the Medical Times.]

SIR,—Attracted by large placards, calling a meeting for "Medical Reform," under the auspices of a person rejoicing in the lugubrious and ominous name of "Doctor" Coffin, I repaired to Exeter Hall, and found the large room two-thirds filled, with an assemblage of both sexes, and of all ages, chiefly appertaining, apparently, to the humbler ranks of society. I should not, however, have troubled you with any account of their proceedings, but

for an incident indicated by the title of this communication. When I entered the room, an enthusiastic advocate, (himself a victim of the misdeeds of the regular faculty, as his well-scarred face and harrowing details witnessed) was exhibiting in impassioned language the advantages which quackery (*sic*) conferred upon the public. The form of quackery in particular which he advocated, was that of every man becoming his own doctor, after perusal of "Doctor" Coffin's "Guide to Health." You may judge of my surprise on hearing him cite among his authorities the name of the present President of the College of Surgeons—not *quasi*-President, for he was not aware of the fact, or he would have brought down additional thunders by its announcement,—“John South, no mean authority.” The ground for conferring this additional honour on the P.R.C.S.E., was found in a highly objectionable work, published by him some three or four years since, entitled “Household Surgery,” in which he sought to render the commoner incidents of practical surgery familiar to the meanest lay capacity. In this book, said the speaker, “John South” had declared that it was infinitely more pleasant for a medical attendant to visit a patient who was conversant with the *rationale* of his disease and the treatment required for it, than one who was ignorant on these points. For my part, I have ever found it the contrary—no persons being so undocile and so unreasonable as your smatterer in medical knowledge. The danger and mischief of Mr. South's book was fully pointed out at the period of its publication, (see *Medical and Chirurgical Review*, July, 1847), and we much doubt whether the President must not feel some misgiving himself, on learning that his name was received with “unbounded applause” by the same audience that listened with delight to every abusive epithet, every lying calumny, heaped upon the Profession at large.

It is not my purpose to give you any detail of the various speeches that were made; but it may not be unamusing to state a few of the propositions that were laid down by the various speakers (whose proud boast it was, that, since they had been Coffinites, no medical man had darkened their doors) and unhesitatingly assented to by the “enlightened,” “respectable,” “Christian” audience they had the honour of addressing:—

1st. Doctors profess their inability to cure colds, which they allow to take their course; how then could they pretend to cure the effects of the cold?

2nd. Doctors are inferior in ingenuousness and philanthropy to quacks; for while the former make mistakes without acknowledging them, and refuse to impart what little they know, the latter cheerfully acknowledge their errors, accept correction from any quarter, and are willing to tell all they know, to the very doctors themselves.

3rd. No disease is incurable. The difficulty is the discovery of the means of curing it. This is a result of Coffinism; consumption and scrofula being offered as trifling examples of what it can do.

4th. Half those born never reach manhood. How could this be if doctors were what they pretend?

5th. No poison, whether vegetable or mineral, can be used safely or advantageously as a medicine.—(A pretty strong opinion for the advocates of lobelia to express, in the teeth of divers inquests and trials.)

6th. The declaration by the Profession of its inability to cure organic disease, is a confession of utter incompetency.—(Numerous living testimonies were on the platform anxious to do homage to their presence from the rival coffin.)

7th. Numberless persons' lives would have been saved had they resorted to Coffinism, in place of dying under the “best medical care.”—(One speaker gave a harrowing account of his losing “nine blessed babbies” who might have thus been saved.)—Old age is the only natural cause of death, and under Coffinism, is the only one in fact.

These, and kindred sentiments, were developed with the enthusiasm that fanatical confidence and unblushing assurance impart to ill-educated persons, and illustrated by details of personal ailments, all the more relished by the audience for being accompanied by vulgarities and indecency of expression, that would not have been tolerated in any other assembly of both sexes.

Each speaker directed attention to a “venerable,” “philanthropic,” “apostolic” personage, who sat near to the chairman, pregnant with mighty events that are yet to entirely remodel the constitutions (bodily) of all mankind. My attention consequently became rivetted on a white-headed, well-to-do-looking old gentleman, who, I was informed, had undergone a dreadful series of persecutions at the hands of the faculty. Detesting persecution, even in a good cause, I was preparing to sympathise with him, but presently found, on his rising to reply to a vote of congratulation at the present position of “Medical Botany,” that the great Coffin stood in need of no aid of this kind, his own unblushing impudence

being quite competent to carry him through every trial. All the eulogia that had been uttered he cheerfully adopted, and added assumptions that even his warmest admirers had not ventured upon. Stripping off his coat, and facing the entire platform with tremendous energy, he enumerated his cures, paraded his patients, denounced the doctors, defied their efforts, and challenged their competition. Altogether, it was one of the richest scenes I ever beheld; and I do not hesitate to denominate this Yankee mountebank the Prince of Charlatans. One observation he made is worth attention. He said, that when he first commenced operations at Halifax, the medical men there, treating him with contempt, left him alone; but, now that they wished to put him down, it had become impossible—acknowledging that, had they at first resolved upon what they now attempted in vain, they would have succeeded.

I am, &c.

A CORRESPONDENT.

DR. BENICE JONES ON THE NITROGEN OF THE ATMOSPHERE.

[To the Editor of the Medical Times.]

SIR,—Noticing in your valuable Journal of the 19th ult. the following quotation from a lecture delivered by Dr. Benice Jones, at the Royal Institution, before the members and students of St. George's Hospital, in treating of nitrogen, he says, “We know it to be an experiment, and that it is of no use whatever as nutriment.” However this opinion may agree with our established chemists, I must protest against it, and am prepared to prove, that, as it forms four-fifths of our atmosphere, it is somewhat more than “a mere diluent,” “an unvital air.” It has been suggested as probably to serve “some useful purpose in the economy of animals, the exact nature of which has not been discovered.” The time, we would hope, is now ripe for an investigation of this question. I have endeavoured to bring it under the consideration of scientific institutions, especially among my medical brethren, and have not only pointed out subjects where its usefulness is peculiarly developed, but instanced its efficacy in cholera with circumstantial minuteness, as a prominent example, open to public investigation and criticism.

I first submitted a prospectus of the treatment to the Board of Health in August, 1849, and since, through other medical channels. From the known uses of ammonia, I have traced its effects in generating heat to its basis in nitrogen. This element is found also in our most explosive compounds; and, I believe, is the cause of heat and stimulating properties in our most effective medicines and food.

Whilst the effects of ammonia have been admitted by agriculturists, they have not generally recognised its virtue to emanate from nitrogen, although an eminent Professor has stated, that “no doubt is now entertained of nitrogen, as an element of food and manure.” I have endeavoured to trace the purposes of this great element through Nature's laws, and to demonstrate it as the source of heat, and also, in a physiological point of view, connected it with our five senses, in an essay addressed to the Royal Institution in December last. It would be an interesting query solved, whether Dr. Benice Jones were an examiner of it; his assertion in respect of nitrogen is very positive. As the Royal Institution “delivers no opinion on scientific subjects,” is it also irresponsible for the information it conveys, and content even to withhold opportunity for open argument on this great subject? It is not a system of quackery it involves, but the debateable question, whether nitrogen be, in the purposes of nature, a great and efficient agent, or “a mere diluent”? It must be especially injurious to students to hear doctrines in direct opposition to each other. Would professors of medicine and chemistry condescend openly to investigate the matter, a great boon might result to society, even surpassing the valuable productions of the Crystal Palace, through all its ramifications of art and mechanism, and afford scientific reasons to lead the judgment of the intelligent public. I am, &c.

WILLIAM PARKER, M.R.C.S., L.A.C.

2, Hamilton-square, Birkenhead, Cheshire.

MEDICAL CLUBS AND SELF-SUPPORTING DISPENSARIES.

[To the Editor of the Medical Times.]

SIR,—I know you have the interest of the Profession at heart, and will not think it imposing too much upon your time and talents by being asked to educe such information upon the subject of “gratuitous prescribing” as may place the matter in correct juxtaposition in respect to the Profession and the public, both in a moral

and legal point of view. I am aware that the question is one which ought to be comprised under the article, "Medical Reform;" but what is to be done while the grass grows, which is already overstocked. It is a well-known fact, that medical men give too much time and attention to charitable purposes among a class of patients who are not poor enough to be paupers to claim parish medical relief, but yet who are too poor to pay the doctors, and too proud to acknowledge their indigence, so that our books become insensibly filled with bad debts, in defiance of our best efforts to make men honest against their will, by either compelling them to pay a just debt, or keeping them out of debt by "gratuitous prescribing." What is your opinion of medical clubs and self-supporting dispensaries? If they are really beneficial to the Profession, why do we not hear more of them? They cannot possess the advantages represented, otherwise they would make greater progress in the country, as, in vulgar parlance, a good article will always recommend itself. Odd Fellows' clubs, and those got up for the express purpose of cheating the doctor, there can be no question of their injurious tendency. Until the Profession to a man will discountenance such a dead robbery as practised by them towards us, it is empty sound to talk of the union of the members of the Medical Profession; such is the temptation to rival and supplant a brother in so many dirty practices, that, unless resisted, it is but arrogance to assume to ourselves the rank of a Profession when our practice becomes that of a low trade. If we do not respect ourselves, the public will not, but will naturally take advantage of our failings. Your strictures on the subject will confer an obligation upon your Correspondent and others.—I am, &c. H. R.

UNIVERSITY OF LONDON.

M.B. FIRST EXAMINATION.—1851.

PASS EXAMINATION.

MONDAY, AUGUST 4.—Morning, 10 to 1.

Anatomy and Physiology.

Examiners, Mr. KIERNAN and Prof. SHARPEY.

1. Give the anatomy of the elbow-joint, describing the articular ends of the bones, the ligaments, and the synovial membrane. Mention the movements which take place at this articulation, and the muscles by which they are effected.
2. The pharynx being opened posteriorly in the middle line and in its whole length, describe the parts brought into view in the order in which they are seen from the basilar process to the lower margin of the cricoid cartilage. The mucous membrane being removed, describe the parts then exposed. The answer to include an account of the form and structure of the soft palate and its arches, the tonsils, and the interior of the larynx.
3. Describe the parts which would be exposed in tracing, by dissection, the peroneal nerve and its branches, from the upper part of the popliteal region to their termination.
4. Give an account of the structure, course, and connexions of the large intestine from its commencement to its termination, describing the ilio-colic valve, and noticing specially the points in which the large differs from the small intestine. In your account of the rectum, describe its relations to the adjacent parts in the two sexes.
5. Describe the external configuration, the position, and the internal structure of the teeth in the adult.

MONDAY, AUGUST 4.—AFTERNOON, 3 TO 6.

Anatomy and Physiology.

Examiners, Mr. KIERNAN and Prof. SHARPEY.

1. Describe that portion of the base of the cranium which is bounded anteriorly by the suture uniting the horizontal plates of the superior maxillary and palate bones, and by the anterior margins of the pterygoid processes, posteriorly by the superior transverse ridge of the occipital bone, and laterally by the ridges separating the zygomatic from the temporal fossæ, and by the posterior roots of the zygomatic processes of the temporal bones. Commence the description at the anterior part; mention the openings, with the parts occupying them, and the attachments of muscles and ligaments in the order in which they are seen.
2. Describe, in the order of their occurrence, the parts met with in exposing the course and distribution of the suprascapular and circumflex nerves: the dissection to be commenced at the upper and back part of the shoulder, and carried from behind forwards as far as the point where the circumflex nerve passes the lower border of the subscapularis muscle.
3. State the steps of the dissection required to display the facial

artery and its branches, (except the palatine and tonsillar;) mentioning the other parts exposed in the dissection, and pointing out their relation to the vessels in question.

4. Describe the parts seen in the right auricle and right ventricle of the heart. Mention the peculiarities of the heart and pulmonary artery of the foetus.

5. Give an account of the cellular or areolar tissue; describing its structure, its physical and vital properties and chemical composition, the varieties which it presents in different parts, and its mode of distribution in the body.

TUESDAY, AUGUST 5.—MORNING, 10 TO 1.

Chemistry.

Examiner, Professor BRANDE.

1. Enumerate the preparations of lead of the "London Pharmacopœia," giving their respective formulæ, and modes of manufacture or preparation.
2. How are nitrates detected in spring water, and what is their probable origin?
3. What are the proximate components of opium? Give an outline of its qualitative analysis, and of the preparation and chemical properties of morphia, and its principal salts.
4. Enumerate the principal alloys of copper used in the arts, and give directions for their quantitative analysis.
5. Give the equivalents of the following substances, and the formulæ of their several compounds with oxygen:—
Chlorine. Manganese.
Sulphur. Iron.
Phosphorus. Antimony.

TUESDAY, AUGUST 5.—AFTERNOON, 3 TO 6.

Materia Medica and Pharmacy.

Examiner, DR. PEREIRA.

1. What are the chemical changes which citrate of potash, tannic acid, salicine, and ammonia respectively suffer in their passage through the system?
2. Give a botanical description of *Atropa Belladonna*, and describe its medicinal effects and uses. Give a sketch of the properties and uses of *Atropia* and its sulphate.
3. Describe the process for making the *Ferri Ammonio-Citras*, Ph. Lond.; and explain the successive steps of the operation. State the per-centage quantity of sesqui-oxide of iron which this salt yields when decomposed by potash.
4. In the *London Pharmacopœia* for 1851, it is stated that "Potassii Iodidum in spiritûs rectificati partibus sex vel octo, in aquâ copiose, liquatur. Hæc aqua curcumæ colorem vel non omnino vel levissime modo in fuscum mutat; lacmi colorem non mutat; acido nitrico et amylo simul adjectis, cœrulea fit; acido tartarico cum amylo adjecto, non coloratur. Quod ex eadem a plumbi acetate demittitur, flavet, et in aquâ fervente liquatur: nihil autem decidit adjecto vel liquore calcis vel barii chlorido. Præterea, si id quod per argenti nitratem demittitur, in liquore ammoniæ fortiori digeras, dein liquori colato acidum nitricum adjicias, nihil inde dejiciatur. E granis 100 in aquâ liquatis, adjectâ argenti nitrato, demittuntur argenti iodidi grana 141." You are requested to explain this paragraph, and point out what particular indications these properties respectively furnish.
5. What office does silex contritus serve in the preparation of the "Aquæ" of the *Pharmacopœia Londinensis*? And what are the objections to the use of sugar, spirit, or carbonate of magnesia in the preparation of these waters?
6. Briefly state the effects, uses, and doses of the following preparations of the *London Pharmacopœia* for 1851:—

Liquor arsenici chloridi.
Syrupus ferri iodidi.
Tinctura lobeliæ ætherea.
Tinctura quinae composita.
Tinctura conii.

WEDNESDAY, AUGUST 6.—MORNING, 10 TO 12.

Botany.

Examiner, Rev. Prof. HENSLOW.

1. Define the terms Capitulum, Achlamydeus, Superior, Discus, Pyxidium, Hilum.
2. Describe (in the order in which they are numbered) the plants on the table, confining yourself strictly to the following scheme so far as it may be applicable to the several specimens.
(a) STEM. General Character.
(b) LEAVES. Arrangement.
(c) ———. Stipulation.
(d) ———. Composition.
(e) ———. Form.

- (f) LEAVES. Margin and Incision.
 (g) ———. Venation.
 (h) INFLORESCENCE. General Character.
 (i) ———. Bracteal Appendages.
 (j) FLOWER. Peculiarities of Calyx.
 (k) ———. ———. Corolla.
 (l) ———. ———. Stamens (noticing insertion).
 (m) ———. ———. Disk.
 (n) ———. Pistil (as to Ovary, Style, Stigma, Placentation).
 (o) A Brief Sketch of the Chief Characteristics of the Order to which the Plant belongs.

MEDICAL NEWS.

OBITUARY.—On the 1st inst. Richard Wright, Esq., surgeon, Rotherhithe, aged 79. On April 7, aged 31, at Burra, Adelaide, South Australia, Thos. Pinsent Budd, Esq., surgeon, late of Newton Abbott. On the 18th instant, Dr. John Faithhorn, of 14, Grosvenor place, Bath, in the 79th year of his age.

NAVAL APPOINTMENTS.—Assistant-surgeons Horace H. Smith, M.D., (1848) to the Victory flag-ship at Portsmouth, and George Moore (1848) to the Impregnable flag-ship at Devonport; Mr. R. T. C. Scott, surgeon of the flag-ship Hastings, at Hong-kong, has been superseded at his own request by Admiralty order, and was to have taken passage home in the Reynard steam-frigate, which was wrecked on the 31st May on the Prata shoal, in the middle of the China sea. Mr. Patrick Digan, sen. Assistant-surgeon of the Hastings, has been appointed acting surgeon of the Cleopatra, vice Haire, invalided.

MEDICAL APPOINTMENTS AND VACANCIES.—At the Bristol General Hospital the office of physician is vacant—election on the 8th of September. Candidates must be duly elected. The election is for ten years; but the medical officer is re-eligible to supply any vacancy in his department. A resident house-surgeon and apothecary to the Loughborough Dispensary is wanted—must be M.R.C.S. and L.S.A. Salary 80*l.* a-year, with furnished apartments, coals, candles, and attendance. Election 15th September. The surgery to the Blenheim Free Dispensary is vacant by the resignation of Mr. Carlisle. Election on the 30th instant.

UNIVERSITY OF LONDON, 1851.—FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE.—First Division.—Henry Briggs, University College; Alfred Carpenter, St. Thomas's Hospital; Henry Vandyke Carter, St. George's Hospital; James Ekin, University College; Evan Evans, University College; William Henry Flower, University College; John Henry Gould, University College; Thomas Hillier, University College; John Frederick Money, St. Thomas's Hospital; William Boyd Mushet, University College; Alfred Playne, King's College; Josiah Ramskill, Guy's Hospital; William Edward Robbs, King's College; William Roberts, University College; James Martin Roche, University College; Julius Woldemar de Tunzelmann, University College; John Newnham Winter, Guy's Hospital. **Second Division.**—Walter Goodyer Barker, London Hospital; Erlin Clarke, King's College; James Doubleday, Guy's Hospital; Charles Reeves Evans, University College and Paris; Henry James Franks, Queen's College, Birmingham; Robert Grundy, University College; Henry Stavely Thaddens King, King's College; William Langford, King's College; Elias Jones Roberts, Richmond Hospital, Dublin; Richard Wilkinson, King's College.

UNIVERSITY AND KING'S COLLEGE, ABERDEEN.—The degree of M.D. has been conferred during the present year on the following gentlemen, who, after having been examined on the various branches of medical science, were found duly qualified;—George Everest, Kent; Colvin Smith, Aberdeen; Charles Warden, Warwick; William S. J. H. Munro, Caithness; John Jay Clarke, Bombay; Edward Hart Vinen, Dorsetshire; John Butter Ashford, Devonshire; William J. Grugger, Chichester; John Shea, Dublin; John Tapson, Clapham; Edmund Sheppard Symes, London; George H. Edwards, Middlesex; Alexander Wales Walker, Aberdeen; Theophilus C. Lewis, London; John Berry, Cork; William G. Goldin, Hants; John Horton Broxholm, Sunbury; Edward Boulger, Berkshire; William H. Benson, Cumberland; George Forster Burder, Gloucestershire; John Evans, Dublin; Frederick Collins, Essex; Thomas Bishop, Hereford.

THE ROYAL ACADEMY OF SCIENCES, at Stockholm, have nominated Messrs. Hogman, zoologist; Anderson, botanist; and Kendal, physician; to accompany an expedition about to be sent from Sweden to circumnavigate the world.

SUSSEX COUNTY HOSPITAL.—The vicar of Brighton, at a re-

cent weekly meeting of the Committee of their National Schools, stated that the fruit of their advocacy from the pulpit in one year, in the parish for the Sussex County Hospital, including a series or round of sermons, was 8,983*l.* 6*s.* 5*d.* This was, indeed, a noble result,—such an amount of charity as perhaps no other town in England can boast of having bestowed. It was worthy to have been mentioned by the President of the Provincial, Medical, and Surgical Association, in his introductory address to the members.

THE LANCASTER INFIRMARY.—In the time of the cholera in 1849, a debt was incurred by the managers of this Institution from their charitable endeavours to aid the sick and helpless, which has hung like a mill-stone round their necks ever since. To relieve the Infirmary from this incumbrance, a two days' bazaar has been held, to which all classes seem to have contributed freely, and the result has been the realisation of the sum of nearly 460*l.*, which, with donations presented to the Treasurer, will clear the Infirmary from debt, and enable the officers to proceed, unshackled by an outstanding debt, in their career of usefulness and humanity. The debt was incurred partly through building a new wing to the Infirmary in times of unparalleled distress and sickness.

THE YELLOW FEVER is making fearful ravages among the troops recently arrived in Cuba from Spain.

THE DISEASE that has now for several years infested and destroyed the potato-crops appears to be wearing out. Its ravages this season are evidently comparatively slight, except in Meath and Louth, in the province of Leinster. In some localities, where its traces have been detected, it presents so few of its old destructive features, as to be regarded with but little alarm. A month ago, however, there was dire apprehension as to the extent and severity of its ravages. Turnips will be, it is said, a partial failure, owing to the ravages of the diamond black moth; in some instances, this new plague has manifested itself to such an extent, that, in four or five days, the most luxuriant crop has been stripped of every green leaf, the mere stumps of the leaf-stalks remaining, where, a few days previously, the ground was covered with a healthy and vigorous vegetation.

THE cholera has nearly ceased in the Grand Canary.

A PARLIAMENTARY REPORT, lately published, shows the results of emigration to Canada last year. The aggregate number embarked from Europe was 34,746; the births during the passage 58; the deaths 213; the total landed, 31,591. The proportion of deaths was 0.67 per cent., being a great improvement in comparison with 1849, when the ravages of ship fever carried the amount to 2.73 per cent. Children were, as usual, the chief sufferers; the number of adults out of the 213 cases having been only 58. The Irish emigration was equal to three-fourths of the whole from the United Kingdom. A similar return from New Brunswick shows the total emigration to that colony to have been 1,507. The mortality on the voyage was unusually small, only three deaths having occurred, amounting to 0.20 per cent.

PRESERVED MEATS FOR THE NAVY.—On Thursday, the Lords of the Admiralty inspected the various vessels and public offices at Portsmouth. At the Royal Clarence Victualling-yard a most disgraceful discovery has just been made. A large quantity of preserved meats, in tin canisters, amounting to some thousands of pounds in weight, were delivered at the Royal Clarence Victualling-yard lately. Shortly after being stored, it became evident from the stench that a great portion of the meat was in an unsound state, which, upon examination, proved to be the case. As the contractor had been paid the amount of his contract, if the authorities of the yard had thrown the meat overboard, the Admiralty would not have been able to return it, or demand a proper fulfilment of the contract. Another plan was tried. Mr. Greetham, solicitor to the Admiralty at this port, requested two respectable inhabitants of Gosport to hold a survey on it, (Mr. George Adams and Mr. Robert Hyslop). This was accordingly done, and such was the shameful state in which the meat had been packed, that the surveyors hastened to leave the store, and one of the men was taken ill and remained so for some hours from the effects of the effluvia which he inhaled. Messrs. Adams and Hyslop have stated the case to the Board of Guardians of the parish of Alverstoke, who, it is rumoured, intend to indict the Admiralty, on the ground that it is injurious to the public health to have such a quantity of putrid meat at Gosport.

INDIA.—The military hospitals at Lahore, according to the last reports, were fast filling with English soldiery labouring under fever. This endemic prevailed to a great extent at about the same time last year, and was then attributed to the miasmata from the stagnant pools in the numerous hollows about Anarkullee. A sum of from two to three thousand rupees has been devoted by the Anglo-Indian authorities to remove this cause of disease. At

Singapore, the cholera has swept away nearly one thousand persons, Malays, Chinese, and natives of India. The disease has since subsided in that place, but it is ravaging the Malayan peninsula, especially among the inhabitants of Calantan, Tringanu, and Pahang. It has also broken out in Siam and Cochin China, where reliance is placed chiefly on charms for the eradication of the epidemic. In Java, the cholera is making great ravages throughout the Dutch territories, especially in Celebes. In the southern districts it has spread through the kingdom of Goa, in the territory of Macassar, and thence proceeded to Maros. In Macassar about 600 persons were attacked, of whom about 40 per cent. died. On April the 24th, the disease appeared in Batavia; from the 7th to the 14th of May, 625 were attacked, of whom 46 died; in the suburbs and hospitals, the mortality was severe. Up to May 15th, the official report notices that no less than 4851 persons had been attacked, of whom 1500 died. The disease is in no way arrested in its progress, but is spreading throughout the Dutch territories, and sweeping away the inhabitants.

INFLUENZA and other descriptions of colds were much complained of at the latest dates, from Jamaica, and fever was rather prevalent. The cholera was still committing its fearful ravages on the north side of this unfortunate island; Westmoreland and Hanover, in particular, were suffering fearfully. About thirty of the soldiers in the barracks, about three miles distant from Kingston, have perished. The barracks were fumigated in consequence, and the healthy men removed and put under tents, the epidemic being thereby stayed among them.

THE GREAT METROPOLIS.—Mr. Elliott, the Registrar for the Borough-road Sub-district, in recording the death of a girl from "scarlatina maligna, coma," at 2, Taylor's-place, William-street, says:—"Taylor's-place comprises three small houses in a yard, the entrance to which is in William-street; but there is no thoroughfare. A boy, aged 7 years, brother of the deceased, died in the same house on 2nd August, of remittent fever and pneumonia. The statement of the mother, when giving information on Friday, regarding nuisances by which the occupiers have repeatedly been annoyed, appeared so extraordinary, that I requested that it should be made in writing, and have accordingly received the accompanying letter from her husband. I have visited the spot, and been informed, that a woman living in another house has been ill ever since the occurrences to which the statement refers. 'About six or seven weeks ago a water-closet close to our yard was opened for the purpose, as was said, of making a drain. It was found full; and instead of being emptied properly by a nightman, a considerable quantity of the soil was removed in open day past our door, and deposited in the water-closet common to the three houses composing "Taylor's-place," in one of which I reside. A few days afterwards a part of our yard was taken up, and a further quantity of the soil deposited two or three feet below the surface (in spite of remonstrance) and covered over; and, had not the police interfered, a much larger quantity would have been laid there, although opposite and within two or three yards of my window. On the 5th of August, in a remarkably short time, during the temporary absence of my wife, the ground under my door was opened in search of a drain, although my son was at the time lying dead; but on returning from my employment, finding the place in such a state, I immediately filled it up. Two days afterwards it was opened again (as also a further portion of the yard), and kept open, to no purpose, for two days; when, through the interference of some one, it was filled up. I have had the whole of my four children dangerously ill almost at the same time, and two of them have died. My son was carried off two or three weeks ago, after an illness of less than twenty-four hours; his sister is lying dead, and the eldest boy is now ill. I firmly believe this calamity has happened in consequence of what I have stated above; and I should be glad, for the sake of others, if some friend would take the trouble of putting the case in train for inquiry. Since writing the above, I am informed that the medical gentleman who attended my children has confirmed my suspicion regarding the true cause of their illness.' "

THE MEDICAL OFFICERS OF THE PARISIAN HOSPITALS.—A Bill has been introduced before the French Assembly for the regulation of hospitals, in which was a clause recommending that the physicians and surgeons should be appointed by the Administration. M. Schælcher proposed that the candidates should undergo a public examination, (the Concours,) and that the most successful should be selected. The Amendment was rejected by 391 votes to 204, and the entire Bill was definitively adopted. This new regulation, we presume, does away with the principle of Concours, as far, at least, as hospital appointments are concerned; nor do we regret it, as students fresh from the schools, and mere book-men under its influence, were selectable in preference to hard-working,

practical men. Patients in hospitals require the services of men who can correctly diagnose their diseases, and apply the mode of treatment most appropriate for their cure; not those of men who are able to describe the minute anatomy, physiology, and chemistry of the human frame, but who are often worse than useless in matters of actual practice.

PROCURING ABORTION.—A young man, named Parsons, lately assistant to a medical man at Towcester, was tried, on Monday, before Mr. Baron Parke, on the Midland Circuit, charged with using a catheter on the person of Ann Sharp, in order to procure abortion. From the evidence it appeared that he had availed himself of his professional attendance on her to effect her seduction, the result being pregnancy. The female stated that, at the end of the past year, the prisoner used the instrument for the purpose alleged; but there being some discrepancies in her statement, and some circumstances that threw discredit upon her story, the prisoner, after a lengthened inquiry, was acquitted.—A man, named Hatherby, the late governor of the Cranbrook Union Workhouse, has been sentenced to two years' imprisonment and hard labour, for attempting to induce abortion on a pauper girl, whom he had seduced. The drug he used was savin. It appears, that in a similar case, he had endeavoured to commit the same offence by the administration of some noxious drug. It is much to be regretted, that the newspapers, in publishing a report of the trial, should have mentioned the drug used, as it may spread a knowledge of its peculiar action, and perhaps lead to the commission of a murder.

THE LAW OF EVIDENCE.—The new Act, just printed, (14 and 15 Vic., c. xcix.,) provides:—That on the trial of any issue joined, or of any matter or question, or on any inquiry arising in any suit, action, or other proceeding in any court of justice, or before any person having by law, or the consent of parties, authority to hear, receive, and examine evidence, the parties thereto, and the persons in whose behalf any such suit, action, or other proceeding may be brought or defended, shall be competent and compellable to give evidence either *vivâ voce*, or by deposition, according to the practice of the Court, on behalf of either or any of the parties to the suit, action, or other proceeding. By this clause, in addition to the parties offering themselves to give evidence in their own behalf, their opponents can compel them to give evidence in the cause. Nothing in the Act is to compel persons charged with criminal offences to give evidence, nor is the Act to apply to proceedings in consequence of adultery. Further, the new law authorizes the common law courts to compel an inspection of documents whenever equity would grant a discovery. Foreign and colonial acts, judgments, &c., are to be received in evidence, without proof of the seal or signature; so, also, are apothecaries' certificates. Documents are to be admitted in England or Ireland from either place, and the colonies, without proof of seal. Persons forging the seal or signature to be guilty of felony, and punished accordingly. The Act, which contains 20 sections, and extends to all parts of the United Kingdom, except Scotland, will come into force on the 1st of November next.

DEATHS in the Metropolis for the week ending
Saturday, August 16, 1851.

CAUSES OF DEATH.	August 16.				Sum of Ten Weeks.
	0	15	60	All Ages	
ALL CAUSES	565	317	179	1061	10524
SPECIFIED CAUSES	565	316	177	1058	10459
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	257	50	35	342	3907
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	4	22	20	46	476
3. Tubercular Diseases. ...	76	106	7	189	1720
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses, ...	50	38	21	109	1116
5. Diseases of the Heart and Blood- vessels	■	14	9	26	261
6. Diseases of the Lungs, and of the other Organs of Respiration ...	41	19	19	79	746
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	31	28	14	73	772
8. Diseases of the Kidneys, &c. ...	...	7	6	13	88
9. Childbirth, Diseases of the Uterus	...	10	2	12	76
10. Rheumatism, Diseases of the Bones, Joints, &c.	3	5	...	8	54
11. Diseases of the Skin, Cellular Tis- sue, &c.	1	...	...	1	11
12. Malformations	3	...	...	3	19
13. Premature Birth and Debility ...	31	1	...	32	226
14. Atrophy	44	...	...	44	220
15. Age ... ..	...	...	36	36	451
16. Sudden	1	...	5	0	65
17. Violence, Privation, Cold, and In- temperance	20	16	3	39	241
Causes not Specified ... ..	...	1	2	3	65

TO CORRESPONDENTS.

S.W.—St. Bartholomew's is the largest hospital in London. It contains about 580 beds. Contrary assertions have been made with respect to the mortality; but there can be no doubt as to the excellence of its staff. It would be desirable to have an annual census of the mortality in the several London Hospitals, as well as a report of the mortality from various diseases, under different modes of treatment. Such information would be invaluable.

[To the Editor of the Medical Times.]

SIR,—If it be not too much trouble to you I should be glad of your advice under the following circumstances. A medical man in my neighbourhood holds the office of vaccinator of the district, and a chemist holds that of registrar of births and deaths. Now, the medical man, anxious to get his eighteenpenny fee for as many cases as he can by any means manage to vaccinate, applies to the Registrar for a list of all the newly-born children in the district, and having obtained it, forthwith sends his assistant, or goes himself, to all the families, respectable or otherwise, in which births may have occurred, and offers to vaccinate the infants gratuitously; and if he should receive a rebuff in the first instance, never fails to urge his petition until by anxiety alarm he has accomplished his dirty purpose.

What, Sir, is to be done to repress these most unworthy acts? Here is one of our own brethren with his hand turned against us, and doing all he can for the sake of a few shillings to depreciate the value of medical service, and undermine the connexions of his professional neighbours.

I am, &c.

CHIRURGUS.

[We advise our Correspondent to write forthwith to the Registrar-General, and complain of the improper use that has been made of the register. We have no doubt that the Registrar will receive an intimation to discontinue the practice. If, on the contrary, no notice is taken of the communication, we would then propose to the Profession the propriety of combining to defend their interests; and would recommend them to refuse to sign certificates of deaths, or in any other way aiding the officer. As for the surgeon, he deserves to be marked by his brethren, and incontinently cut. He might as well offer to attend in labour all the ladies in the district, for nothing, as pursue the unprofessional course of which he has been guilty.]

M.D., Manchester.—The Provincial Association deserves the utmost praise. The example set by its members should be followed by every practitioner in the Profession. No regularly-qualified man should meet a homœopath in consultation.

W. Jones.—We are acquainted with the circumstances to which you refer, but do not think that it is necessary to comment upon them at the present time. We trust that whatever steps may be taken will be for the benefit of the members. Our eyes are always open.

M.R.C.S.—You must wait patiently. Abuse the College of Surgeons as much as you may,—and many faults no doubt it has committed,—yet it is a noble institution, and a worthy shrine of British surgery. The contemplated improvements will greatly add to the splendour of the museum. Politics apart: can you deny that it deserves support? How long would the Profession be raising such another temple to science? Reform must come, and we believe it is not far off. *Abest invidia verbo.*

A Union Surgeon.—When the Committee of Poor-law Surgeons has despaired of improvement it would be rash in us to hold out expectations of melioration. Until the Union surgeons can get rid of the incubus of responsibility to a Board of Guardians composed of cheesemongers, publicans, and tripe-dressers, it is impossible to be exempt from the grievances to which our Correspondent refers. If your salary be too small, resign the appointment; or, if that be inconvenient, you must be content to bear the injustice. An appeal to the Commission would not improve your position. Disunion is the bane of Poor-law Surgeons, as indeed it is of the entire Profession. We are beaten by units.

M.D. and M.R.C.S., and a Country Surgeon.—The voice has gone forth against the homœopaths. Their doom is overtaking them. If the Profession be but true to themselves, the humbug and deception of this pseudoscience will be exploded in a very few years. Lord Robert Grosvenor, though high in rank, is not a man of sufficient talent or influence to advance the cause, and we opine that his connexion with it has gone far to deprive him of the little reputation for judgment that he formerly possessed. It is notorious, that the abettor of one form of quackery is the supporter in turn of all the others.

Dr. Burnett's papers are in the hands of the printer.

A Constant Subscriber.—Mr. John Savory's Work, published by Churchill.

[To the Editor of the Medical Times.]

SIR,—In a Sheffield paper of the 9th instant, there are some reports of a case of stabbing to which I think it right and necessary to direct your attention,—a case in which a druggist, of the name of Hudson, is called upon to do surgical duties, and also to give evidence before the borough magistrate, and then bound to appear at Quarter Sessions, to give his evidence in the case, in which, as you will perceive by the journal, a legally-qualified member of the Royal College of Surgeons visited the patient immediately after the infliction of the wound. Yet, in this case, the druggist has regularly attended and dressed the wound up to this day, and no diplomatised surgeon has ever been called to officiate.

I would ask, of what avail are diplomas, procured at a great deal of trouble and expense, if, as is most notoriously the fact, to a very great extent, such men as druggists and quacks, of the most contemptible description, may with impunity overstep the boundaries of law, and supply our places?

If such a state of things is to be tolerated, why not at once throw open to

the public the whole field of medical and surgical practice, and let no one have cause to fear legal proceedings more than another? And then we should probably hear nothing of prosecutions, except for maladministration and serious injuries proved as the consequence of such mal-administration. Of such causes of complaint as these there would, doubtless, be great abundance.

Hoping you will give your very valuable attention to this subject, I shall conclude. I enclose my card. I am, &c.

Sheffield.

PHILO.

IRISH MEDICAL CHARITIES.

[To the Editor of the Medical Times.]

SIR,—In what way (if at all) will the new Medical Charities (Ireland) Bill affect the surgeons to county Infirmaries as to the continuance or otherwise of salaries now payable out of the consolidated fund? An analysis of Clause X. will much oblige

A SUBSCRIBER.

[We must at present decline answering our Correspondent's application on the subject of existing salaries, and the way in which the interests of practitioners now in charge of infirmaries and dispensaries will be actually affected by the Medical Bill. We rather think that as yet the details have hardly been developed, even in the minds of those who, it is to be presumed, will have the arrangement of such matters. We shall take an early opportunity of putting our friends *au courant*.]

C. W. H.—Dr. Watson's address is Henrietta-street, Cavendish-square. It is strange that men do not avail themselves of the "Medical Directory."

Metaphysicus must always remember, that although hypothesis is not truth, it is the most ready and effective means of acquiring truth. It is by hypothesis that the boundaries of science are extended; and it is by the use of this method that facts and principles which once seemed placed beyond the reach of human intelligence, have at length been brought to form a part of our well-established modern philosophy.

Mr. Slatter, of Oxford-street, has our thanks. His communication being without the scope of our Journal we have forwarded it as desired.

[To the Editor of the Medical Times.]

SIR,—I saw in the last Number of the *British and Foreign Quarterly Review*, that Mr. Cazenave is employing aconite as a remedy for some forms of skin disease, in the dose of xv. gr. in 40 pills, one or two of which are to be taken night and morning. Now, Sir, does this mean the inspissated juice, or the alcoholic extract, the dose of which is said to be 1-8th gr.; or, finally, the aconitina as made by Mr. Morson, the dose of which is one-fiftieth of a grain, and which is often called in this country "aconite"—nay, in Pereira it is called "aconitina" (aconite). It reminds me of the consequences of such mistakes as this confusion might occasion.

I am, &c.

A LOVER OF ACCURACY.

Dr. Malden.—It affords us at all times pleasure to comply with the wishes of Dr. Malden, of Worcester, even though our doing so involves disappointment and regret.

A Country Surgeon.—The pills of Méglin, which are so much used in France for facial and other neuralgia, and also in epilepsy, are composed of equal parts of extract of hyoscyamus, of wild valerian, and white oxide of zinc. Each pill weighs four grains; the dose one, to be taken in the twenty-four hours,—increasing the quantity by one pill daily, until six or eight are taken in the four and twenty hours.

A Teetotaler.—The power of imbibing large quantities of spirituous liquors which has been acquired by some persons through long practice, is certainly very extraordinary. The case mentioned by Le Pelletier, in his work on Physiology, is perhaps the most wonderful that has ever been put on record. A druggist, named Buquet, died at Paris towards the commencement of the present century, after having successively used cider, wine, and brandy, until they failed to stimulate him. He then had recourse to alcohol, and when that failed, he took to ether, of which at last he drank *one quart daily*. As this may seem somewhat apocryphal, we will quote Le Pelletier's words:—"Le pharmacien Buquet, mort à Paris vers le commencement du siècle, après avoir successivement usé du cidre, du vin, de l'eau de vie, et de l'alcool, parvint à boire chaque jour un litre d'éther."

A General Practitioner.—We think the judge's charge to the jury was sound and just. A properly-educated medical man ought not to be made responsible for every mistake that may occur in treatment, even though it may eventuate in the death of the patient. This is now a precedent in criminal cases, and was established, we believe, in Seton's case, when the opposing counsel tried to prove that the poor man died in consequence of bad surgery, rather than the simple effects of the gun-shot wound. The evidence was inadmissible.

[To the Editor of the Medical Times.]

SIR,—In your answers to Correspondents will you have the goodness to inform me in your next number of the "Medical Times," when a physician removes to another abode, some miles distant, in a new neighbourhood, he is to call upon his medical brethren, or they upon him. The information as to the etiquette or custom will oblige.

I am, &c.

LEWES.

[Stand not upon the order of your going, but go at once.]

COMMUNICATIONS have been received from—

Mr. TOYNBEE, of Savile-row; Mr. NOURSE, of Worthing; A SUBSCRIBER; A CONSTANT SUBSCRIBER; Dr. BARCLAY, of St. George's Hospital; Dr. BURNETT, of Alton; Mr. N. WARD, of the London Hospital; Dr. DAVIES, of Seaford; PHILLO; Mr. URE, of St. Mary's Hospital; PHILLO; Mr. MAPLESON, of New Burlington-street; Dr. SNOW, of Frith-street, Soho; Dr. MORRIS, of Spalding; Dr. MALDEN, of Worcester; C. W. H.; A SUBSCRIBER OF SOME YEARS STANDING; Mr. SLATTER, of Oxford-street; Dr. BENICE JONES, of Brook-street; Mr. CHURCHILL, of the London Necropolis Company; METAPHYSICUS; M.D., Manchester; Mr. JONES; M.R.C.S.; A UNION SURGEON; M.D. and M.R.C.S.; and A COUNTRY SURGEON.

ORIGINAL LECTURES.

LECTURES

ON

DIGESTION, RESPIRATION, AND
SECRETION,GIVEN AT THE ROYAL INSTITUTION,
TO THE MEMBERS, AND TO THE PUPILS OF
ST. GEORGE'S HOSPITAL.

By H. BENCE JONES, M.D., F.R.S.,

Physician to St. George's Hospital.

[Continued from page 170.]

ON RESPIRATION—ON THE ACTION OF OXYGEN
IN THE BODY UPON NITROGEN, HYDROGEN,
AND CARBON.

IN my last lecture, Gentlemen, I tried to show you the means by which the air passes into the blood through the lungs. As I have still a few words to add on this subject, I will shortly recapitulate the facts which I brought before you. I showed you that respiration could not accurately be compared to the intermixture of two fluids when no membrane separates the liquids, nor to the passage of some substances when two solutions of unequal densities are separated by a thin membrane; although I pointed out, that this truly represents the respiration in the embryo state, when we have the maternal blood on one side, containing comparatively pure air, and the foetal blood on the other side of the membrane, containing less pure air. The foetal respiration is carried on by an interchange between these fluids. The same experiment, in which a different fluid is on each side of the membrane, may be taken to represent also the respiration of the whole class of fishes, in which there is the impure blood on one side of the membrane,—impure from the carbonic acid which it contains, and on the other seawater, in which much oxygen is dissolved. There is an interchange between these liquids, such as you saw going on in the experiment in my last lecture. I showed you that this exosmosis and endosmosis, which takes place in fishes and in the embryo state of man, cannot be taken to represent the passage of the air into, and of the carbonic acid out of, the blood after birth. The tendency of two different liquids to pass into each other where no membrane intervenes, and also in cases where a membrane is present, does not give us any assistance in comprehending the phenomena of respiration. We have already spoken of the mixture of two gases when separated by a membrane. Let us for a few moments consider what occurs when two gases have a still slighter separation. I have here a glass tube, hardly closed at one end with a thin layer of plaster of Paris, and if I have one gas inside the tube, and a different gas outside, there will be a tendency of the two gases to diffuse through the porous substance at the end, and they will do so in inverse proportion to the square-root of the density of the gases. In other words, the more light gas has a greater tendency to pass into a heavier one, than a heavy gas into a light one. This diffusion, as I have said, does not so nearly represent the whole process of respiration after birth as the instance in which a liquid is on each side of the membrane does represent the foetal respiration. It is a potent agent, however, as I shall shortly prove to you.

I omitted to show you, in my last lecture, the experimental proof of this diffusion, when two gases are merely separated by a thin porous substance which will easily allow of the intermixture of gases. You remember my experiment, showing the diffusion of gases, as indicated by the distension of a bladder placed over a jar containing atmospheric air, and having hydrogen surrounding it. Let me now show you the passage of a light gas into the air through the medium of a simple porous substance,—a substance which will not allow the interchange to take place instantaneously, but with some degree of slowness. I have here a tube, which I will fill with hydrogen, and you will see that the hydrogen will escape through the perforated plaster at the top into the atmospheric air. If I place the lower end of the tube in water, you will observe that, by the rapid escape of hydrogen, a vacuum is formed, and the water, by means of the atmospheric pressure, is forced up to fill the place of the hydrogen which has escaped. This is a corre-

sponding experiment to that of the interchange of fluids when no membrane exists between them. I before showed you, that the lighter passed into the heavier fluid, when there was no separation between them. We are indebted to Mr. Graham for all we know on both these subjects.

Let me once more ask you to observe the experiment which I commenced at my last lecture. Here are the two fluids, separated by a membrane. The dense syrup is in the tube in which the liquid had begun to rise at my last lecture; you will see that it has now risen nearly to the top, and, if the tube had been longer, the liquid would doubtless have risen still higher. [The tube was carried to the top of the lecture room.] It would, indeed, continue to rise as I have said, until the fluid within and the fluid without had acquired precisely the same density; and, when that was the case, they would come to a state of rest. So long as the inner fluid is the heavier, and the outer liquid is the lighter, so long there is a tendency of one to pass into the other.

I have dwelt at this length on the diffusion of gases, because it does in great measure account for the wonderful intermixture of gases in the bronchial tube. It does not explain the passage of the air through the membrane of the air-vesicle into the blood; that is more nearly represented by the mixture of liquids, the blood being on one side and the moisture of the air-vesicle on the other, than by the diffusion of gases.

Having said thus much on the mode in which gases pass along the bronchial tubes and into the blood, I come to the effects actually produced there. The one which I shall bring before you first, is the action of the oxygen of the air upon some nitrogenous substances. You will remember that I showed you in my last lecture how rapidly the oxygen of the air acts upon ammonia; you remember that, by burning a little ammonia with coal gas, an oxidation was instantaneously effected, and nitrous acid was at once produced. Precisely the same action takes place also in the body. When I speak of the variations of the acidity of the urine, I shall show you that doses of carbonate of ammonia, and doses of vegetable salts of ammonia, produce totally different effects upon its acidity from similar doses of fixed alkalis. By a diagram, to which I shall have to refer at length in another lecture, you will see that tartrate of potash produces an alkaline state of the urine, much more certainly than the tartrate of ammonia. The latter, indeed, produces little or no effect on the acidity of the urine; whereas, a very great effect is produced by the tartrate of potash. I was led to suppose from this, that the difference in the two cases was caused by the difference of the action of the oxygen of the inspired air—that the changes which were taking place within the body were totally different when tartrate of ammonia was taken, from what they were when tartrate of potash was taken; and I thought that I should probably find passing off from the body the results of the oxidation of the ammonia, just as I found the ammonia when burnt, out of the body, passed into the form of nitric and nitrous acids. To determine whether this actually was so, doses of tartrate of ammonia were taken; and afterwards the urine (which had been carefully examined before, to see that no oxides of nitrogen were in it) was tested, and it was found distinctly and decidedly that nitrous acid was present when tartrate of ammonia was taken. But better than tartrate of ammonia, was the administering of muriate of ammonia, which may be taken in much larger doses. Muriate of ammonia, if oxidised out of the body, would produce nitrous acid; and so, when it is taken into the body, nitrous acid can be detected in the urine for some hours afterwards. It was only needful to take ten grains of muriate of ammonia to obtain distinct evidence of the oxidation. To a measured quantity of urine a little pure sulphuric acid was added, just sufficient to make it decidedly acid, and then the liquid was distilled. Such a distillate from urine, passed after ten grains of muriate of ammonia were taken, I have here before me. A little pure carbonate of potash has been added to the distillate to prevent any loss on concentration. The urine was passed about two hours after the muriate of ammonia had been taken, and by the distillation and evaporation nitrous acid was distinctly discovered. I can show you that it is here now. You remember the test for nitrous acid,—starch, iodide of potassium, and dilute hydrochloric acid. If I add these to my suspected urine, (which you see I have made distinctly and decidedly alkaline,) if nitrous acid be present the iodine will be set free, and will act upon the starch, and the characteristic blue colour will be produced. You see how immediately the

colour appears. (Experiment.) Here, again, I have some other distilled urine, passed after the administration of 120 grains of muriate of ammonia; and in this case you will see the blue colour is formed even more rapidly and distinctly. (Experiment.) This nitrous acid is not found in the urine unless ammonia in some shape has been taken, either in medicine or in the food. The action which occurs in the body is precisely similar to that which you saw take place out of the body when ammonia is oxidized. The nitrous acid, then, we can produce at will; we can cause it to be present or absent, by merely taking or by not taking ammonia. Even so small a quantity as five grains of muriate of ammonia has been found to produce in the urine a perceptible quantity of nitrous acid. Thus, I think, we have as distinct evidence as it is possible to have, that the action of the oxygen of the air in the body, and the action of oxygen out of the body, upon ammonia, are precisely similar.

Having thus spoken of the action of the oxygen upon ammonia, of the production of oxides of nitrogen in the body, let me remind you that there is not the slightest doubt that the hydrogen of the ammonia is far more readily oxidized than the nitrogen which it contains. Before entering on the oxidation of hydrogen I will take, if not the more important, at least the more manifest, action of oxygen in the body,—the production of carbonic acid,—the action, that is, of oxygen upon carbon. You require no demonstration of the action, out of the body, of oxygen upon carbon,—you see it in the fire, the candle, the gas. In the combustion of every organic substance carbonic acid is produced, and in the body we have every reason to suppose that the carbonic acid which is passing out in our breath every moment is actually produced by the action of the oxygen upon the carbonaceous substances within us. The food which we take, and the tissues of our body, furnish the carbon which is consumed in the human body by the action of the inspired oxygen; from thence carbonic acid is produced. I showed you, in a previous lecture, how much carbon was present in different nutritious substances, and how much of each substance was required to furnish us with material out of which the quantity of carbonic acid which is daily expired may be produced. The quantity of carbon consumed daily in the body has been made the subject of calculation and experiment, and the calculations of different chemists have varied very considerably in the amount required. Professor Liebig made experiments upon the quantity of food which was eaten by several persons in Giessen; he determined the quantity of carbon passing off in the fæces and the urine, and thus arrived at the quantity used and thrown off in other ways. He estimated that 6081 grains of carbon, or nearly 14 ounces, enter the body every day and are actually consumed. Thus, much remained when from the known weight of the carbon in the food that was taken, the quantity of carbon thrown out in the excretions was deducted. Of course, the means of arriving at this calculation are very difficult and uncertain. The amount of 14 ounces daily is, probably, the very highest limit to the fuel we require. Professor Scharling, of Copenhagen, states 4375 grains as the surplus of the carbon of the food over the quantity of carbon thrown out in the excretions. By far the best experiments on this subject have been made by a French chemist, M. Baral, and are recorded in Vol. C., p. 129, of the *Annales de Chimie*, in which you will find an admirable paper on the subject. Two out of five series of experiments were made upon himself (aged 29); and experiments so made are much more likely to be accurate than any others. The result of these experiments you will see in my diagram.

WINTER.
(1 lb. = 7000 grs.)
Mineral

	Total.	Water.	Salts.	Chlor.	Carb.	Hydr.	Nitr.	Oxygen.
Food	6.03 lbs.	4.39	0.17	0.02	0.80	0.12	0.05	0.58 lb.
Excretions...	2.77 lbs.	2.59	0.03	0.01	0.03	0.01	0.03	0.04 lb.
Difference ...	3.26 lbs.	1.80	0.04	0.01	0.74	0.11	0.02	0.54 lb.
0.54 lbs. of oxyn. require about 0.067 of hydr. to form 607 lb. water (from hydrogen and oxygen of food)								
0.352 lbs.	,, are required by 0.044 of hydr. to form 396 lb. water (from hydrogen of food and oxygen of air)							
1.970 lbs.	,, ,, ,, 0.74 carbon to form 2.71 lb. carb. acid (from carbon of food and oxygen of air)							
Hence water lost by skin and lungs, $1.80 + .607 + .396 = 2.803$ lb. in 24 hours								
total carbonic acid ...	...	...	...	...	...	2.71	,,	,,
215 grs. of carb. per hour.								
Total oxygen consumed, $352 + 1.970 = 2.322$ lbs. 677 grs. per hour.								

In the winter, in twenty-fours, he took food weighing 6.03 lbs.; the excretions were found to weigh 2.77 lbs.: making a difference of 3.26 lbs. He analysed the food, and found that it consisted of so much water, mineral salts, chlorine, carbon, hydrogen, nitrogen, and oxygen. Having done this with the greatest possible care, he determined also the constituents of the excretions. The weight of the body is supposed not to change. By deducting, therefore, the weight of the excretions from that of the food, he clearly arrived at the quantity which must have passed off by the skin and lungs. The difference in the oxygen taken in and given out, you will see, is 0.54 lbs. This does not pass out of the body as oxygen, but as water, or as carbonic acid, or some compound of oxygen with other substances. We may suppose that these .54 lbs. of oxygen will combine with the amount of hydrogen requisite to form water—which amount, you will see, is given in the diagram. Thus, much oxygen does not combine with all the hydrogen which is taken in with the food. The surplus hydrogen is 0.044 lbs., and that surplus certainly passes out, combined with the oxygen of the air, as water. Thus we can see what becomes of the oxygen and hydrogen of the food. The quantity of nitrogen in the food above the quantity in the excretions passes off as nitrogen out of the body by respiration. A small portion of nitrogen, in health, always escapes from the body as nitrogen, and, though ammonia is oxidised, there is no proof that the surplus of nitrogen can be directly oxidised. There remains, then, only the surplus of 0.74 lbs. or 5180 grains, of carbon, for which we must account. What becomes of it? It does not pass out as carbon, but as carbonic acid; and it requires for this purpose, 1.970 lbs. of oxygen. This quantity of oxygen, when combined with the 0.74 lbs. of carbon, gives the total daily quantity of carbonic acid expired = 2.71 lb., which escapes out of the body by the skin and lungs. These observations were made in the winter. This other diagram shows the results of experiments made in the summer.

SUMMER.
(1 lb. = 7000 grs.)
Mineral

	Total.	Water.	Salts.	Chlor.	Carb.	Hydr.	Nitr.	Oxygen.
Food	5.24 lb.	4.05	0.04	0.007	0.58	0.09	0.05	0.42 lb.
Excretions...	2.41 lb.	2.27	0.02	0.003	0.05	0.01	0.03	0.03 lb.
Difference ...	2.83 lb.	1.78	0.02	0.001	0.53	0.08	0.02	0.30 lb.
0.39 lb. of oxyn. require about 0.048 hydr. to form 0.438 water (from hydrogen and oxygen of food)								
0.256 lb. ,, are required by 0.032 hydr. to form 0.288 water (from hydrogen of food and oxygen of air)								
1.410 lb. ,, ,, ,, 0.53 carbon to form 1.94 carbonic acid. (from carbon of food and oxygen of air)								
Hence total water lost by skin and lungs, = 1.78 + .438 + .288 = 2.496 lb. in 24 hours								
total carbonic acid ...	...	...	...	...	...	1.94	..	..
154 grs. of carb. per hour.								
total oxygen consumed ...	= .256 + 1.410 = 1.666 lb. in 24 hours 486 grs. per hour							

	Dry solid.	Enter 100 parts. Liquid.	Oxygen.	
	18.7	55.7	25.6	= 100
	Exit 100 parts. Carb. acid	Evacuations.	Other loss.	
Water by lungs and skin.	34.8	32.2	34.5	0.5

You will observe, that the surplus of carbon in summer is represented by 0.53 lb., being decidedly less than the quantity consumed in winter. The quantity of carbon in summer requisite to produce carbonic acid, is no more than 0.53 lbs., or 3731 grains, rather more than seven ounces, which, you will remember, was the quantity I assumed, in a table shown in a previous lecture, to be requisite in the different ingredients of food taken daily into the body. These are by far the most accurate experiments which exist; and how uncertain they must be may be seen by simply looking at the analyses. They are, by no means, to be relied upon as facts which apply to every person; in different individuals, as M. Baral shows, the numbers do vary greatly; and no deductions made from such experiments can be so satisfactory as a complete and perfect determination of the actual quantity of the carbonic acid thrown out and collected daily. The experiments of M. Baral and others assume, that the body remains of the same chemical composition during the twenty-four hours. But even though the body may not change in weight, it may change in composition; more fat may be deposited in one place, and less bone or muscle in another, and, nevertheless, the weight of the body may remain the same. The composition may thus vary very decidedly in the twenty-four

hours during which the experiments were performed, though the gross weight of the body was not changed; and thus the deductions cannot, by any means, be relied on as positive facts; but they are sufficient to show, and they show very distinctly, the nature of the actions which occur in the body. The only quantitative experiments which can be relied on are those which give the actual quantity of carbonic acid itself,—the actual weight or measurement of the oxygen which goes in, and of the carbonic acid which comes out. By far the most perfect results have been obtained by MM. Regnault and Reiset, of Paris, during the last few years. They have given in the *Annales de Chimie* (16th Vol., 1849,) the experimental details, which, as regards accuracy, are by far the most trustworthy that have ever been made. Whether in the mode of conducting the experiments or in the method of analysing the gaseous results, we are, in both, equally indebted to M. Regnault and M. Reiset for their researches on the respiration of animals. Here is a representation of the apparatus used in these experiments. The object was to determine the quantity of oxygen which goes in, and of the carbonic acid which comes out of the body,—to determine them by actual weight and measurement. The mode which was followed was one by which the experiments could be carried on for hours, and even days, the animals living in a state of perfect ease. The animal is placed in a receiver, over which a vessel containing water is arranged, so as to render the receiver perfectly air-tight. This outer vessel can be kept at a fixed temperature, so that no effect can be produced by any alterations in the temperature of the medium surrounding the animal. From one set of vessels a constant supply of oxygen is given to the receiver, and by another set of vessels, which are moved by clock-work, the carbonic acid is removed as it is produced, and thus the atmosphere in which the animal breathes is kept pure and uniform. There is a tube which passes into a little mercurial vessel, for the purpose of showing the state of the receiver as regards the pressure of the atmosphere within, and the supply of oxygen can be regulated accordingly, any deficiency being at once made perceptible by the mercury rising towards the receiver. Whenever any of the air of the receiver is required for analysis, it can be always drawn off by a special apparatus provided for the purpose; and, by the same means, a portion of the residual air in the receiver can be examined after the experiment is over, and its composition can be accurately determined. There is a small apparatus, also, for the purpose of making sure that no trace of carbonic acid passes into the animal with the oxygen gas. It consists of a little vessel, half full of caustic potash, through which all the oxygen which is supplied has to pass; and in this vessel each respiration, and even each beat of the pulse are perceptible. This prevents the possibility of any trace of carbonic acid passing in. The total quantity of carbonic acid produced is determined by analysis at the end of each experiment, and at the same time the total quantity of oxygen gas consumed is determined also. My diagram gives the result of a number of experiments performed by means of this apparatus.

RESPIRATION.

	Young grown-up Dog. Older dog. Rabbit. Fowl. Young grown-up dog.							
Weight of animal in lbs.....	14.14	14.14	14.14	13.70	6.08	2.82	14.14	14.14
Duration of experiment. 24½ hrs.	22½	21½	27	4.2½	63	21	22½	22½
Oxyn. consumed ...	0.402 lb.	0.402	0.323	0.376	0.256	0.188	0.371	0.325
Carb. acid. formed ...	0.409 lb.	0.415	0.336	0.382	0.323	0.236	0.393	0.336
Oxygen in carb. acid.	0.297 lb.	0.300	0.241	0.278	0.235	0.172	0.286	0.244
Nit. evolved	18.2 grs.	9.6	15.6	8.1	8.9	19.2	5.0	6.7
Weight of oxyn. consumed ...	= 100.000							
Oxygen in carb. acid.	74.191	74.798	74.677	73.986	91.613	91.295	77.079	75.146
Oxyn. otherwise consumed ...	25.809	25.013	25.323	26.014	8.287	8.705	22.922	24.854
Oxyn. consumed on an average each hour	114.5 grs.	126.2	106.1	97.2	41.9	20.9	123.4	100.2
* Air in which animal respired contained 47 per cent. oxygen.								
† " " " " " " " "	60							

The weight of the different animals is given, and also the time during which the experiments were carried on.

You have also the quantity of carbonic acid actually produced, and this result is arrived at, not by deduction, as in M. Baral's experiment, but by appeal to the balance. Having determined the quantity of the carbonic acid, it immediately follows, that the quantity of oxygen present in the carbonic acid is known also. Thus, in the first experiment, if we call the total quantity of oxygen consumed by the animal 100, the quantity of oxygen found in the carbonic acid gas was about 74 only. What, then, has become of the other 26 parts? These are used to oxidise other substances in the body. One part is required to oxidise hydrogen and to form water; another to oxidise ammonia, if any be present, to form nitric acid; another to combine with sulphur to form sulphuric acid; and another, without doubt, to combine with phosphorus to form phosphoric acid; these being oxidations which actually take place in the human body. There is no doubt, even, that mineral matters are oxidised in their passage through the body, and that a portion of the surplus of the oxygen is required for that purpose. Of this I shall have to speak further in my next lecture.

MM. Regnault and Reiset found that the relation between the quantity of oxygen contained in the carbonic acid and the total quantity of oxygen consumed, appears to depend much more on the nature of the food, than on the class to which the animal belongs. That is, more or less of the total quantity of oxygen taken into the body is exhaled in combination with carbon as carbonic acid, according as the animal is carnivorous or herbivorous. If the former, as much as 1-4th of the oxygen combines with other substances than carbon; if the latter only from 1-5th to 1-10th of the oxygen combines with other elements; nearly all the oxygen re-appears in the carbonic acid exhaled. All warm-blooded animals in a state of inanition respire like carnivorous animals. They feed upon themselves.

They observed, that the consumption of oxygen was ten times as great for small birds as for great ones. Moreover, the dog that was kept in an atmosphere containing 47 per cent., and 60 per cent of oxygen, did not produce a great excess of carbonic acid; and when birds were kept in pure oxygen gas, the deviations from the results obtained in normal respiration were inconsiderable. The same was the case when the air respired contained 79 parts hydrogen and 21 oxygen.

The quantity of nitrogen evolved in twenty-four hours is given in the table. If no nitrogen were consumed or evolved, there would clearly be the same quantity in the receiver in which the animal was placed when the experiment was ended as there was when it commenced; but it was always found that the vessel contains most nitrogen at the end of the experiment, at least, when healthy animals were experimented on. In the respiration of man, also, we may conjecture, that there is a small quantity of nitrogen evolved. In one experiment on a dog, it was found that 18 grains were evolved in 24½ hours; and in another 15½ grains in 21 hours. This quantity varies very considerably; but it never rises to 2-100ths of the total weight of the oxygen consumed, and most frequently it is less than 1 per cent. In a state of inanition, animals frequently absorb nitrogen. This was especially observed to be the case in the respiration of birds. Why in one case this should occur more than in another has not yet been ascertained. It is only known, that in a state of health, but not in a state of disease, more nitrogen is given out than is taken in. The reason for this must be determined by future experiment.

They also made some most interesting experiments on marmots, awake and asleep.

One, in five days, consumed only 200 grains of oxygen. His temperature was 53.6. This was about 1-30th of the oxygen he would have consumed if he had been awake.

Another, after being in the apparatus 66 hours, suddenly awoke, and in three quarters of an hour consumed half as much oxygen as he had before taken. His temperature when asleep was 52 Farh.; immediately on coming out, 78 Farh.; five hours afterwards about 90 Farh.; when awaking he consumed more oxygen than when he had been some time awake.

Two marmots slept eight days in the apparatus. On the evening of the eighth day enough gas was left in for two days, but one awoke, took in all the oxygen he could get, and died asphyxiated. The other remained asleep, and continued in the atmosphere in which his companion had died for five or six hours. It appears from this, that the animals

have no voluntary power of sleeping to prevent being asphyxiated.

During sleep the weight of oxygen which they take in is much more than the weight of carbonic acid which they give out. Hence, if the animal passed no excrements or urine, and lost no water by evaporation, the excess of oxygen consumed would give the increase in the weight of the animal.

An animal that weighed 43·692 grains on the 8th of January, by February 21 lost 2527 grains; yet,

From 10th to 13th January	it gained	20 grains.
„ 22nd to 24th „ „	17 „	
„ 26th to 28th „ „	18½ „	
„ 31st to 2nd February „ „	15·4 „	
„ 8th to 10th „ „	26·2 „	

Another in two days gained 35½ grains.

I had intended here to bring before you the whole of the results obtained by many observers of the variations of the carbonic acid expired by man in different states of disease; but my time fails me. Moreover, the variations of the carbonic acid expired in health are not yet determined. Hence, the influence of disease upon the quantity of carbonic acid thrown out of the body, though most interesting and important, cannot be estimated with accuracy. I must in conclusion remind you, that the experiments on which I have dwelt so long in this lecture were made on *animals*, and it does not follow that precisely similar results will be obtained by experiments on *man*.

MM. Regnault and Reiset intended to have continued their experiments thus far, but the expense of the apparatus necessary for experiments on man is considerable, and the present Government appears to have neither the will nor the means for promoting experiments on respiration. But little of the apparatus that was employed now remains, and M. Regnault informed me that there was no probability at present of his continuing the experiments on man or animals. Similar experiments, however, must be made on human beings before we can arrive at positive certainty regarding the quantity of carbonic acid exhaled and the quantity of oxygen inhaled in health or in disease. Until we have these we must be content with deductions such as those of M. Baral's, which are the best I can refer you to, and to which at present I am inclined to attach the greatest value.

ORIGINAL COMMUNICATIONS.

ON EMPIRICISM.

BY J. MALDEN, M.D.

MEDICINE, in all its departments and subdivisions, is a practical art. To the early practisers of this art the ancients granted divine honours, and the Greeks and Romans called it a divine art. It certainly is the most noble of arts, upon two grounds. First, from the sublimity of what it undertakes to perform; and, secondly, from the vast knowledge and ability essential to the success of the performance.

Nature is the art of the Deity, and this art alone can put the soul and body of man together. Now, that, therefore, must be the most sublime of human arts which conscientiously labours to keep this mysterious compound together, as long as possible, in a state of agreeable harmony; for the ends and aims of the art are fourfold,—to prevent disease where we can; to arrest it when we can; and, when we can do neither, to alleviate suffering and to prolong life. In these are summed up the whole that the art labours to attain to; for “it is appointed to man once to die.” This decree cannot be reversed by human skill. Our art cannot confer immortality, neither can it materially lengthen the natural term of human existence; still, it must be, from the nobleness and grandeur of its object, with justice regarded as the most sublime of human arts. This high rank can also be defended upon the ground of the vast knowledge and ability required to practise it with success. The motto of a medical man should be “*Medicus sum, nihil in naturâ a me alienum puto.*” If we do not claim for the art of medicine the rank of a distinct science, it must be admitted that the medical sciences are endless. No bound can be set to the number of knowledges which are of importance in perfecting the artist in medicine. In labouring to attain these, his education only closes with his life. The toilet of

medicine is waited upon by innumerable handmaids, who, although not medicine themselves, hold each a mirror in their hands, throwing light upon her from every side. We are bound unceasingly to cultivate their acquaintance; we should ever aim at being in their agreeable society, and feel a horror at being excluded even for a moment from their inspiring light. I need not here enumerate the sciences of observation and experiment, which are essential to the practice of medicine; but, in addition to a competent knowledge of these, we must cultivate the mathematics, history, particularly that of our own profession; general literature, both in the ancient and modern languages; the rules of both kinds of reasoning, the inductive and disputative; and the formation of a pure, simple, and clear style in writing and speaking. Of all these, to the medical man, the most important is the cultivation of the rules of the inductive process of reasoning, laid down and successfully applied by Aristotle, but perverted and misunderstood, or laid aside and altogether disused by his followers and admirers, who blindly submitted to his authority in matters of fact, and in his philosophical theories, but proceeded no further, although he had instructed them in the means of doing so. Indeed, we may say, that this *οργανον*, or instrument, rusted in obscurity till the great Bacon threw upon it the refulgence of his splendid intellect, in the almost superhuman light of which he produced it to mankind. How much this was (at the time it appeared) wanted in England, can be shown by the almost entire absence of all correct investigation into the laws of nature. There were no bees, no honey, no depository or hive; but there were, as there had been for ages, innumerable spiders, and no end of cobwebs, in the besmirched Temple of Science. You have a convincing proof of the darkness which could be felt at that time, in the rubbish which Bacon attempted to clear away, and the large amount of error and of superstition which still clung about and encumbered his own noble intellect. We have also in the *Pseudo-doxia Epidemica*, a most remarkable work of a highly-gifted contemporary of the great philosopher, (Sir Thomas Brown,) abundant proof, not only of the vast amount of ignorance and error prevailing among the mass of the people, but also of the astonishing quantity retained by the mind of the physician of Norwich. It is hardly possible to avoid exclaiming, *Ἰατρὲ θεράπευσον σεαυτὸν, or doctores quis docebit ipsos?*

The rules of inductive reasoning are so clearly and concisely laid down by Sir Humphrey Davy, that I shall here merely content myself with quoting him, and then proceed to the consideration of the qualifications required in a medical man for the successful prosecution of his art. “By observation,” says Davy, “facts are minutely and distinctly impressed upon the mind; by analogy, similar facts are connected; and, in the progression of knowledge, observation, guided by analogy, leads to experiment, and analogy, confirmed by experiment, becomes an established truth in science.”

I must, however, here, by the way, vindicate Celsus from the unfair accusation of his having spoken disparagingly of our noble art, in calling it “*ars conjecturalis*.” This is a mistake. Celsus neither meant, nor has he done any such thing. The origin of this mistake was two-fold; first, from separating the phrase from the context, and the argument in hand; and, secondly, from misunderstanding the meaning of “*conjecturalis*.” Celsus describes two sets of practitioners, the philosophers and the empirics, or experimenters—two extremes—and wisely selects for himself the “*aurea mediocritas*.” He rejects the speculative vapouring of the dogmatic philosophers; and, on the other hand, condemns experiments rashly disjoined from correct reasoning upon them. He says, the experiments must be thrown together (as if he had written “*conjicienda*”), carefully surveyed, separately and conjointly estimated, and hence a rule deduced for practice. In this sense it is an “*ars conjecturalis*,” or, in other words, an art whose philosophical principles are based upon the fair and candid induction of particulars. It is quite clear, from the whole tenor of the argument, that this is what Celsus meant, as well as from the very obvious meaning of the adjective “*conjecturalis*” in connexion with the text. If *conjectura* meant guessing, or guess-work, then “*conjicio*” would mean to guess, for which there is no good classical authority.

Begging pardon for this digression, I return to the consideration of the qualifications required in a medical man for the successful prosecution of his art. An ardent love of,

and a religious adherence to truth, is the first and greatest requisite. It is altogether indispensable—not a step can be taken in advance without this standard-bearer. What is truth? It is the empyreal light of the Deity. It is his essence. It is Diety itself. Not to venerate it is impiety: not to search it out is unpardonable laziness: to disguise or conceal it is atrocious: from whatever motive, intentionally to pervert it is Satanic. O! how watchful, how careful ought we to be, in keeping our consciences clear, and our minds unpolluted in this particular. The absence of the love of truth is a total disqualification for the practice of our noble art. Beware of him who loves it not. "*Hic niger est hunc tu Romane caveto.*" It is right to bear in mind that there are two kinds of falsehoods; the one comparatively venial, the other altogether unpardonable. There is the natural untruth, and the moral untruth. The former arising from careless observation and incorrect reasoning, the latter from evil intention. It is devoutly to be hoped, that, in the serried ranks of our Profession, we have no delinquents guilty of the latter offence in thought or word. Whoever the guilty party may be who should condescend to this ignoble and degrading vice, has virtually seceded from our ranks. He ceases from that time to be one of our corps. We will not "march through Coventry with him;" but we will, with unanimous accord, send him to Coventry.

"*Inest naturâ mentibus nostris insatiabilis quædam cupiditas veni videndi,*" writes Cicero. I wish, for the honour of human nature, that this may be propounded as generally applicable to mankind; but I fear it must be limited to Cicero's estimate of the morals of his own *alma mater*, the 'Ακαδημία at Athens; for the desire of investigating truth, philosophical truth, for the truth's sake, was confined to few then, and I fear is not, in our own times, very widely diffused. The medical man must not be contented with adhering strictly to truth; he should never be contented but in the honest and zealous investigation of it. Truths discovered must not be hoarded, and selfishly concealed. A valuable law, or fact, once established by any one member of our Profession, becomes instantly the common property of us all. There are no secrets in true science,—no private purposes to serve by it. "*Laudari a laudatis,*" in addition to the approbation of his own conscience, to the luxury of advancing the knowledge and increasing the happiness of mankind, is reward enough to the true philosopher. The fabled patron of our art was the God of Day. A nostrum should not be so much as named among us, as becometh good men and true. The very word originated in ignorance, selfishness, and presumption. *Our medicine, our cure, our mode of treatment.*

How far are regular medical men, then, empirics? Why, in all the sciences which we cultivate experimentally, according to the rules of a sound philosophy; in the cautious application of discoveries to the improvement of practice at the bed-side, and in our rational mode of investigating diseases; in distinguishing disease in strict accordance with these rules; in weighing the evidence of verbal testimony; in estimating the value of the present symptoms, in experimental inquiry into them, in physical and chemical investigation of secretions and excretions, and in the detecting physical signs with or without the aid of the stethoscope. The treatment of diabetes, of some forms of epilepsy, and of epidemic cholera, of hydrophobia and of tetanus, is of necessity very experimental at present; but, "*In rebus dubiis satius est anceps remedium experiri quam nullum.*"—All this is empirical, if you please; and of this empiricism we have reason to be proud, for see what great things it has done for us within the last half century. To say nothing of the labours of many other worthies, I have only to enumerate such names as Sir Charles Bell, Laennec, Louis, Liebig, Prout, and Paget, Marshall Hall, Carpenter, Todd, Conolly, and Bright, to recal instantly to your minds the vast strides we have made and are making.

If, then, we are empirics, what are pretenders, quacks, and impostors? Are they empirics too? Yes; but they are neither rational nor honest empirics.

Is the announcement of a secret remedy for the cure of all diseases rational? Is the concealment of its nature honest? Is not the vending of it equal to swindling? Is not the protection of the fraud a connivance at the roguery? Yet such things are thick around us, "like motes in the sunbeam."

Is the bold announcement of any law or fact, without any proof of its truth, rational? Can any practice based upon such a law be rational? But if the practice based upon the law be a mere subterfuge, is it rational, is it honest? Yet

such is homœopathy. "*Similia similibus curantur*" is an assumption, an unproved dogma; that the itch is at the bottom of the majority of the diseases which afflict mankind is another; and the practice based upon these dogmas is a fraud; for infinitesimal doses (that is, no doses at all) can never prove their dogma nor any other. Yet all of this is swallowed greedily by the multitude, and rogues grow rich upon it.

Again, an ignorant Silesian boor announces that water used internally and externally (according to his method, mind; you must go to him at Graefenberg, mind,) is a cure for all diseases, and that no other remedies are "wanted." Time flies on; and a sufficient number of opulent and idle aristocrats have crammed the village and neighbourhood for miles round; nearly all that come away, "*Tumulus raro loquitur,*" declare that they have come away cured, and in a very short time a medical man from Ghent, in Belgium, writes, (after six weeks' residence only among these aquatics,) that water will cure all diseases which medicine can cure, and this when they are at a much more advanced stage than that at which drugs can act. "I have no doubt," says he, "that the time will come when medicine will be as completely a dead letter as Latin is a dead language, and that, eventually, people, when speaking of drugs, will refer to them as they do to other objects which time has rendered altogether obsolete." Here's a *petitio principii* for you, with a vengeance. And after all this ignorant boasting at the commencement of their course, which way are these water-men pulling now? Are they attempting honestly to prove their postulate? Are they not, on the contrary, carefully picking their cases? Are they not clandestinely blending, or ignorantly attempting to blend, legitimate treatment with their paralytic panacea? Have not—"proh pudor!"—some gentlemen gone out from among us to join their low ranks, and avail themselves of the gross advantages of so dishonourable a coalition? Have not some of these hybrids concurred in generating a triune monster,—a ludicrous compound of water, infinitesimals, and mesmerism,

"That can, like Cerberus, pronounce
A leash of nonsenses at once?"

Is this honourable, rational, honest? Is this the empiricism which we sanction,—the practice which we approve?

As to mesmerism, it deserves at our hands a little closer attention. It is, I think, by far the oldest of the modern delusions. It has been dead, buried, disinterred, and resuscitated by the *Inhumane Society* a hundred times; it has numbered amongst its ephemeral converts men of eminence, of whom all we can say is, "*Speraveramus meliora.*" It has entered from time to time into partnership, or rather into an unholy alliance with every contemporaneous quackery; it has pretended to superhuman power, to prophetic inspiration, to impart instantaneous knowledge most profound to perfectly ignorant and uneducated people, to enable persons to perform all the functions of all the senses, although, like Shakspeare's octogenarian, they were "*sans eyes, sans ears, sans everything.*" It explores earth's loneliest bounds and ocean's wildest shore, and launches into the regions of unknown space, to claim among the stars a sisterhood with astrology.

Mineral magnetism preceded by a few centuries animal magnetism or mesmerism. Paracelsus set mineral magnetism a-going after this fashion: you know that he pretended, not only to make gold, but to cure all diseases, and to confer immortality. I believe that he was sincere when he first propounded the magnet as the philosopher's-stone. He was soon followed by "*imatatores servum pecus,*" who kept up almost a continuous stream of magnetisers until Mesmer burst upon the astonished world.

Mesmer was at first a self-deluded enthusiast. He graduated in medicine at Vienna in 1766, and his inaugural dissertation upon planetary influences showed his early turn for the *τα μετὰ τα φύσικα*, and indicated some germs of his future theory. When he first began to magnetize, he started in terrific partnership with a priest of an ominous name—Hell. But Hell and he soon quarrelled from mutual jealousy, and separated, like Walpole and Gray. Hell kept the metallic plates; Mesmer did without them, and beat Hell out of the field by literally having his magnetism at his fingers' ends. He had, you have seen, previously taken for granted the planetary influence over human bodies and their diseases. He now assumed that there was a similar influence exerted between one

animal body and another, even at a considerable distance. His first case was a young lady afflicted with convulsions, delirium, and fainting fits. He relieved her by merely passing his hands downwards towards the feet of the patient. I think that he flattered himself that he had made an important discovery, for he was so sanguine as to write to all the learned Societies of Europe, soliciting their investigation of it. But he failed in drawing their attention at that time. He persisted in travelling to different continental states propagating his theory and offering proofs of its correctness; and although again and again refuted, and although the fallacy of his boasted cures was again and again exposed, he was of the same opinion still.

This self-confidence and perseverance at last secured for him a degree of attention and credulity in Paris which he had in vain sought for elsewhere. The ladies in particular were enthusiastic about it, and he converted a regular practitioner or two. But nothing could exceed the attractiveness of his salons, where every sense was studiously gratified; splendid furniture, innumerable mirrors, sweet music, most effective lights, the odour of incense all combined their Paphian attractions to inflame the imagination and subdue the judgment. Mesmer and his theory became fashionable, and fashion soon declared that facts were in his favour. This excited controversy, (a thing which Mesmer fervently desired,) and he had it to his heart's content. After Mesmer had quitted Paris in disgust, M. d'Eslon, his first medical convert, was called upon by the Faculty of Medicine, for the third and last time, to renounce Mesmer's false doctrine or to be expelled from their body.

This gave rise to the celebrated Royal Commission of the Faculty of Medicine, seconded by another Commission of the Académie des Sciences, which was appointed in 1784.

These Commissions contained men distinguished for their science, sagacity, and integrity. That of the Académie des Sciences included men of no less celebrity than Franklin, Lavoisier, and Bailly,—Mesmer absented himself, but M. D'Eslon attended, by far the more sincere man of the two. The inquiry lasted for five months. In the meantime Mesmer had raised a large sum of money among his dupes, with which he returned to Paris, and recommenced his lectures and his practice. His admiring pupils established in all the principal towns of France "Societies of Harmony" for curing all diseases by animal magnetism. Some of these Societies, under the guise of mesmerism, lent themselves to the most immoral excesses. The able Report of the Commissioners was at last published. Nothing could exceed its impartiality and lucidity. It concluded by saying, that animal magnetism did not, but that imagination did, account for all the nervous phenomena which they had witnessed.

This Report was the ruin of Mesmer's reputation in France, but not of his fortune, for he retired to his own country with a competence subscribed for him by his admirers. He died in 1815 at the advanced age of 81. But he might have sung in his last moments, "*non omnis moriar.*"

"Surely the pleasure is as great
In being cheated as to cheat."

Wonder and credulity once excited, must continue to be gratified. Where there is a demand for an article, there must follow a supply of it. Mesmerism could not die; the people would not let it die. In some form or other, it has ever been more or less in vogue. And professors of the great untruth have out-heroded Herod in France, Germany, and England. Passing by M. de Puysegur, and Chevalier de Barberin, in France, we had Dr. Mainauduc, and Holloway, and Louthembourg, and Perkins, with his metallic tractors (so ably exposed by Dr. Haygarth,) in England. Holloway, and Louthembourg the painter, made a good thing of it, by lecturing at the rate of five guineas a pupil. From the time of Perkins, in 1798, till 1813, mesmerism lay in deep repose,—a tranquil sleep which nobody seemed willing to disturb—till up rose M. Deleuze, and out came his "*Histoire Critique du Magnetisme Animal.*" Upon the paper wings of this work, the old delusion again commenced its airy flight over the nations of the earth, drawing the attention of all, but calling particularly upon medical men for inquiry into its merits; and many eminent members of our Profession were earnestly concerned in the investigation of its pretensions—pretensions to new powers, much more marvellous than had ever before been predicated of it. Mesmerism again, in 1831, had in Paris the inquiry it claimed. A most able and impartial Commission again decided

against it, declaring that the facts brought under their notice were anything but conclusive in favour of the doctrine, and could have no relation either with physiology or therapeutics. Let us pass over, "in silence and tears," the fantastic tricks that mesmerism has of late years performed in our own Metropolis, enchaining and deceiving one noble mind; and take a selfish consolation in the reflection, that the Germans, with whom the phantasm originated, have vastly surpassed us in the absurdities they have recently engrafted upon it.

Gentlemen, I have detained you long with the history of these fallacies and follies,—these bubbles of the water and the earth,—but I trust, that what I have said will not be altogether useless, if it lead us to the solution of the simple inquiry, What is the origin of all these delusions, and how are they to be obviated? Is unprincipled quackery ever to flourish and abound? or is there a hope of arresting its lamentable career?

The origin of all the principal deceptions which have been practised on mankind will be found in man's discontent with three immutable decrees.

1st. Thou shalt surely die; 2ndly. In the sweat of thy brow shalt thou eat bread; 3dly. No man knoweth what a day may bring forth.

Whoever, therefore, boldly promises health and unusual longevity, or even an earthly immortality, will be listened to. Whoever promises wealth without labour, will find greedy hearers. Whoever audaciously pretends to the spirit of prophecy—to the power of lifting up the dark veil from the future,—will find believers.

Will the widest spread of the best education—will the teaching the art of correct reasoning (if it were possible) through the whole œcumenical world, entirely obviate the evils arising from the dissatisfaction of mankind with their allotted condition, "on this dim spot which men call earth"?

I think not entirely, but it may do much. Let us, therefore, whilst we individually and collectively strive with all our hearts and minds to improve ourselves, and to advance, by the untiring pursuit of truth, the rational practice of our own noble art; let us, I say, neglect no opportunity of instructing and expanding the minds of others.

Let us take a benevolent delight in seeing other men's minds wear the liveries of our own. It will be, after all, but the genial charity of our own patron Apollo; for we shall, like him, enlighten others without impoverishing ourselves.

In proportion as we succeed in this God-like endeavour, our real science, our integrity, and our skill—our power to save—will be more and more appreciated by our fellow-men.

Worcester,

THE PSEUDO-SCIENCES.

I. HOMŒOPATHY.

By JAMES J. ROBERTSON, Surgeon.

Entráras sin cuidado en un molino de polvora con una tea encendida? (Would any one carrying a burning brand think of heedlessly entering a powder-mill?)—*Jos. de Barzila*, Sermon xxxiii.

Οἷσις γὰρ, μάλιστα ἐν ἡτρικῇ αἰτίῃ, κ. τ. λ.—Opinio enim, maximè in medicina, in crimen vertitur his qui ea utuntur; in calamitatem verò his, qui ejus opera fruuntur. Nam cum ob scientiam sermonum universalium sibi ipsis persuadeant, se etiam artis opus singulare novisse, non aliter ac aurum adulterinum ab igne examinatur, ita eorum ignorantia hac professione arguitur.—*Hippocratis de Elegantiâ Lib.*

It was said, in the days of Montaigne, to be an occupation unworthy of a man of honour to go from house to house *faire montre de son caquet*.(a) We, in our century, are less delicate. "Go to Paris," said Prince Metternich to Dr. Gall; "if you can only get Parisians to laugh at your bumps, you will not fail of reputation." "Let Homœopathy," said Hahnemann, "but reach Paris," that modern mart of lying vanities,(b) "let it but reach Paris, and it is saved." What is talked of, and even laughed at in Paris, will not fail to gain admirers both there and in other places. With Dr. Gall, however, or his opinions, we have here nothing to do.(c) No, we come as serious inquirers to investigate the doctrines of one against whom the finger of

(a) We do not assert that this word (*caquet*) is not from *κακός*, although omitted or overlooked by Morin.

(b) See Père Goriot, De Balzac, etc.

(c) We hope again to return to this subject.

ridicule has been more frequently directed than against Dr. Gall; and if we can clearly ascertain what his notions are, can show that they are based on immutable facts, and are legitimately deduced, we may, by this investigation, do the cause of truth and humanity some service. But if, on the contrary, our inquiry should irresistibly lead to the conclusion, that homœopathy is not only a baseless fabric, destitute of any foundation in nature, but, like Gabrina in Ariosto,—

Quant' era più ornata era più brutta,

we may be able to denude the jejune "thing"(a) of its adventitious trappings, and hold up to unmistakeable view a creature, it may be, of imperturbable empiricism, that with an impudent face still gropes—since she cannot trip her way—along, unscared by the noontide blaze of the nineteenth century.

We shall not delay the reader so much as to remark that those sciences which have their origin in observation, unlike the evanescent theories of a day, are the slowly maturing growth of ages,—*debemus sæculis Scientiam*. Nor need we say, that the common sentiment of the thinking world of his time, and, with some singular exceptions, that of our own, was clearly expressed by Bartholin when he added, "*multum restat operis, multumque restabit; nec ulli nato post mille sæcula præcludetur occasio aliquid adhuc adjiciendi*," a remark which, if true of any science, must be emphatically true of medicine. Nor shall we hint that homœopathy, though cradled in Paris, first saw the light among a people where, according to some of their own wiser and more observant writers,(b) men, more than elsewhere, run headlong into all the extravagances of theory. No; we might thus encumber our view with a cloud of prejudice where we desire nothing so much as a perfectly lucid atmosphere, where no filmy particle of vapour could occasion, in the most distant point, even the slightest indistinctness. And as it is not the man, but his doctrines, which we come to examine, we shall also overlook—how much soever we may be therewith offended—that overweening conceit and pretension, that unjust slighting and ignorant contempt of labourers in the fields of legitimate science—savouring so strongly as they do of the everyday empiric—which are visible throughout this man's writings, and which, though but the offensive smoke of the strange fire that burned within, gave no vague indications of the coming announcement—made in his old age, we believe—that his own *corps de doctrine*, when duly altered and amended, could be nothing more or less than a Divine revelation! "Gentlemen," said Hahnemann, in his address to the Homœopathic Society of Paris, "I present to you a Divine revelation."(c) *Il ouvre un large bec*, certainly; but the reader need not on that account conclude—at least before examination—that there must necessarily have been, as in analogous examples, abundant evidence of what the phrenologist would call a corresponding feebleness of development behind, unless, indeed, we are charitably to suppose that Hahnemann made this announcement in his dotage.

Yet, before we proceed to the more immediate object of this inquiry, it will not be without its use, nor altogether at variance with our plan, if we throw a passing glance on the capabilities of this man as a theorist; and this will also give us an opportunity of remarking a singular instance of the submissive deference which some of his followers have shown to their leader's will in a matter where the inventor of homœopathy may possibly have had uniformity at heart—*dux unus in gregibus*. Our example shall be the psoric theory—one of no very abstruse kind—and that will not be easily misunderstood by any reader, premising only one or two remarks, that the example may be better appreciated.

When Hahnemann "hatched his egg," the callow offspring—we had all but said, the callow gosling—was by some pronounced to be "black as any crow." Hahnemann, with

that partiality which in such cases is said to be natural, pronounced it white as any swan, not second to the phoenix itself; nay, surpassing it, inasmuch as it was endowed with inherent immortality, effulgent with all the beauty of imperishable youth. Yet, among the reckless hands that were ready to despoil a bird of such wonderful plumage, are to be reckoned the busy hands of some of his own followers. We naturally ask, how is this? The reader knows, possibly, the remark of Montesquieu, that certain notions of uniformity never fail to strike the little-minded, (a) but which, nevertheless, make no impression on the minds of the more sensible part of mankind. Does the reader suppose that the sting of some such sentiment as this could have goaded on the homœopath magnanimously to assert, if but for a moment, his independence, though that could not be done but at the expense of his master's reputation? No! and the reason will presently be seen.

It is a very general practice with the homœopath to begin his alleged treatment of diseases—of such, at least, as are chronic—with an infinitesimal dose of brimstone; and the most exquisitely fine lady, were she another Hebe, must, if she submit to homœopathic treatment, have her dose of brimstone—to eradicate her constitutional itch. It is not on account of the ridiculousness of this notion that homœopaths now wish to get rid altogether of the itch or psoric theory. Nor yet is it that the doctrine may have an unpleasant reaction on some, who, willing as they might be to believe anything the homœopath may say, so long as they do not understand a word of it, have yet suddenly aroused in them an ineffable sensitiveness the moment they see themselves considered the hereditary subjects of this malady. At the period we speak of,—when the homœopathic egg was hatched, *κακος κόρακος κακὸν ὄρν*(b)—it was known but to few that, in the disease alluded to, the *corpus delicti* is a visible *acarus*, an animalcule that "mines its way" under the cuticle. This now becomes a tangible argument—a lively impediment in the way of the psoric theory, which, it may be supposed, the inventor of homœopathy never dreamed of; but which, for the credit of homœopathy, it would be most desirable to keep out of sight. For, although the *credenda* in this instance require no greater amount of credulity than any other of Hahnemann's notions, yet the transmission from sire to son, through many generations, of a race of hexapods, luxuriating all the while under their cuticles, and that, too, without their knowledge, must be considered a very palpable absurdity; and the *corpus delicti* being a living argument, easily brought forth to confront the homœopath, may, moreover, be so placed, as, in his very sight, to do battle with a vitally dynamized globule of brimstone, and come off from the field of battle victorious, unscathed, and without a scratch.

The homœopath says, "there is no such a disease which should be looked upon as local,—tumours of all kinds, eruptions, eye diseases, &c. All have a deep-seated dyscrasy for their cause, and should be properly cured by internal remedies. All external remedies are useless—injurious." This eloquent scrap was not thrust into our hands in the street; it is an extract from the work of Dr. ———, on "Eruptive Diseases." Let us suppose that some Hebe, such as we have spoken of, has received her dose of brimstone, and that a sufficient number of days have been allowed to elapse to insure its perfect operation, so as to eradicate the remotest trace of her constitutional taint. Would not the homœopath then say, that the health of his fair patient must now, in every part, be perfect—the dyscrasy blotted out—annihilated? Let an *acarus* of the true breed be now dislodged from some one who has given it harbour and sustenance, and placed in a fold of the skin, *al grembo dell' amata vergine*, it will lose no time in setting systematically to work, and burrow and multiply in the most approved manner, establishing colonies, too, for its overgrown population, wherever it can find a means of transport. Now, as to dyscrasy or constitutional taint on the part of the fair patient, in this instance there could be none. Yet the homœopath asserts, after his master, that this disease has its origin, like others,

(a) Thanks for this word to Dr. ———, who, in a lucubration that has actually been published, triumphantly exclaims, "Homœopathy is, at all events, a thing."

(b) In this honourable band we must place Eberhard, who, in his highly encomiastic review of the Duke of Manchester's "Times of Daniel," recommends the example of English authors as an antidote to the visionary tendencies of so many of his countrymen.

(c) The drivelling biographer follows in the same tract, and says, "when light was given him." "Mon cher, mon cher! les ténèbres frappent nos sens aussi bien que les lumières." You knew there was inspiration, no doubt; you only mistook the source; or, if you had any doubt, you charitably decided that, so far at least as you were concerned, Hahnemann and homœopathy, for once, should have a benefit.

(a) It must not hence be inferred, that we place the homœopath in the last of the three grand classes into which Hesiod, Livy, Machiavelli, Gessendi, and others divide mankind; that is, in the class of those who are good for nothing at all, (in the way of practice,) although their awkward imitations of Hahnemann scarcely entitle them to rank in the second.

(b) Stobæi Florileg.—"A sorry corbie lays a worthless egg." Good corbies, of course, lay good eggs.

in dyscrasy, without which, says he, it cannot exist; and since it is clear there could be none on the part of the fair experimentalist—for we have seen her take her dose of brimstone—we are driven to the only possible alternative, and compelled to conclude—discourteous though the conclusion may seem—that in this instance, all that can deserve the name of dyscrasy is clearly on the part of the homœopath.

"All great discoveries," says Doctor —, the homœopathic advocate, "have commenced by appearing absurd." How absurd will Bonomo's discovery of the itch-animalcule appear when the homœopath demonstrates the truth of his psoric theory!

The mind that gives harbour to one absurdity without perceiving that it is an absurdity, or even suspecting that it can be such, may be fairly presumed capable of giving entertainment to more than one such guest. To the above example let us here add also the following.

From the time that the renowned philosopher of Stagira declared the properties of matter inseparable from matter, no one, till the renowned inventor of homœopathy, had dreamed of separating matter from its properties, and of manufacturing, and so obtaining, by themselves, the properties of matter; or, as Hahnemann also calls them, power without matter. Inexorable fate,—inexorably cruel in this instance,—had reserved for the inventor of homœopathy the hitherto unattempted enterprise of separating the properties of matter from matter; and so, after his manner of thaumaturgy, obtaining and preserving them in his phial, (in combination with water,) corked up and ready for use. All this, however, was but a step in the process; for Hahnemann, who "to all the other fowls (a) must seem a phoenix," has informed his wondering disciples how they may increase this power to any desired extent. Give the magic phial containing this power a single shake *secundum artem*, the power is increased one degree; give it another shake, and it receives another degree of increase. But a very benevolent caution is here interposed: Do not give too many, lest—lest the power thus shaken should be increased to a dangerous extent. (b) Were Hahnemann to assert that in his native Saxony immense herds of porkers lineally descended from Pegasus, might daily be seen flying from mountain to mountain, and from valley to valley, browsing upon flowers of paradise, is there among his followers one who, for a moment, would think such assertion deserving of credit? Perhaps not. What better authority has the homœopath for believing in his manufacture of "power without matter?" This, however, is not only part of his creed, but a part so essential, that to "give it up" would at once be to sever the link that unites the portentous globule with the cried-up effect, and renounce for himself the very name of homœopath. In the former instance, the absurdity of the theory is immitigably gross; in the latter instance, it is not less so; but being less palpable, and of a kind which many who are led by others may believe, it gives the homœopath no uneasiness, and so is not only allowed to pass muster, but is even raised to a first place of rank and importance in his infinitesimal system of *far niente*.

We come, after these remarks, to consider the leading dogma in Hahnemannism—the doctrine to which Hahnemann gave the name of homœopathy. What, then, is this homœopathy? There are some things, say logicians, in themselves so simple as neither to require nor admit of definition. (c) Is homœopathy of this number? We shall perhaps be able, before bringing our remarks to an end, to determine. But, if we can find no definition already existing, the reader knows, no doubt, that the whole theory of homœopathy is comprehended in the expression, "like cures like," *similia similibus curantur*, or, as some homœopaths, through ignorance or design, write the latter word *curentur*, a dogma which furnishes also the unvarying rule of homœopathic practice.

As the chief obstacle to a right understanding of this subject lies in the word *like*,—a word which, in the affairs of

everyday life, is so plain as not to be mistaken by the most illiterate of our race,—it may perhaps be necessary, before proceeding further, to remove this impediment out of the way of some readers.

When the schoolboy hears his teacher say, that one apple is like another apple, one Dutchman is like another Dutchman, and one learned pig like another learned pig, all is as plain to him as it would be to the most intelligent; here is no room for ambiguity. But when his instructor, like the homœopath, goes on to add that, by virtue of this likeness, one Dutchman cures another Dutchman, and one learned pig cures another learned pig, the schoolboy and the philosopher comprehend no more the import of what is said than would the learned pig itself were it forced—learned pigs have their antipathies, no doubt—to take its place, day after day, for the natural period of its life, in the homœopathic lecture-room, or homœopathic Society of London. (a) What, then, is there in the word *like*, when used by the homœopath, which we do not comprehend? Does it, in the mouth of the homœopath, assume an heretical meaning of which other people know nothing? We shall see. But before we answer this question, let the reader pass in review every object in nature with which he is acquainted,—not excluding the learned pig,—and find out, if he can, a single example in which like cures or obviates like. No doubt his search, strict and comprehensive though it may be, will be in vain. In the moral and mental world it will be no less so; for who has ever heard that any philosopher or teacher had proposed as the rule of his procedure, *vitia vitiis honestare*? Or, in everyday life, who ever heard that any of the dry discourses of Doctor Dryasdeal had contributed even an iota towards curing the dry-rot in his hearers? (b) "*Ne chicanex point sur non préambule*," says Malbranche, who has pleaded for us *d'avance*. We may, then, safely conclude, that neither in the natural, nor in the moral or mental world, do we meet with any examples that can be brought to support the homœopath's assumption, that like cures like.

Such, however, is the doctrine; and the homœopath, till he take shelter in some other *chateau en Espagne*,—for we do not think he will be found among those contrite persons who betake themselves *ad priscorum tramites anhelis*,—must still assert, that like cures like. And, that we may be in no danger of mistaking the import of his dogma, he tells us, that Peruvian bark, by virtue of likeness, cures intermittent fever. But, between the sensible properties of cinchona and the phenomena of intermittent fever, what sort of resemblance can there be? Who sees any sort of likeness between the cold fit of ague and the bark which has so long been known as its most efficacious remedy? Then, let us go again to our teacher. "Oh!" says the commiserating homœopath, "be not so simple-minded! Do not think the likeness can lie in the things themselves!! You must look, first of all, to the symptoms produced by the 'drug' when it has been given in due quantity, and for a sufficient length of time, to persons in good health; for in them, we assert, after our master, that medicines so administered occasion symptoms and phenomena similar to the phenomena and symptoms of disease; and that 'drugs' which occasion a given set of symptoms, when thus administered, will also cure the same symptoms when these last constitute the phenomena and symptoms of natural disease. This is what you are to understand by our dogma, that like cures like." Our instructor may now be said fairly to have admitted us within the vestibule of homœopathy. And here our teacher again, with the same look of commiseration, gives us to understand, in language not to be mistaken, that, before his great prophet revealed this "principle of eternal truth," (such is the unpretending language of Hahnemann,) we virtually knew nothing. Nay, moreover, that, under the ban of this dire condemnation, are included, to this hour, all mankind, saving Hahnemann and the homœopaths. We have now,

(a) Doctor — "confesses"—before or after perpetration?—that in his homœopathic studies he found himself much in the same position as our learned pig would do on the homœopathic benches; for he says, "from the writings of English homœopathic practitioners, I must confess, I should have derived no satisfaction or conviction." We give him the fullest credit for being, during the lucid interval in which he delivered this judgment, the most sensible clairvoyant we have yet heard of,—a Daniel sitting in judgment. But, as he adds, "I had always faith in specifics;" the old canker, having struck deep its roots, was not to be eradicated by a feeble hand; and so the evil spirit of empiricism, thus encouraged, quickly returned to claim and receive its wonted possession.

(b) Dr. E.— has taken to himself great credit for having "advocated glanders." Perhaps we shall be allowed, then, without blame, to say a word in praise of dry-rot.

(a) There is, beyond the Tweed, a provincial mode of pronouncing this word, which, as it is not quite classical, we shall no further allude to. Some of our readers will no doubt understand.

(b) As the solution, or whatever else the homœopath may name it, contains also a small portion of spirit of wine, there must be, on his principles, an additional reason for this caution.

(c) "Proofs and arguments are necessary only when the mind cannot see a thing intuitively. Whatever is seen intuitively can be but weakened by any kind of reasoning."—Dr. Bushnan's "Miss Martineau and her Master," a work we cannot too highly recommend to the attention of every reader.

in spite of our worse than Bœotian ignorance, got some notion of what we are to understand when the homœopath says, that like cures like. We have also some idea, on awaking from our dream of deep ignorance, that a man possessing, like Hahnemann, an ordinary knowledge of language, might, had there entered into his mental constitution a grain of logic, have found some half-dozen words that would have expressed his dogma without any ambiguity,—without making him, too, assert what he never meant to assert, and actually leaving untold what he wished to say. A philosopher and emperor thanked his gods that he had never learned logic: we shall possibly see whether there are not men who have Hahnemann to thank for having enabled them to despise it.

We are now able, notwithstanding the blundering manner in which the homœopath announces his dogma, to form some notion of what we are to understand when we hear him say that like cures like. If, for example, Peruvian bark, when given in sufficient doses to persons in good health, and duly continued, should produce, *parodical imitatione*, an assemblage of symptoms similar to the symptoms of ague, then, on the homœopath's principle, that bark would become the homœopathic remedy for ague.

When the driver of a Russian sledge has been found half-frozen to his perch, his limbs rigid, and reduced in temperature, perhaps below the freezing point, it is an approved practice, of much older date than homœopathy, to rub the affected limbs with snow or ice. And this practice Hahnemann adduces to prove and illustrate his doctrine of like curing like. But, before Hahnemann, it was a rule, in such cases, to restore very gradually the temperature of the limb, —*ustum ab assiduo frigore*,—and, instead of allowing it to rise rapidly to the temperature of the room into which the patient had been brought, to rub the limb with snow or ice, and so prevent that violent re-action which would, from the sudden application of warmth, have taken place, and so have occasioned the death of the parts affected,—a procedure not unlike that of people who give nourishment in very small quantities at first to persons who have been many days without food,—a rule the importance of which has been plainly shown by many fatal instances in which a contrary practice had been pursued.”(a) Is it candid in Hahnemann to impress such an instance into his service? But let us suppose it is; let it be as Hahnemann would have it. To those who consider this subject, it must be plain, that this example, even in the sense in which Hahnemann would explain it, is not an instance of homœopathy. It would be claimed by another class of men,—little known, or, rather, never heard of, in this country,—as a pure and unadulterated example of isopathy, in which, says the isopath, the same thing cures the effects it occasions,—in which cold, for example, cures the effects or condition which cold had induced. This, we repeat, is a pure and undefiled example of isopathy; and the inventor of homœopathy, the would-be-redoubtable Hahnemann, cannot, at the very outset even, refrain from again tripping on his own ground.

Let the reader, then, keep in view the distinction between *sameness* and *similarity*—isopathy and homœopathy; the former of which has here no claim on our consideration, although it be the natural offspring of homœopathy.

[To be continued.]

DISEASES OF THE EYES;

A SKETCH OF THE MEDICAL HISTORY OF THE 47TH REGIMENT.

By GEORGE SAUNDERS, Esq.,
Assistant-Surgeon, 47th Regiment.

OF the various diseases to which soldiers are liable, none, perhaps, may be said to cause more painful anxiety to surgeons than ophthalmia, when prevailing to any unusual extent. The vast importance of this subject claims the earnest attention of all military surgeons, not only because its destructive ravages have rendered “whole regiments occasionally ineffective, and entailed an unheard-of expense on the country,” but also on account of the great value of that precious sense—vision—without which man's existence

would be reduced to a “dreary blank; dark, solitary, and cheerless.” How serious the charge, if this miserable and dependent state were the consequence of wrong treatment.

1240 cases of ophthalmia occurred in the regiment between January, 1830, and March, 1850, of which number, thirty-two were invalided for impaired vision.

The regiment returned from the East Indies late in the year 1829; served in the Mediterranean from September, 1834, to January, 1841, and thence proceeded to the West Indies. The regiment was particularly exempt from ophthalmia in the Mediterranean, while other corps, stationed in the same garrison, suffered severely from the disease. On the return of the regiment from the West Indies, in January, 1844, several acute cases arrived with the detachment from St. Kitt's, and these were joined by others of a like nature from the depôt in Ireland.

In the year ending 31st March, 1843, when the depôt was stationed at Castlebar, thirty-seven cases occurred, chiefly in the latter half of September and beginning of October, and again in the end of February and during March, and at other times. The disease assumed the form either of conjunctival inflammation, or of inflammation of the anterior part of the sclerotic, or a combination of both, which was, however, more frequent in September, and in the warmer months, than in the colder ones. In September, no very obvious cause for the disease could be detected, but in February and March, the variations of the weather were very considerable and sudden. For about a week before the disease appeared at the latter season, the thermometer stood generally considerably below the freezing point, and the air was extremely dry; in the course of two days, the temperature suddenly rose to 40° or 44°, and the dew-point increased from 20° or 25°, its previous temperature, to 36° or 40°, indicating that the quantity of moisture on the latter occasion in the atmosphere was about double that it contained on the former. The first cases of the disease appeared at the time of this transition; and every day afterwards, for a period of three weeks, fresh numbers were added to the list, during which, another alternation of cold and dry weather, with comparatively warm and moist, occurred.

Ophthalmia was very prevalent among the people of the town and neighbourhood at the same time, and was undoubtedly to be attributed to the same cause. Many of the cases occurred in men who had been previously under treatment for other diseases, but especially syphilitic, and several of them proved extremely obstinate and unmanageable during the continuance of the acute symptoms, and, after their subsidence, were characterised by unusual irritability of the eyes, or by a granular state of the conjunctival lining of the palpebræ, and frequently both combined.

It is worthy of remark, that during the following months of April, May, June, July, August, and September, the disease was, with a single exception, confined to two companies, (eleven cases in one, and twelve in the other,) which occupied two rooms exactly similar in size and exposure, while in the other two companies, composing the depôt, which occupied rooms of a different description, only one case occurred in the six months. The rooms first mentioned were large and airy, the windows were not tight, and the sills very little above the level of the men's cots, and there were two large chimneys in each room. On examining particularly into the relative position of the beds of the men who were attacked with ophthalmia, it was found in every instance that the cot was either close to, and in the draught from a door or window, or in the immediate vicinity of the fire-place, and within the range of the current of air from the room to the chimney.

The cases, though severe, were at first manageable, but many suffered relapses when nearly well, which not only threw them back, but aggravated their nature in every respect. Such cases became excessively difficult to manage, and several, in consequence, were under treatment for months. These symptoms became aggravated by ordinary changes of weather, and they thereby lost more ground in the course of a few hours than they had gained by the most assiduous attention in the previous week or fortnight.

Ophthalmia did not prevail to any remarkable extent until the year 1848-9, when 243 cases were admitted into hospital. The majority of these cases appeared among 300 men of the regiment who occupied the “Bianconi Temporary Barrack” at Clonmel, an overcrowded and ill-ventilated building. The disease spread suddenly and rapidly, and its progress was not decidedly checked till better accommodation was

(a) See Pechlin, *Observationes Medicæ*.

provided, by reducing the strength of the garrison on the conclusion of the rebellion farce in September, 1848. At this period the regiment was ordered to Limerick, where the obstinate cases assumed a more tractable character.

Another outbreak of the disease afflicted the regiment in the following year, while stationed at Buttevant, the cause of which, at this as at other stations, was most assuredly not the result of harassing drills, night duties, or any peculiarity in the locality; on the contrary, the interior economy was in every respect calculated to promote the general health.

The disease has, in almost every case, both original and relapsed, been satisfactorily traced to exposure to cold draughts of air from the doors or windows of the barrack-rooms, in the currents of which the men's beds are placed; and this cannot be avoided as the buildings are at present constructed. Even among those in hospital under treatment the same effects have been frequently observed in every gradation, from a slight redness of the conjunctiva to the most violent purulent ophthalmia, following distinctly the same causes; on the contrary, no patient in hospital, with a single exception (an hospital attendant), ever got the disease, which, were it contagious through the medium of the atmosphere, or had the men been inclined to tamper with their eyes, was scarce within the bounds of possibility. The case which did originate in hospital occurred in a man who was confined to bed in a ward the furthest from the ophthalmia, and it was clearly traced to the draught from a window at the head of his cot.

By far the greatest difficulty in the treatment was the prevention of relapses. The first attack of inflammation, though frequently severe and tedious, very seldom affected the organisation of the internal tissues of the eye so far as to interfere with vision; but after some, or, still more, after several relapses, extreme irritability of the eyes, not only to light, but to any stimulus whatever, comes on, abscesses formed in the substance of the cornea, or it ulcerated, and the resulting opacities and adhesions have in several cases nearly destroyed vision.

These relapses of patients in hospital, so far as could be ascertained, were attributable to cold. It was necessary to confine people with irritable eyes to a properly darkened ward, and it was equally necessary to admit a supply of fresh air to diminish the injurious effects of the confinement on their health. This could only be done from without, and, though several expedients were adopted to admit the fresh air, diffusing it at the same time so as not to produce draughts, and to prevent evil consequences from its coldness, yet on every considerable change of weather relapses occurred in spite of all efforts, and vastly increased the difficulty of the ultimate cure. In such cases, as in chronic affections of the lungs, the susceptibility of patients to cold, and in their liability to suffer from it, are very great; and it may be boldly asserted, that, in the treatment of either class of disease, much would be gained by introducing a better system of ventilation into military hospitals; for at present it is impossible to ensure an adequate supply of fresh air to a moderately filled ward, without exposing the patients to currents, which, acting on the surface, often in an excited state from the action of medicine, check its function, and almost universally lead to an aggravation of the disease. The worst cases of relapse arose from such exposure, even during warm weather; and, though its operation was sufficiently obvious, it was impossible to prevent it. The present material of the hospital dresses is but ill adapted even for summer weather, and certainly most unsuitable for winter.

The most common, and, perhaps, useful division of diseases of the eyes is into acute and chronic. Returns and reports usually embody the following points of information, viz., ophthalmia, without purulent discharge, one eye; ophthalmia, without purulent discharge, both eyes; iritis; ophthalmia, with purulent discharge, one eye; ophthalmia, with purulent discharge, both eyes; including, also, any combination of particular affections: opacity of the cornea, amaurosis, fistula, lacrymalis, etc.

The most prevalent form of the disease presented the usual characters of common acute inflammation of the conjunctiva, which was easily subdued by the general treatment. Several cases of the purulent, or destructive variety, occurred, which, undoubtedly, can be communicated from one person to another by the application of the matter to the conjunctiva

of a healthy eye, and must be treated as such; one of the worst cases among the soldiers' wives was clearly traced to this cause.

Iritis was not an uncommon disease in connexion with secondary venereal; the attacks were quite insidious in their origin, occurring without the knowledge of the individual, until detected either at the ordinary health inspections, or while patients are in hospital.

Granular conjunctiva of the eyelids was found to be one of the most troublesome consequences of ophthalmia.

The general treatment consisted in the employment of a solution of nitrate of silver, varying in strength from two to ten grains to the ounce of distilled water, dropped into the eyes once or twice a day, cathartics, antimonials, confinement to bed, and spoon diet.

Poppy fomentation, at one period in great requisition, is now seldom or ever used, as it appeared, in most cases, to have had no other result than increasing the public expenditure.

Cold lotions of the liquor plumbi diacetatis dilutus afforded remarkable benefit in certain cases, when constantly applied over the eyes by means of a piece of linen.

No case of iritis resisted the use of mercury when given so as to affect the system. Turpentine is also a very valuable remedy in this affection.

Excision of a portion of the chemosed conjunctiva is, perhaps, the most decisive measure that can be employed, not merely in affording relief to the patient, but in removing the pressure and tension which endanger the safety of the cornea. This practice has been recommended by Scarpa, Lawrence, and others.

Chronic cases, with opacity of the cornea, have received considerable benefit from alterative doses of blue pill, or the hydrargyrum cum cretâ, followed by sarsaparilla and hydriodate of potash; but the most salutary effect was derived from change of air.

The prevention of disease, by prophylactic measures, is one of the most important duties of a military officer, and has special reference to ophthalmia.

When the disease prevails to any unusual extent in a regiment, every precaution deemed advisable should be adopted to prevent its extension, for it has a well-known character of self-propagation, in consequence of neglect and want of attention to cleanliness on the part of individuals.

A daily inspection of the men should be made by a medical officer at the early morning parade, and every man evidencing the slightest appearance of inflammation of the eye admitted into hospital. This, of course, increases considerably the aggregate number in the general return, and may, possibly, cause erroneous inferences if used for statistical purposes; one will thus, however, not only have the opportunity of bringing every case under early treatment, and insuring the best results, but also of preventing the occurrence of symptoms that may endanger, if not destroy, vision.

The ablution-room should be under the control of an intelligent non-commissioned officer, for the purpose of seeing that each man, in washing, uses clean water and his own towel.

Men, on being discharged from hospital, should not be required to perform night duties, cooking, etc., for some days.

In consequence of the want of hospital accommodation, the establishment of a convalescent-room in barracks has sometimes been resorted to, and always with the greatest disadvantage to the cases treated therein; the adoption of such a measure cannot be advised except under most extraordinary circumstances.

Notwithstanding the most careful inquiries and observations, there has been no reason, at any time, to suspect men of tampering with their eyes.

Can it be credited that such worthless characters could have existed in days happily gone-by, who were so base and wicked as to have attempted, and even caused, the destruction of their own vision,—the sense of all others regarded as the greatest blessing to mankind,—that organ, an examination of which, Sturmius held, was a cure for atheism; yet numerous instances are on record in full testimony of the melancholy fact.

ON PLACENTA PRÆVIA.

By CORNELIUS BUTLER, Esq., Surgeon.

UPON reviewing, in the various publications upon midwifery, the reports of placenta præviæ, one is struck with their rarity. In my own field of practice I can enumerate not more than six or seven from a number exceeding 4000; and as my first fatal case of the kind happened to me a few weeks since, I will, with your permission, report it while the painful impressions are fresh in my recollection. The great object of our publications being intended for the confirmation of the practice of the experienced, or for the information and guidance of those who may be just setting out upon their professional career, I will add also a few remarks, which I trust will not be deemed impertinent, on these most alarming yet most interesting cases.

On the 5th of May last, whilst in attendance upon a labour, I was requested to visit a poor woman in an adjoining cottage, who, it was reported to me, had had, a day or two previously, (without pain, and near the completion of her time,) a sudden and so severe a discharge as to induce at the time considerable faintness, lasting only a few minutes. I found upon examination the os uteri open to about the size of a shilling; its lips loose and flabby; through it, and upon pressure on the parietes of the uterus, a cushiony fullness only could be felt, with no distinct foetal presentation,—decisive, in my mind, that the cause of the hæmorrhage was placenta præviæ.

The discharge had then entirely stopped, and she (this was her third child) had tolerably recovered from her alarm and weakness—was cheerful and well. I saw her from day to day; castor oil was administered, which produced its proper effects without any other disturbance. Cool applications were constantly used, recumbency and quietude enjoined, with strict orders, that in case of the slightest “show,” myself, or, if needful, some other attendant, should be immediately applied to, the distance to send being about a mile. On the evening of Monday, 12th, some discharge occurred, but unfortunately, there being no pain, not enough to create alarm. On Tuesday, 13th, about 5 p.m., I was summoned, and rode up instantly, when, to my horror, my poor patient lay pale, pulseless, jactitating, complaining at intervals of pain over the præcordia, not uterine, with occasional sensations of choking, and the vagina plugged with coagula. I immediately gave a large dose of brandy, repeating it frequently, but without any reaction. I was for a moment encouraged by the advent of vomiting. The only alternative was now to deliver at all risks, and while preparing myself, my friend Mr. Thom, Surgeon of the Military Depot at Warley, passing the window, I felt too happy in availing myself of his valuable assistance. I passed my left hand, as is my custom, by the side of the placenta, without disturbing the membranes, to about 2-3rds up the uterus, when, upon dipping down for the purpose of rupturing them, I fortunately found both the feet together, proving it to have been otherwise a natural presentation. The delivery (of a bloodless, living child) was thus accomplished, but *too readily*, there being no resisting power, always so desirable in these cases.

The hæmorrhage now ceased; but after the useless administration of restoratives of every kind, we determined upon trying what transfusion would do.

The action of the heart remained distinct, but it was only at the carotids that any pulse was distinguishable.

The husband, with great good feeling and readiness, afforded us the supply of blood. I opened the cephalic vein, the only visible one; the instrument was readily introduced into it, and a considerable quantity of blood forced in; but I am persuaded none reached the heart—the natural vis-a-tergo was wanting; and no sensible effects resulted. After every effort which skill and the most anxious solicitude could suggest, she sank in about two hours and a half from her delivery, the uterus remaining uncontracted in spite of external pressure.

This, I think, is a fair detail of the case, with the treatment adopted; and it presents to me one most important lesson, which I would solemnly impress upon the attention and conscience of young practitioners particularly, which is,—never to leave a woman when hæmorrhage such as was described to me on my first visit, and such as I have faintly described, without adopting the only method that can reasonably lead to safety, viz., as speedy a delivery as possible.

This is the practice I have invariably pursued and recommended in my conversations with others through a long period of experience, and, it is flattering to myself, with good success. There is seldom, if ever, pain in hæmorrhage from placenta præviæ, which misleads (through ignorance) attendants, who expect pain, and therefore delay sending for proper assistance. An hour, nay, a few minutes lost, can never be repaired!

When, therefore, an accoucheur is called to one of these appalling cases, let him not suffer himself to be deceived as to the state of things within the uterus; if one finger will not tell him, let him try two, or even the whole hand; *aut non tentes aut perice* must be his motto. Let him honestly and deliberately bear in mind what he owes to his patient (be she rich or poor), to society, and to himself.

Exhaustion comes on with such fearful rapidity, that there is rarely time for consultation. He may be miles from a friend. After due consideration, regardless of the opinion of the world, let him do his duty with courage, firmness, and caution, and, depending upon a kind Providence, (the only source of true courage,) he will more frequently than he expects have the proud satisfaction of restoring mothers to their intensely anxious friends.

I beg to make one remark as to transfusion in these cases. Successful ones are reported; but I am satisfied, that, whenever jactitation has commenced, there is an end to human remedies!

It is depressive to a young practitioner (and it is to them I presume to address myself), let his attainments be ever so satisfactory, to find himself foiled in the employment of such means, after having read of their success in the hands of others. Should these reported cases be analysed, I am of opinion, that they would be found fallacious guides.

One word more, and then I will intrude no longer upon your patience. If in my practice in a large agricultural district so few of these frightful cases have occurred, *i.e.*, about 1 in 700, it is a proof that not many of us have, happily, much actual experience in them. It therefore appeared to me a becoming duty to report this case in your widely-circulated Journal, inviting others to do likewise, in order that the experienced may be sanctioned and established in his practice, that he who hesitates may be stimulated and encouraged, and that the lessons of the lecturer may be enforced and confirmed by a reference to the judgment and success of those who are engaged in this most anxious branch of our unceasingly arduous duties.

Since writing the above, my attention has been directed to Dr. Ramsbotham's invaluable practical work on midwifery; and it is gratifying to find my views correspond so fully with those of this justly-esteemed and eminent physician. (See his work upon Midwifery, pp. 83—88, 2nd edition.)

Brentwood, Essex.

CASE OF

POISONING BY WHITE OXIDE OF ARSENIC;
FATAL WITHIN THREE HOURS AFTER
EXHIBITION.

By R. JEFFREYS, Esq.,

Member of College of Surgeons, Licentiate of Apothecaries Company.

On Thursday, March 13th, 1851, I was sent for to attend upon Mrs. John Dearlove, who lived five miles from my residence, and who had been taken ill soon after her dinner. I arrived there about half-past two o'clock, p.m., and found her in her bed-room upon a chair, supported by a neighbour, in a state of collapse. She was cold, her pulse almost imperceptible, her lips and fingers livid, her conjunctivæ red, her countenance expressive of the greatest anxiety and distress; she did not speak, nor appear to be conscious; she was rapidly sinking; she had neither vomiting nor diarrhoea after I saw her. After a time, we lifted her upon the bed, where she remained about half an hour; when, becoming more and more restless, she endeavoured to get out; she was assisted to a chair, and in a short time there she died—calmly and without convulsion—at about half-past three o'clock of the same afternoon. Mrs. D. was a thin person, thirty-nine years of age, and has left a daughter aged fourteen years.

Upon inquiry, I ascertained that the deceased had eaten nothing for dinner but some batter-pudding; that she appeared to be in good health up to dinner-time, and that in about ten minutes after, she was attacked with vomiting, purging, pain, and faintness, which, with the symptoms I had witnessed, induced me to conclude that poison must have been used; I therefore obtained a portion of the pudding, and brought it away for examination.

The same evening and the following day I analysed the portion of pudding, and obtained from it the arsenites of copper and silver, and the deposit of arsenic upon bright copper (Reinsch's test) besides crystals of arsenious acid in abundance, and the well-known metallic rings.

Saturday, March 15th.—I made a *post-mortem* examination of the body, about forty hours after death. There were no marks of external violence or disease; the external coat of the stomach, small intestines, uterus, and bladder, were very vascular, the bladder extremely contracted, and there was an old adhesion of the right lung; the other viscera were healthy.

I removed the stomach and duodenum, with their contents; (also a separate portion of intestine, containing some pulpy fluid, which I examined on my return home in the evening, and found arsenic therein.)

At the inquest, which was now sitting, I satisfied the jury that the portion of pudding which I had taken from Mr. Dearlove's house contained a large portion of arsenic. It was arranged at the same time, that the stomach should be handed to an analytical chemist for analysis, and it was accordingly conveyed the following Monday to Mr. Deck, of Cambridge.

Monday, March 17th.—I was present when the stomach was opened, and the following appearances presented:—

The stomach contained about four ounces of dark fluid, and several lumps of partly-digested pudding.

The mucous coat was covered with a tenacious mucous secretion, and parts of the same with red ecchymosed patches, highly inflamed.

A dark, tenacious, bloody *patch*, about three inches in circumference, near the cardiac extremity, with a corrugated state of the rugæ, having very much the appearance of disorganization.

The pyloric extremity highly inflamed.

On analysing the contents of the stomach, Mr. Deck found a considerable portion of arsenic, which he has since estimated at between thirty and forty grains.

July 22nd.—Being the time of the assizes at Cambridge, I had another opportunity of examining the stomach, and, though kindly assisted by an experienced anatomist, I could not detect under the microscope any *disorganization* beyond a few minute abrasions of the villous coat, not visible to the naked eye. The minute mucous cells in the inflamed parts (being only about $\frac{1}{16}$ of an inch in diameter) were like so many little ink dots, the consequence, I imagine, of blood having escaped with the mucus from them.

The large extravasated patch had disappeared, in consequence, perhaps, of maceration leaving the surface underneath smooth and nearly entire, but highly vascular.

I may remark here, that Sir B. Brodie has stated that Mr. John Hunter had preserved in his museum, as an example of "a slough of the villous coat caused by arsenic," what turned out on examination to be nothing else than an adhering clot.—*Christison*, p. 305. He probably attributed the slough to the corrosive action of the arsenic; and I believe that the notion of arsenic being a corrosive poison is still pretty general; however, it is not so; it has little or no direct chemical action upon the tissues; it does not effect their disorganization, except as a consequence of inflammation, which is a much slower operation than corrosion.

The outline of the case is briefly this,—that, on the 13th of March, Mrs. Dearlove was at home with her cook and housemaid. Between nine and ten o'clock, a.m., she herself made an egg-pudding with eggs, milk, flour, and a tea-spoonful of *egg-powder*, which ingredients she stirred up together in a basin. Mrs. Dearlove and the housemaid then went up stairs to make the beds, leaving the pudding with the cook, with directions to put it in the pot at a certain time.

Mrs. Dearlove ate nothing for her dinner but a portion of the pudding, and, in about ten minutes after, was attacked with symptoms of poisoning, which terminated fatally.

Suspicion fell upon the cook, who was committed by the magistrates on the 5th of April, and tried at Cambridge on the 23rd of July, when she was acquitted.

The evidence for the prosecution went to show that there had been great provocation on one side, and threats used on the other, and that there had been opportunity.

For the defence, it was shown that no poison had been found in the prisoner's possession, and it was admitted that the remainder of the egg-powder had been thoughtlessly thrown into the fire a few days after the catastrophe by one of the family, leaving a possibility that arsenic might have been mixed with it, or have been used instead of it by some unaccountable mistake.

I have no doubt that I am correct in stating that this case was of less duration than three hours. In the depositions before the coroner, the magistrates, and the judge, the witnesses named half-past twelve as the time appointed for dinner, and half-past three as the time of decease. Now, as Mr. Dearlove was expected home from market to dinner, it is very probable that the meal was in some degree delayed, and the housemaid, who dined at the same time, and who gave very good evidence, stated at the trial that her mistress dined at half-past twelve or one.

Considering that the arsenic was exhibited in a solid form, and mixed in a viscid substance, the first appearance and the termination of the symptoms were extremely rapid. I was told by a friend of the deceased, that the latter had been affected for two or three weeks previous to her death with slight diarrhoea, but not requiring medical treatment. I mention this because, if the capillaries of the mucous coat were really in an excited state, it in some degree accounts for the rapid absorption of the poison; it was the absorbed poison, not that remaining in the stomach, which destroyed life.

Wisbeach.

EXTENSIVE INJURY OF THE LOWER EXTREMITY.—RECOVERY.

By GEORGE HILL SMITH, Esq., F.R.C.S.

Stevenage, Herts.

THE following case of extensive injury to the lower extremity, and the perfect recovery under circumstances, is so uncommon, that I deem it proper to bring it under the observation of the Profession.

Hugh M'Gillarray, aged 30, of excellent constitution, thin, wirey in his conformation, and of temperate habits, employed on the Great Northern Railway, on May 28th, 1850, at eleven o'clock a.m., a wagon ran over him, and the wheel passed along the whole of the limb from the foot to the hip, passing over the ribs, at the same time breaking two of them, and dislocated the shoulder. A surgeon in the neighbourhood was called in at the time of the accident, and reduced the dislocation of the shoulder.

On the following morning I was called in, and found the nature of the injury as now described. Although the wheel passed over the whole of the limb, the integuments were untouched, except at two points, viz., in the popliteal space, from which they were completely torn away, and likewise just above the knee, where there was a wound about two inches in extent, as if some sharp instrument had passed through; the whole limb was enormously swollen. On careful examination I could detect no fracture of any of the bones. I learned there was considerable hæmorrhage at the time of the accident; when I saw him it was still going on, and I thought the popliteal vessels were injured. The limb appeared to be quite numbed. He was suffering no pain, and the constitutional disturbance was by no means commensurate with the severity of the injury. I dressed the wounds with water dressing, and kept the limb in the extended position, supported by pillows. From this time to the expiration of a week, the patient went on pretty well; the chief feature in the case being, that the whole limb gradually increased in size, and it was evident that the main injury had been inflicted upon the deep textures of the whole of the extremity; now the constitutional disturbance began to be very severe, the pulse became very rapid, the appetite was lost, and the patient became weak and hectic, and it was necessary to support him with stimulants; suppuration took place in various parts of the limb; openings were made, pus and extravasated blood were evacuated. This state of things continued for a month, at which period it was deemed advisable by the surgeons who had

first seen him to amputate the limb above the knee; the propriety of this measure was enforced upon the patient, but the friends would not consent to it. At this juncture I had the advantage of my friend Dr. Hawkins' advice, who agreed with me that an attempt should be made to save the limb; for although it was evident that the deep textures of the whole of the limb were seriously damaged, none of the important vessels or nerves were injured, and as yet the knee-joint appeared not to be involved. I now took the opportunity of requesting the assistance of my friend Mr. Henry Smith, of London, to whom I am indebted for advice on several previous occasions in difficult surgical cases. This gentleman, in company with Dr. Hawkins and myself, carefully examined the patient. He was lying in a most deplorable condition; the pulse was 130, irritable and weak; countenance was very anxious; the mind was hardly collected, and it was at once evident that amputation of the limb was out of the question in the present condition; the whole of the thigh, from the knee-joint to the hip, was immensely swollen, and on careful examination it was considered that a large quantity of matter existed under the deep fascia. Acting upon this opinion, Mr. Smith made a long and deep incision on the inner side of the thigh, upon which a large quantity of matter was discharged; and through this opening the finger could be passed into a large space, or sinus, which ran close by the bone up as far as the trochanter; and it appeared as though the matter had stripped the soft textures from the bone for this distance; the knee-joint was much swollen, but we could not ascertain as to whether there was matter in it or not. After this operation the patient was liberally plied with stimulants, and on the following day his condition was less dangerous; however, he remained some days in a very precarious state; at times he was very delirious, and it appeared, on one or two occasions, that he was about to sink rapidly; a profuse flow of matter kept up from the wound, and much exhausted him. The chief treatment now consisted in keeping up his strength by large quantities of nourishment and stimuli. At the expiration of a week the patient had rallied much, and the thigh had diminished to one-half its previous size. Mr. H. Smith again saw him, with Dr. Hawkins and myself, and it was now discovered that the knee-joint was seriously implicated, and the ends of the bones were distinctly felt to grate against each other. Notwithstanding this circumstance, the patient had so much improved in his general condition that attempts were still made to save the limb, and he continued under the care of Dr. Hawkins and myself until the expiration of twelve weeks from the date of the accident, when he was removed to the Hitchin Infirmary, and placed under the care of Mr. Shillitoe. At this time his general health was very much improved, but he was still suffering a good deal from constitutional disturbance; there was a large sinus in the thigh discharging, and the articulating surfaces of the knee-joint were destroyed, and it was feared even yet amputation might be necessary. By the judicious care of Mr. Shillitoe the patient rapidly improved, ankylosis of the knee-joint took place; and, at the expiration of four months, he was able to leave the infirmary, walking with a crutch and stick. Soon after Christmas, he was enabled to return to his work. I have lately had several opportunities of seeing this man; he has a good and useful limb, knee perfectly enchylosed, but in such a position that the leg is only half an inch shorter than the other; he does not even use a stick, nor does he wear a high-heeled boot.

I should not have troubled the readers of the *Medical Times* with the particulars of this case; but it is one of those from which any surgeon may learn some instruction, for it shows how extraordinary are the powers of nature in bringing about recovery, even from the most dire accidents, under circumstances when the limited understanding of man would lead him almost to despair of success from the use of the resources of our art. It will be seen, that, although in this case the injury was externally but slight, the deep parts of the limb had been most dreadfully confused, and that the secondary disturbance which arose, and which so much jeopardised the patient's life, was only what could have been expected after such severe local mischief.

As regards the question of amputation, when urged a few weeks after the accident, it is evident that it would have been a futile and, probably, fatal proceeding; for the serious symptoms under which the patient was labouring at the time were owing to a large accumulation of matter which had not been discovered; for when this was evacuated, the

patient at once began to rally. Subsequently, any surgeon would have been justified in amputating the limb when, in addition to the existence of profuse discharge of matter, which had so much lowered the patient, the knee-joint itself was found to be completely disorganised; nevertheless, the complete recovery of this case shows that it is by no means always necessary to remove a joint, even though it may be disorganized, and the individual be under such unfavourable circumstances as existed in this instance.

TRISMUS, FOLLOWING A WOUND OF THE THUMB.

BY RICHARD NEALE, M.R.C.S.,

(Late Physician's Assistant, University College Hospital.)

MARY P., aged 19, previous health very good; never subject to hysteria; regular. May 18, 1851, during breakfast she cut the outer side of the carpo-phalangeal joint of the left thumb, causing profuse bleeding, easily stopped, however, by being wrapped up in rag; but returning in three hours, when her mistress bound the wound up afresh, and nothing more was thought of the accident, the girl proceeding with her work as usual.

At 7 p.m., the same day, she felt as usual, but, about 8½ p.m., complained of feeling faint and very cold, together with great pain in the wound, extending up the arm to the muscles of the neck, with, at the same time, great difficulty and pain in protruding the tongue; the jaws were slightly stiff.

At 9 p.m. I was called in, and found the jaws nearly closed, and unable to be opened; great pain all up the left arm, and on that side of the neck, with stiffness and hardness of the masseter muscles and swelling of the cervical muscles upon the left side; the features had assumed a peculiar anxious appearance; jaws nearly closed; tongue incapable of protrusion; facial muscles twitching, more than natural; for her mistress says, "that she is subject to slight choreic movements of these muscles at times;" feet and legs very cold; not the slightest hysterical symptom. Plugs were placed between the teeth, and a large dose of extract of belladonna, (gr. viiss.) with ten grains of calomel, was given and repeated in an hour; sinapisms were, at the same time, applied to the feet and calves of the legs, and a warm bath prepared.

At 10 p.m. trismus more marked; jaws firmly clenched upon the wooden plugs; slight general tetanus most marked upper extremities; consciousness perfect, but speech impossible; pulse small, natural, or only slightly accelerated.

11½ p.m., placed in the warm-bath. At 12 she was removed to bed, and fell into a gentle sleep till 4 a.m., when she awoke much relieved and perfectly conscious, capable of answering questions. The pain in the arm and neck severe; stiffness of jaws remaining, but they were capable of being opened for a short distance; could swallow fluids with a little difficulty; pupils widely dilated; great pain in head, which she describes as most excruciating.

May 19.—Cephalalgia still severe; complained of general pain. At 10 p.m., there was slight return of the trismus, and the warm bath was repeated, with sinapisms to feet and calves of the legs; after this passed a tolerably easy night.

May 20.—Noon, great tenesmus, with copious greenish offensive stools, relieved by a starch and opiate enema. The pupils were still dilated, and the cerebral disturbance marked. Counter-irritation was applied to the nape of the neck, and at 10 p.m., half a grain of hydrochlorate of morphia administered; at 12 she sank into a profound sleep, and awoke comparatively free from pain in the morning.

May 21.—The effects of the belladonna now began to disappear; the wound looked very unhealthy, discharging a thin grumous matter; caustic was freely applied, and she was ordered quinae disulph., gr. ij.; ext. humuli, gr. iiss., 3tis horis.

May 23.—Able to leave her room, and is now in her usual health, but weak.

Fageley, Staffordshire.

DR. LINDSAY, Deputy Inspector of Hospitals, arrived at the Royal Naval Hospital at Haslar, on the 22nd instant, and commenced duty in the place of the late Dr. Allen. He held office previously at the Royal Naval Hospital, Malta.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

LONDON HOSPITAL.

By NATHANIEL WARD, Esq., F.R.C.S.,

Assistant-Surgeon to the Hospital, and Demonstrator of Anatomy in the School.

COMPOUND FRACTURE OF THE SKULL WITH DEPRESSION—APPLICATION OF THE TREPHINE—RECOVERY.

WILLIAM ESSERY, a temperate, hard-working man, aged 43, joiner by occupation, came under the care of Mr. Wordsworth, having sustained a compound fracture of the skull, with depression of two or three fragments of bone. The injury was situated a little below the middle of the posterior part of the body of the right parietal bone, and its extent was represented by a large, irregularly lacerated flap of the scalp, of a triangular form, which was thrown forwards; laceration of several fasciculi of the temporal muscle, and an irregular space, of about a square inch in extent, occupied by two or three fractured portions of bone, depressed irregularly a quarter of an inch below the natural level.

The accident happened by the man falling off a stage sixteen feet high, on to the dock where he was working. He soon rallied from the immediate shock of the injury, and was sensible when admitted into the hospital, but gradually became drowsy. When Mr. Wordsworth saw him, the drowsiness, though not great, was on the increase, and the right pupil did not act so freely as the left.

An ordinary-sized trephine was applied to the uninjured bone, immediately behind the seat of fracture, and on detaching what was supposed to be the entire thickness of the bone, it was found that only the external tablet had been removed. The absence of the external table was, however, quite sufficient to allow of the elevation and removal of the depressed fragments, without sawing away the internal. This circumstance was owing to the fractured part in immediate relation with the crown of the trephine having been driven on to the dura mater obliquely downwards and backwards, so that the internal table of the undepressed bone from which it had been detached had been broken further back than the external. Four irregular pieces of bone were removed, and on their removal a small dark clot of blood was observed; but whether this was merely on the surface of the dura mater, or over a lacerated wound of that membrane, it was deemed imprudent to find out. Considerable hæmorrhage followed the operation, and the wound was left perfectly open and exposed to the air, so that the blood flowed freely away. The flap of scalp was laid lightly over the wound on the cessation of the hæmorrhage. The effect of the removal of the bone was very marked, for almost immediately after the operation, the pupil regained its natural activity, and all drowsiness speedily subsided. The wound in the evening was dressed with wet lint and oiled silk; the head was shaved, and ordered to be kept cool with rags dipped in saturnine lotion, and the patient was ordered to take a common purgative in the morning.

The patient slept a short time during the night, the intervals of sleep not being marked by any particular restlessness, and on the following day the pulse was 72 and regular; the bowels had acted after a common enema and purgative. On the 2nd night he slept a good deal, but was very restless when awake, and in the morning the pulse was 72, and somewhat laboured; the respiration, however, was free and regular, and he had no pain in the head. The third night was passed in a very restless manner, and in the morning he complained of headache, and felt inclined to be sick. The pulse was 68, soft; the skin hot, but moist. These symptoms being those rather of irritation than inflammation, the patient took eight grains of Dover's powder with decided benefit, for he passed a much better night, and on the following morning felt the pain in the head much easier; serous and bloody discharge now came away from the wound, and he complained of great debility. Erysipelas had supervened in the scalp. He was ordered two ounces of wine, and some arrowroot and beef-tea. The wine was discontinued on the following day, as it caused a rapid rise in the pulse, and throbbing sensation in the wound. The erysipelas subsided about the third day after its appearance, the lower part of the wound having

assumed a healthy granulating aspect, and discharging pus freely. On the 6th day after admission the pulse was 100, skin soft and moist, absence of all anxiety of expression in the countenance, and the patient said he was very hungry. On the 7th day, the nurse stated that he did not get to sleep till one o'clock, wandering a little, and asking for his bed-clothes. The bowels had not acted on the preceding day; on their free action, these symptoms did not recur. On the 11th day a small slough came away from the wound. From this period to the 36th day nothing worthy of note supervened; the wound had gradually contracted; and on that day a small piece of loose bone was removed, including with it about one-third of the border which had been made by the crown of the trephine. During this interval a generous unstimulating diet had been given. The man became an out-patient on the 55th day, the wound having nearly healed; he felt "as well as ever he did in his life," with the exception of being rather feeble.

He comes occasionally now to see Mr. Wordsworth. He has followed his employment for some time without inconvenience, the wound having quite healed, and all pulsation of the brain having ceased to be perceptible from beneath it.

Remarks.—It is a generally acknowledged rule in the treatment of fracture of the skull, complicated with depression, not to have recourse to the trephine for the removal of depressed bone, unless what are termed "head symptoms" supervene. This has become a recognised principle, in consequence mainly of two circumstances; the one, that numerous cases have recovered, in which there has been considerable depression of bone, and in which mechanical interference has not been had recourse to; the other, that the operation of the trephine is by no means of a harmless character; strong evidence existing to prove, that a fatal result has occasionally followed its performance. The propriety of using the trephine in the above instance, can, I think, hardly be called into question. The removal of the depressed and detached portions of bone was had recourse to at the most favourable period possible, viz., on the immediate supervention of symptoms of compression. Had the operation been postponed till the symptoms had become of greater intensity, the result would, in all probability, not have been so favourable as it turned out. The pieces of bone that were removed were irregular and sharp in their outline, depressed upon each other at a considerable angle, and would have acted injuriously, not only by pressing on the brain, through the medium of the dura-mater, but would, in all probability, have set up in addition severe inflammation in the latter membrane, and which might have been attended with fatal consequences, notwithstanding the removal of the fragments on its supervention. The constitutional treatment adopted in this case is worthy of particular notice. From the period of admission to the time the man left the hospital, not a particle of mercury was given; attention being directed to the condition of the bowels, which were kept freely open, to the relief of the constitutional irritation by opium, and the support of the system on the supervention of free suppuration in the wound. The great necessity of attending carefully to the first condition is well illustrated by the fact, that on the day on which the man's bowels had been confined, he passed a restless and slightly delirious night, these symptoms subsiding on their free action. Stimulants in the progress of similar cases to the above should always be administered with great caution, a principle also illustrated in this instance; for it will be remarked, that, even after the exhibition of only two ounces of wine, the pulse rose rapidly, and other symptoms came on which necessitated the immediate omission of the stimulant.

ROYAL FREE HOSPITAL.

By JOHN L. MILTON, Esq., M.R.C.S. Lond.
Medical Registrar, &c.

DISEASE OF THE TESTIS.—EXCISION.

THE commencement of this case dates from a very early period of the patient's life. When a boy of 15, he was playing with a companion, who, in consequence of some slight dispute, kicked him on the testicles with such violence, that the scrotum turned quite black, and he felt severely hurt. After a short time the more urgent symptoms went

away, but as the patient is of an unhealthy appearance, it is quite possible that this had something to do with his present sufferings. At the age of 19 he entered the army, and for a soldier was extremely cautious in his habits, avoiding debauchery, and not exposing himself to infection. About seven years after, however, he was attacked with gonorrhœa, the result of an unclean connexion. On finding himself infected, he attempted to cure the disease by sugar of lead injections, the use of which was followed by a severe testitis. The testicle, in a few days, swelled to such an extent, as to hinder him from walking, and he was obliged to enter the hospital at Devonport. Here the disease was very actively treated, a beginning being made by applying, at one time, twenty-five leeches to the scrotum, and this was kept up till not only the orchitis, but also every vestige of the clap was removed. He was, however, very much weakened by it, and, having bought his discharge, left the army, with the testicle apparently reduced to its normal size and condition, and for two years and a half it remained so.

Two years last Christmas, he was running at the top of his speed, when, his foot catching in some ice, he fell with the greatest violence to the ground, and the testicles were violently squeezed between the hard earth and the pubis. The effects of this were instantly felt; excessive pain and great swelling of the testis came on, accompanied by cold sweats, prostration, and sickness. In this state he went to the London Hospital, where he was admitted as out-patient, and a brown ointment was given him to rub on the testicle, with some medicine to take. The most urgent symptoms passed off, but the testicle remained greatly swollen, and at the end of three or four months, not finding so much benefit from this treatment as he wished, he complied with the request of some friends, who were anxious that he should try St. Bartholomew's. After several visits to this hospital, the surgeon in attendance concluded that there was some fluid in the tunica vaginalis and tapped it, which brought away a quantity of serum and soon reduced the bulk of the swelling. Some medicine was also given him, and he remained four or five months under treatment; but, finding that the testicle was again increasing in size, he gave up attendance and entirely neglected doing anything for it for about twelve months.

In November of last year he came to the Royal Free Hospital, where he was seen by Mr. Jackson, the house-surgeon, who tapped the hydrocele, at this time much in the same state as when he left off attending at St. Bartholomew's, and let out five or six ounces of water. Soon after this he was blistered, and put upon iodine, which was continued with the greatest perseverance for some months; the blistering was also repeated, and on two occasions the water was drawn off from the sac. All this time he paid the greatest attention to his health; the testicles being carefully suspended, and the secretions corrected, from time to time, by the employment of mercury and chalk with rhubarb.

In the spring, he went to the sea-side, where his health, which had suffered considerably, was recruited by change of air; but the scrotum now gave way at the most depending part, just as if the weight of the heavy testicle had burst it, and he returned to town with a sinus formed, and the tunica vaginalis hard and thickened, surrounding the testicle like a shell. As the case presented no hope of cure but by extirpation, this was proposed to him by Mr. Gay; and, as he freely consented, it was performed on the 22nd August. At the present date the wound has almost healed, and the patient much improved in health and appearance. He feels relieved from a burthen which had become insupportable, and there is now every probability of his doing well, although we must not omit to state that the other testicle is considerably enlarged and hardened.

Up to the time of being operated on, this man wore a very unhealthy look. He is tall and somewhat spare; dark haired and sallow, with brown eyes and taper fingers; the nails being exceedingly round. Altogether his appearance appears to indicate that vice of conformation which is supposed to usher in and bespeak a strong tendency to malignant and purulent forms of disease; but, except from this affection of his testicles, he has suffered very little from ill health; nor have any members of his family or parents given any signs of such a diathesis. But there is something suspicious about his physical conformation; for, even in his present improved state, he does not look like a man who could ever attain to a high standard of health.

On opening the vaginal sac it was found excessively

thickened, but not very much distended; it contained a small quantity of green, sanious fluid. The epididymis was enlarged to three or four times its usual size, its texture being infiltrated with a fibrinous deposit, partly whitish, and partly translucent; it was elastic and very firm, having almost the feel of carcinoma; the testicle was much atrophied, and contained some of the deposit found in the epididymis. Mr. W. Adams made a minute examination of the organ, and found that "the tubular structure was generally condensed by fibrinous exudation in many parts, in various stages of degeneration. In the midst of the translucent fibrinous material were several irregular patches of a yellowish or buff-coloured matter, such as are frequently seen in fibrinous exudations; the surrounding parts were in all parts infiltrated with old and recent inflammatory exudations. Mr. Adams did not think that it was a scrofulous affection, but that it was essentially of inflammatory origin."

Mr. Gay considered that "the deposit was the result of inflammatory action, and, although in some respects, viz., in the colour and consistence, it did not correspond with that found in the ordinary cases of chronic orchitis, little doubt could be entertained that the testis and its appendages had suffered from this form of disease." "That it is to be remarked, that the person was of an unhealthy phthisical appearance, and that both testes assumed the same morbid changes, the one taken away having outstripped the other in the progress the disease was making."

PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

BRISTOL GENERAL HOSPITAL.

By W. M. CLARKE, Esq.,
House Surgeon.

DISLOCATION OF RIGHT SCAPHOID AND MID CUNEIFORM BONES.

RICHARD HARRIS, aged 30, a plasterer, admitted under the care of Mr. Godfrey, on the 14th October, 1850. He had fallen off the roof of the Great Western Terminus, a height of thirty feet; he pitched on his feet.

The left foot is very much swollen, but there is no injury to either of its bones.

The right foot is also much swollen. The scaphoid bone is partially dislocated, forming a prominence above and in front of the astragalus, and behind the cuneiform bones. In front of this, near its mid, is a smaller prominence, which is somewhat higher than the displaced navicular. By depressing the metatarsus and pressing on this smaller prominence, it easily slips into its place. On removing the pressure and elevating the metatarsus, it as easily slips out again. This was done several times, but it then slipped in and would not be again displaced. The natural position of the scaphoid was restored by extension from the toes. Its reduction was not attended with any difficulty. He was also suffering from symptoms of concussion, and had been quite senseless.

15th.—Is much rallied; complains very much of pain in his back. Both his feet are extremely swollen, and the swelling extends up each leg nearly to the knee. There is a good deal of ecchymosis. Ordered a purgative and cloths wrung out of cold water to the legs and feet.

18th.—Feet much swollen, but not so painful. Legs not so much swollen.

25th.—Feet less swollen, but he cannot yet stand.

November 5th.—Can walk a little with crutches, but can scarcely pitch on his right foot.

6th.—Was discharged.

This case is interesting from its rarity. It is uncommon to have any dislocation of the scaphoid bone, and still more uncommon to have a complete dislocation of the middle cuneiform bone. One can easily understand, however, how a wedge-shaped bone, with its thickest part upward, could slip up when all the bones of the tarsus were so violently squeezed together, especially when it is taken into consideration that its ligamentous connexions are not so strong as those of the other two cuneiform bones.

The diagnosis was by no means difficult; the whole foot felt loose and shaky.

The reduction was easy, and nothing but rest in bed was required to keep the bones in their proper position.

POISONING BY EXTRACT OF BELLADONNA.

Mary Jenkins, aged 41, admitted on the 11th March, 1851, under the care of Dr. Fairbrother.

6 p.m.—At 9 a.m., to-day, she swallowed some liniment for a pain which she had in her stomach. This liniment was of belladonna. She took more than ʒss., which contained grs. xv. of the extract.

She soon passed into a lethargic condition, and has ever since remained so.

Face expressionless; pupils very widely dilated, the irides being mere lines. When a candle is brought close to her eyes, she slowly closes the lids; but, if the lids be held open, the irides do not act, even when the light is very close to the eyes; extremities cold; pulse about 72, small and sharp. When roused, she indistinctly mutters an answer, but not at all to the point.

The person who brought her, said that she had excited vomiting soon after taking it, by tickling her throat with a feather. They have left her until this time, without applying for medical assistance; but, finding that she was gradually getting worse, they brought her here.

Ordered, Zinci sulph. ʒss. s. s.

7 p.m.—Has vomited freely. Is much the same.

Brandy ʒss. directly.

To be walked up and down briskly in the air.

9 p.m.—Has been kept moving since 7. She will now give a rational answer. Says she feels much better, but very dizzy; that she has a tightness in her throat. She staggers in her walk.

Repeat the brandy; to be kept walking.

11 p.m.—Has been kept roused, though not walking all the time. Says she feels much better; but complains of a "catching pain" in her stomach. Pupils the same.

To go to bed.

12th.—Has slept soundly; pupils still very much dilated; the irides act slightly; skin warm and moist; pulse 80; moderate volume, and soft; tongue moist and clean; not thirsty; appetite pretty good; bowels not moved since admission; has passed enough urine.

R Spt. ammon. co. et spt. æther. sulph. co., aa. mxxx.; mist. camph., ʒj. Ft. haust., 6tis horis sumend. Haust. purg., ʒjss., s.s.

13th.—The pupil is smaller. The irides act, but very sluggishly. Says that her sight is clearer. She answers much more readily, and her manner is not nearly so strange.

Rep. Mist.

19th.—Has gradually improved. She now only complains of a tingling in her legs. Her pupils are now of a natural size, about that of a split pea. The irides act well and readily. She has no giddiness nor dizziness.

Has continued her mixture regularly.

Omit medicine.

This, again, is a case of some interest. The effects of the poison were well marked. The account given when she was brought was, that she had drank some liniment that her husband was using. This, with the extremely dilated pupils, enabled one to come to a correct diagnosis. It was subsequently verified by the remainder of the liniment, and more accurately, from the husband having had it from the hospital, being an out-patient. That her eyes retained some sensibility to light was proved by her shutting her eyelids on the approach of a candle. The irides were completely paralysed. The lethargy was very complete. As to the treatment, it was principally directed to rousing her and keeping her awake.

RUPTURE OF THE LIVER.

John Newall, between 2 or 3 years old, admitted on the 6th February, 1851, under the care of Mr. Godfrey.

He had been run over by a heavy cart. There was a mark of the wheel along the upper part of the chest. No other appearance of injury. He gasped about once after I saw him, and died.

Post-mortem.—Cavity of peritonæum full of dark-coloured fluid blood. The liver torn through its whole length, at the junction of the right and left lobes. The two portions were only held together by the vessels which remained entire.

No large vessel was injured. The rupture was just to the left of the fissure for the vena cava inferior. No other lesion found.

It is curious that the mark of the wheel was along the upper part of the chest. There was not the slightest external appearance of injury to the abdomen.

THE MEDICAL TIMES.

SATURDAY, AUGUST 30.

QUACKERY PROTECTED BY LAW.

THE public, from its highest to its lowest members, seems to be perfectly ignorant of the real value of the claims which the Medical Profession has to its support. The accumulated experience of past generations of observant and thoughtful men, sifted and appropriated by the most recent,—the accuracy of modern pathology, and the simple and rational therapeutics flowing from a more exact knowledge of disease and a more inductive method of observation,—the consequent superiority of the regularly qualified practitioner of the present day, not only over his predecessors, but over all others who have not undergone the same rigid training nor inherited the same advantages,—the considerable expense which a compliance with the law of the land and the conscience of an honest man make necessary to acquire a due title to practise the Profession, and the guarantees thus afforded to the public,—are all ignored as null and valueless, when an appeal is made for protection against the audacity of impostors, and for the defence of the public against their artful solicitations and rash and ignorant practices. There is a singular obliquity of perception among all classes upon this subject. Even our Judges are not free from it. It is true, where there is no law there can be no judgment; but we believe that many decisions of the Judges in relation to illegal practice, are so lax as practically to set at nought the small protection which the law really affords. It is obvious to every sound and reasonable mind, that when a charge of manslaughter for maltreatment is preferred against a common quack, he should not be regarded in the same light, nor receive the same indulgence, as a regularly qualified practitioner. The one is *primâ facie* an impostor, the other has given guarantees for his competency, and has obeyed the statute-law of his country. The presumption in the former case is, that the man is ignorant, and, if ignorant, therefore rash, and liable, in the eye of the law, to punishment for injury inflicted through his ministrations. We are sorry to say that this distinction is not generally observed, and that when an attempt is made to bring justice home to a presumptuous offender, quacks are viewed with the same lenity as regular practitioners.

A case has been recently tried before Mr. Justice Wightman, in which an agent of the well-known Dr. Coffin was charged with causing the death of a boy, by the administration of lobelia and other powerful drugs. After hearing evidence, the man was acquitted. We do not venture to complain of the verdict. The evidence was obscure, contradictory, and would not carry a condemnation. The patient appears to have died of inflammation of the bowels, and it was alleged that the lobelia and valerian caused or aggravated the malady. On the other hand, it was asserted that the boy had been ill some time before being seen by the herb-doctor, and that many other persons had taken the same vegetable composition without suffering inconvenience, and

with much benefit. We do not arraign the verdict. The man has escaped, and we trust that the lesson he has been taught will produce for him more of good than evil. It is of Mr. Justice Wightman we complain.

He charged the jury, that a medical practitioner, or any other person undertaking the cure of a disease, could not be considered guilty in case of death occurring, unless gross ignorance had been manifested. We should have thought that there could have been no difficulty in proving this point in the instance of a dealer in herbs; but whether so or not, we protest against a common quack at any time being put upon the same level, as regards professional competency, with a legally-qualified practitioner. Again, in the case under remark, the Judge directed that, although the herbs might have aggravated the disease, yet it did not appear that the defendant was aware that inflammation of the bowels existed. What, to the mind of any rational man, does this prove, but the gross ignorance which should have made the defendant amenable to the law? It is not assumed that he committed wilful murder, but only that he employed dangerous remedies, in gross ignorance of the nature of the disease he professed to cure.

We have no hesitation in saying that Mr. Justice Wightman grievously misunderstood the true bearings of the case before him, and that charges such as this will do infinite damage to the respectability of our Profession, while, by depreciating the value of the guarantees now enjoyed by the public, they will render insecure the health and lives of thousands of Her Majesty's subjects. If our Profession be an institution useful to the public, it ought to be supported by the Judges; but if uneducated quacks are to be at liberty to treat disease under the same legal protection enjoyed by duly-qualified men, then reckless and dishonest innovation will be the rule, the Profession will be disorganised, and the public cheated and tortured by a swarm of harpies, who will live by preying upon its ignorance and credulity.

THE UNIVERSITY OF LONDON.

THE establishment of the University of London was an event most favourable to the progress of the science of medicine. Its curriculum and its examinations are of a very superior character; and, as a consequence, its honours are sought for by men from all schools with the greatest avidity, while Colleges plume themselves on the number of their students who are placed in the first of the two divisions into which those who pass the examination are divided, and on the prizes carried off by their *alumni*.

The following are the numbers of the students from the different Colleges who were placed by the Senate:—

Colleges	1st Div.	2nd Div.
University	10	2
King's	2	4
Guy's	2	1
St. Thomas'	2	0
St. George's	1	0
London	0	1
Queen's (Birmingham) ..	0	1
Richmond (Ireland) ..	0	1

The prizes were divided between University and Guy's men as follow:—

University.—Two Exhibitions and Three Gold Medals.

Guy's.—One Exhibition and One Gold Medal.

So that this year University College-men have come off with flying colours.

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF
MEDICINE AND SURGERY.

[FOURTEENTH NOTICE.]

THE subject of vaccination—its preservative power, and the means by which that acknowledged power may be sustained in the greatest state of efficiency, is one of the most momentous that can engage the attention of the Profession at the present time; and it is now doubly important to discuss these questions, as we find one of the physicians of the Small-pox Hospital, who, from his position, must have greater opportunities of investigation than most of his brethren, impugning its complete preventative efficacy. Another question of great importance is, whether any deterioration of the properties of the vaccine lymph, by which its protecting power is diminished, occurs by repeated and continuous transmission through the human body for a long series of years,—whether, in short, it is necessary to obtain fresh supplies from the cow, or to rest satisfied with the original stock. Were Jenner now alive, and could his opinion be taken, we believe it would be given in favour of fresh supplies at short intervals; because we have no doubt but that the fresh lymph is much more energetic in its effects on the system than that now furnished by the National Vaccine Institution. Another, and perhaps the most important question relating to this subject, is the identity or non-identity of vaccine with variolas; because, if the former be identical in its essence with the latter, of which it is only a modification, the preservative power is readily and satisfactorily explained; and we may anticipate, that vaccination will preserve as many patients from a subsequent attack of small-pox as will be preserved by the occurrence of natural or inoculated small-pox from a second invasion of the same disease. As there exists sufficient evidence, that two, and even three attacks of variola have occurred in the same individual, it is evident, that, even if vaccine be admitted to be a modification of variola, neither of them can afford a complete exemption from a subsequent attack of small-pox.

It is a curious circumstance in the history of discovery, that, not unfrequently, two minds have been separately and independently brooding over the same subject; the one making more rapid progress than the other, places the earliest account before the public, and is thence properly styled the discoverer. Such appears to have been the case in what we must admit to be the demonstration of the identity of variola and vaccine. It would seem that Mr. Ceely, of Aylesbury, and Mr. Badcock of Brighton, were both instituting experiments on the inoculation of the cow, and the production of vaccine lymph at the same time, but that Mr. Ceely was the first to complete his experiments and publish to the world the *fact*, that vaccine disease may be produced in a healthy cow by inoculation with the matter of small-pox, and that the lymph thus produced in the cow being introduced in the ordinary way into the human system, produced not small-pox, but vaccine. Mr. Ceely, as we know, has endeavoured to keep up a supply of the lymph thus produced, but being situated in a comparatively small town, we are uncertain whether he has been successful in preserving his original stock, and we are not sure whether he has repeated his original experiments on the cow. To Mr. Badcock is due, if not the credit of an original discovery, the great merit of extending the researches so as to afford as complete a demonstration of the fact as could be desired. Mr. Ceely inoculated one or two healthy cows, produced thereby regular vaccine vesicles on the udders, and vaccinated children directly from these cows. That the virus thus obtained was much more powerful in its action than that from the old stock distributed by the National Vaccine Institution, we can testify from personal experience. Mr. Ceely

kindly furnished the writer of this article with a supply of points four removes from the cow with which he vaccinated his eldest son. The vesicles produced were much larger; the areola and the subsequent inflammation so great as to extend far below the elbows, and the constitutional disturbance much greater than that produced by the ordinary lymph. May we not infer a proportionally greater preservative effect?

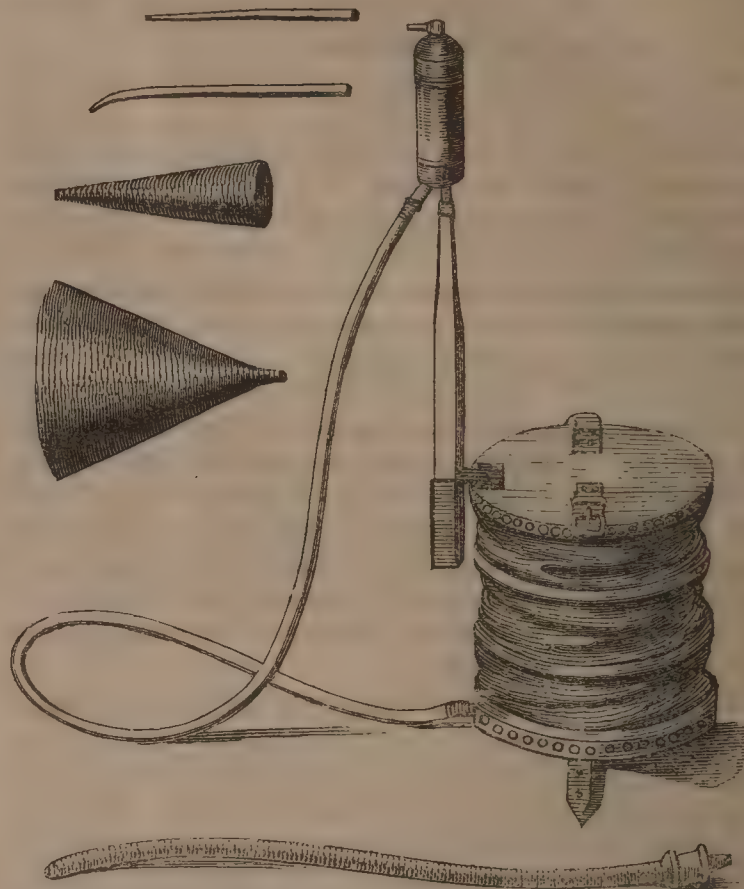
We will now allow Mr. Badcock to speak for himself. In a letter addressed to a physician holding one of the highest appointments in the kingdom, he says: "I have now myself vaccinated more than eight thousand patients (that number forming but a small proportion of those vaccinated by others, supplied from my stock); consequently these had ample opportunity of testing it, and my experience convinces me that vaccine thus obtained is superior to that of the ordinary kind. I am in possession of interesting and well-authenticated facts to prove, that in many families where I have vaccinated a part, and the other part were vaccinated from the old stock, small-pox has subsequently occurred in the latter, but in no one instance has it happened to my patients, although equally exposed, and not separated from those infected. Scarcely a week passes that my vaccine is not brought in contact with small-pox; for, in case of need, the public institutions and the medical officers of this parish are glad to avail themselves of my supplies, and my house is at all times open for vaccination, getting in return small-pox virus, with which, since the commencement of my experiments, I have inoculated nearly two hundred cows.

"The little interest that has been shown by the Profession generally in this matter, does not lead me to expect that my specimens will attract much notice, more particularly as many suppose that I have adopted Mr. Ceely's experiments; but it is well known in this neighbourhood that my attention was directed to the subject several years before Mr. Ceely succeeded in his experiments; and, although I had not produced vaccine until some months afterwards, it was before they were known to me, and I believe prior to their publication. The object I have always kept in view has been to give this new description of vaccine a fair trial; for as Mr. Ceely is situated in Aylesbury, with a small population, I thought it extremely doubtful if he could, as small-pox would seldom occur, and I soon found he had a difficulty in keeping up his supply, as you will perceive by a portion of his note enclosed."

What are the authorities of the National Vaccine Institution about, that no inquiry is set on foot as to the validity of such statements as these, when at the same time Dr. Gregory is expressing strong doubts as to the preservative power of the present vaccine virus? Why did they reject Mr. Ceely's offer of a supply of the new vaccine ten or more years ago? When such curious as well as important researches are brought before the Profession, why are they passed over with silent contempt by those in office? We can only account for the neglect by the assumption, that officials of all sorts are averse to any change from the ordinary routine. We are convinced, from our own experience, that the occurrence of small-pox after vaccination is becoming much more common than heretofore, and that the confidence of the public in its efficiency as a prophylactic is diminishing. It is, therefore, not unreasonable to demand from the authorities, on the part of the public, an impartial investigation of the statements put forth by Mr. Ceely and Mr. Badcock, whose researches deserve the highest meed of praise in a scientific as well as a practical point of view. We hope to find that this demand will be acceded to, and that a revision of the entire system at present adopted by the National Vaccine Board will follow in due course. The progressive stages of the vaccine vesicle, from the eighth to the seventeenth day, are exhibited by means of daguerreotype representations from the actual vesicles.

The only apparatus for medical purposes we have space to notice this week is the Aneuralgicon invented by Dr. Downing, for the relief of neuralgia, by the application of a stream of heated air, either alone or combined with the fumes of narcotic or sedative substances. It consists, as will be seen by the figure, of a bellows of peculiar form, by which a stream of air is forced through a flexible tube into a small box, containing the ignited substance. The leaves of hyoscyamus, belladonna, or opium, with some ligneous matter to support the flame. From the upper part of this bar a jet issues, to which tubes or funnels can be attached, suited in

size to the part to which it is desired to apply the stream of heated air, charged with the narcotic vapours or fumes.



Dr. Downing reports, that he has had ample experience of the beneficial effects of this remedial agent in numerous cases of neuralgia. He attributes the origin of the affection to cold, accompanied by moisture; and he states, that the paroxysms were frequently produced by these causes. Hence he infers, that the application of a current of warm, dry air seems to be the natural remedy. The sedative is serviceable in quieting the local nervous excitement and spasm which are usually present. He looks upon this application as a powerful and valuable adjunct to other remedial agents, when judiciously and perseveringly employed; he does not put it forward as a sole remedy, but uses it in conjunction with the internal remedies demanded by the nature of the individual case. We may mention, in concluding this notice, that Dr. Downing is the author of a recent Jacksonian Prize Essay on Neuralgia.

REVIEWS.

A Letter to Professor J. Y. Simpson, concerning the Resolutions Recently Passed by that Body in Reference to the Therapeutic Practice commonly called Homœopathy. By WILLIAM MACLEOD, M.D., F.R.C.P., Edin. 1851. Pp., 45.

Dr. Macleod is one of the delinquents who have lately fallen under the censure of the Edinburgh College of Physicians, and, as he does not feel disposed to submit tacitly to their condemnation of his practices, nor to comply with their request to resign his fellowship, he has published a statement of his reasons for becoming an homœopathist, and for continuing to enrol himself among a class of men who profess such widely different opinions. As we are about to criticise this statement freely, we think it is but just to Dr. Macleod, to preface it by stating that we did not hesitate a moment after reading his pamphlet, in admitting his perfect honesty of intention. He is no quack in the offensive sense of the term; and we believe him to be what very few of his associates are, a sincere believer in the nonsense of Hahnemannism. But this opinion, and a kind of good will which we felt towards Dr. Macleod after reading his pamphlet, will not prevent us from stating our opinions openly of the evident causes which have led to his perversion.

Dr. Macleod commences his pamphlet by telling us that

he was a very diligent student, that he attended carefully the hospital wards and the dead-house, and compared the diagnoses of the cases with the after-death appearances, and with the treatment pursued. After *three years study*, he came to the conclusion that "the practice followed was erroneous, based on no settled principle, without science, and consequently a blind, and therefore, necessarily a bungling art." He therefore resolved, "never to have to do with what is called the drug or allopathic practice."—P. 3.

It is evident that Dr. Macleod's faculties are of no common order, when he thus, in three years, decided that the art which has flourished for 2000 years was blind and erroneous. The University of Edinburgh may be congratulated on training up in three years men, beside whose enlarged perceptions Alison, Christison, Simpson, and Bennett are mere bungling boobies.

"O, wise and upright judge!
How much more elder art thou than thy looks."

We miss the old-fashioned virtue of modesty it is true, and a censorious critic might doubt whether a little further delay and questioning might not have been advisable before the new-fledged student condemned the veterans of the art. But leaving this, Dr. Macleod must allow us to observe, that there are practising in these countries some 25,000 surgeons, many of whom have, for many cycles of three years, attended cases, made *post-mortem* examinations, and with as much desire for the truth as Dr. Macleod, have endeavoured to determine the effects of treatment. We find that these observers have arrived at conclusions differing somewhat from those of the precocious Edinburgh student.

Just at this time, when Dr. Macleod's mind was unsettled in its primitive belief, he came in contact with an homœopathist, and, being impressed with the doctrine, he went to Vienna, and spent *four months* in watching the treatment at the Homœopathic Hospital, and in comparing it with the "negative treatment pursued by Dr. Skoda, and the allopathic under one of his colleagues."—P. 5. He decided that the homœopathic was the most efficient, the negative less so, the allopathic least of all, and even dangerous. He also regarded it established, that "medicines given in quantity not amounting to more than the ten thousandth part of a drop of the pure tincture, have, when properly administered, a powerful effect in controlling and destroying many diseased actions."—P. 5.

The extreme activity of Dr. Macleod's perceptions is as obvious in this as in the former case. Four month's investigation, once more gave him a creed, and this time it was an infallible one, with no perplexities, no difficulties, no doubts, and no regrets. He has not told us how, in the short space of four months, he managed to gain the information which made him an homœopathist; but as he has not told us, and as the omission takes off something from the value of the conclusion, we shall give an hypothetical sketch of the system which so clever and conscientious an observer would of course adopt.

His object being to compare three several methods of treatment, he would select at first a certain number of cases of a specific disease, under each of the three physicians. He would take care that these cases should be exactly parallel, that the ages should be equal, the general constitution and habit sufficiently alike, the previous mode of living identical or nearly so, and the period of disease the same. He would then inquire whether previous diseases or previous treatment had modified the case so as to alter in any way the effect of the means about to be employed. Having finished these preliminaries, he would regard the external circumstances of the patients; he would see that no unfavourable tendency was given by hygienic conditions existent in one case and not in the other, such as locality, structure of the hospital, number of patients in a ward, etc., for he would know that some hospitals, as the Hôtel Dieu, at Paris, are notoriously unfavourable for treatment, while others are quite the reverse. He would then examine whether the several physicians whose treatment he was about to investigate, were equally careful in certain important matters, such as the kind of diet, the degree of ventilation, and the temperature of the air, the personal cleanliness of their patients, etc. Having settled all these preliminaries, and having obtained comparable cases, or made allowance for important differences at the commencement, he would then verify the diagnosis carefully, and would also lay down rules for himself as to the time when he would consider that

convalescence had commenced. Then he would day by day take notes of symptoms and changes, and make complete histories of all his patients. In this way he would patiently persevere until he had a certain number of cases, because he would know that we never can be perfectly certain that causes untraced by us may not have influenced the result in any particular case. When, to avoid such individual fallacies, he had got the correction of large numbers, he would carefully analyse them, and compare the symptoms during treatment, the duration, the period of convalescence, and the sequelæ. One disease having been thus finished, he would take another, and act in the same way.

That Dr. Macleod should have been able to accomplish all this in four months is almost incredible, and indeed he could only have done it in the case of some acute diseases, (for the time was too short for chronic cases,) and then we can only say that the amount of labour he must have gone through must have been prodigious. The cases he found in the hospitals of course he could not employ, and those he left there were necessarily useless, as he could not have the result; so that he could only use the cases admitted during his attendance, and in process of convalescence before he left. We know not which most to wonder at, Dr. Macleod's extraordinary industry, or the unheard of opportunities which gave him the power of using so many comparable cases. Because, of course, Dr. Macleod did not rest satisfied with one single disease, but went through all the usual acute diseases, and then generalised his results, and received the conclusions as to chronic cases upon faith. However, if Dr. Macleod has collected this evidence, and of course he has done so, else he could not be an homœopathist, we trust he will give us the benefit of it; this would advance his cause better than any arguments derived from the "diligent student's" career, or from the assertion that what he saw at Vienna convinced him of the fallacy of legitimate medicine.

Leaving Vienna, Dr. Macleod visited an hydropathic establishment, and was soon convinced of the powerful effects of this treatment. Here we do not blame him; water when properly used, is indeed "*febrifugum magnum*," as Currie called it; we have only blamed that charlatanism which made a treatment of this kind applicable to all diseases. When properly conducted, we do not doubt that, in a certain number of cases, the air, the exercise, the diet, and the water of hydropathic establishments are powerful remedial means.

After having given us, in the first seven pages, his previous career, Dr. Macleod proceeds to explain his theoretical views about diseases and their treatment. He talks really sense for some time, and commits only the error of supposing that what he says of the effect of diet, of air, and of exercise, is anything new. This is what the homœopathists continually do. They christen us by the absurd name of "Allopathists," and are pleased to represent us as a lot of drug-dealers, whose only notion is cramming the *Materia Medica* down people's throats. They forget that our object is to cure; and we do this at one time by a judicious regulation of diet, by the use of water, by change of air and scene, by enforcing ease of mind, or, as the case may be, by giving medicines, whose action, whether purgative, diuretic, or tonic, may aid us in our aim. The coolness with which the homœopathists appropriate what they like, and leave us the residuum, is rather amusing. When reading their books, we are often tempted to cry out with Dennis, hearing his rival's melo-drama, "By G—d, that's my thunder."

All this is, however, beside the question. We do not blame a man for using, as well as he can, principles of regimen in treating his patients, but for neglecting to use them;—one great object of our Profession is to do away with many of the causes of disease, by giving the people pure air, pure water, and by teaching them to restrain their vicious propensities and evil habits. But this is not homœopathy. We must administer drugs in many diseases—all the regimen in the world becomes in certain cases only accessory—medicines must be added. Both we and our opponents agree on this point. The practitioners of legitimate medicine give drugs in quantities which have been ascertained by use to produce certain effects, and in accordance with rules which have been deduced from experience; the homœopathists also give drugs, but in doses which produce no perceptible effects, and in accordance to an hypothetical rule, of which they cannot advance a single example. The question lies in a nut-shell; a grain of opium makes a certain man sleep;

the decillionth of a grain produces no effect on him—any one may try this himself if he likes. If now, we wish to make this man sleep, should we give him a grain or an infinitesimal part of it? It is ridiculous to say that the infinitesimal part produces the same or a greater effect than the grain. The experiment can be made by all, and has been made by thousands. As to the rule that "*similia similibus curantur*," it is an hypothesis without a foundation; we have, heretofore, called on the homœopaths to advance their proofs and cite their cases, and, with the exception of that miserable and contemptible nonsense in which Dr. Epps and men like him indulge—such as, that limbs frostbitten are rubbed with snow, etc.,—we have not been able to find in the works of Hahnemann and his followers a single instance in point.

Dr. Macleod is no exception to this rule; he has not a single line of what can be called argument for the dogma "*similia similibus curantur*," but he gives at page 18, what he calls the principles of rational and systematic practice, and at page 23 he states, that in the two first clauses he has given what he considers the physiological grounds of Hahnemann's maxim. We will cite these two clauses, and, in so doing, we will make our objections and remarks in brackets. They are Dr. Macleod's articles of faith:—

1. "If the causes of disease were always known or within reach, the process of cure would consist in destroying or abating them. [Has any one ever doubted this?] But though causes cannot always be reached, the organic seat of the disease is generally known. [Yes, in a certain number of cases.] Certain classes of diseases affect certain tissues or organs; and the same tissue or organ, when diseased, or unnaturally excited by any cause, gives rise uniformly to the same class of disagreeable sensations or symptoms. [Very true.]

2. "It is found that two diseases cannot co-exist in the same tissue, the more powerful one uniformly pressing out or extinguishing the other. [A very doubtful statement.] If, when a tissue has become diseased from unknown causes, it were possible to introduce into the same tissue, by some known or controllable agency, another disease of due amount or intensity, it follows that the original one *might* be extinguished, and, as the indirect disease or excitement depends on the presence of an irritant we command, it too could be withdrawn at will, and its effects destroyed."—P. 18.

Now, some of these views have been often professed by theoretical writers, and even by men of the first genius in our profession; we think them very doubtful, but we have no time to enter into their examination. Of one thing, however, we are very certain; they are not translations of the homœopathic dogma. Dr. Macleod says we are to introduce one disease to expel another; Hahnemann says we are to give in a disease the drug which produces the same disease. Dr. Macleod is no more an homœopathist than we are, and we are only too happy to be able to inform him, that the Edinburgh College could never have intended to include him in their black list. He does himself great injustice in allying himself to those who adopt a maxim so opposed to his ideas as that "like cures like."

If, notwithstanding this real difference of opinion, Dr. Macleod still continues to enrol himself among the knavish followers of a mad leader, we will propose to him a question which we beg him to solve on the homœopathic maxim. There is a certain disease called diabetes mellitus, in which sugar in large quantities appears in the urine. Will Dr. Macleod point out a single drug, which causes sugar to appear in the urine? If he cannot find one, how is it possible to treat diabetes homœopathically? But if Dr. Macleod be wise, he will not attempt to answer his question, but will indulge in that inextricable torrent of verbosity with which the followers of Hahnemann dexterously avoid coming to the point.

The last part of Dr. Macleod's pamphlet quits the subject of Homœopathy to attack legitimate medicine. Now, this was the grand tactic that Hahnemann adopted, and he over-rated purposely the imperfections of medicine. God knows that in an art, surrounded as ours is with difficulties, the wisest must commit mistakes, and the most cautious occasionally do harm. But such errors should no more lead us to abandon a practice productive of immense benefit, than the few deaths from chloroform should lead us to neglect the means which Providence has given us of alleviating pain. At pages 35 and 37, Dr. Macleod gives examples of differences in the treatment of fever and of pericarditis. But he must know, that all that has ever been attempted to be enforced in

the majority of diseases is the *direction* in which treatment should tend, and that each individual case must necessarily be treated somewhat differently from all other cases. A general rule may be laid down, that stimulants are advisable after a certain day in typhus fever, or that pneumonic patients should be bled; but every man knows that the amount of stimulus or of bleeding must be settled afresh in each case by the cautious and educated practitioner. As to the difference in the treatment of pericarditis to which he refers, medicine ought not to be blamed because it is imperfect. Supposing, at the present moment, that we are unable to say whether mercury or antimony is most useful in pericarditis, is that any reason why we should leave off treating pericarditis as well as we can with our present knowledge of it? We are to do what we can to increase our knowledge, holding fast by what we have of certainty, and it is much; and striving day by day to solve the problems which necessarily beset this science, as well as every other department of human knowledge.

We could say much on this point, but our space forbids, and moreover it does not bear on homœopathy. If Dr. Macleod could convict us all of constant blundering and universal error, it would not make homœopathy one bit more true. If men differ in their treatment of fever, does that show that "*similia similibus curantur*," or that, by mixing a drachm of laudanum with the Atlantic Ocean, you obtain a more potent agent than the undiluted tincture?

In conclusion, we are afraid Dr. Macleod has made his case worse. We find no arguments for homœopathy in his pamphlet, but many indications of erroneous habits of thought. Shrinking from the necessary difficulties of the most difficult of arts, and overrating the importance of a theory of the action of medicines, (a thing which we shall perhaps never have,) he has thrown himself among the supporters of a heresy propounded by a bolder and more masculine intellect than his own. We see in his pamphlet the indications of a mind captious and timid, but probably acute and rapid. He has, already, as we have seen, essentially modified the dogma of Hahnemann, and we doubt not that, as he grows older, and finds that difficulties attend all systems, and that he cannot, as an homœopathist or a water doctor, escape the inevitable consequences of imperfect knowledge, he will become more lenient to the art from which a false notion of superior certainty and success has alone seduced him.

John Hunter's Works. By PALMER. With Notes by Professors OWEN, BELL, &c.

There exists no one, we presume, calling himself a member of the Medical Profession, who would consider his library complete without the works of John Hunter. This great man, the founder of the modern school of scientific surgery, has, unfortunately perhaps, clothed his ideas in language so guarded, terse, and obscure, that it is only by frequent re-perusal of his writings that we become acquainted with the power of his reasoning, and the extent and originality of his views.

The edition published by Mr. Kimpton is singularly moderate in price. The four octavo volumes, with the Atlas of 63 plates, are offered for 30s. We strongly recommend those unprovided with the work to take advantage of the opportunity now afforded them of procuring it upon such easy terms.

GENERAL CORRESPONDENCE.

THE POOR-LAW BOARD AND THE HOMŒOPATHS.

[To the Editor of the Medical Times.]

SIR,—Professional engagements having kept me from attending the Brighton meeting of "The Provincial Medical and Surgical Association," I have perused with much pleasure in the *Medical Times* the Report of the Committee of that body, read by Dr. Cormack, on Irregular Practice. I heartily congratulate the Association for thus plainly and decidedly expressing its sentiments on a subject of such momentous importance to the Profession as well as to the public at large, involving, as it does, the character and position of the former, and, I may venture to say, the security and comfort of all.

I trust this Report, which emanates from so vast and important

a body of Medical Practitioners, will tend to induce those aristocratic patrons of humbug who sacrifice their senses to such monstrous quackery, as well as those legally-constituted Poor-law authorities who elect their medical officers from the ranks of such charlatans as the professors of the doctrines of Hahnemann, to reflect ere they continue to support a principle which is subversive of common sense, and, I may add, dangerous in its operations and results.

Let me ask, Is it right that the life of the English pauper should be entrusted to the followers of such a delusive system? It will be in the recollection of your readers, that in March last, a poor man resident in the district of the Honiton Union, died from strangulated hernia. He had been attended by a homœopathic medical officer, who had given him (previous to an operation subsequently performed) the third dilution of *nux vomica*!—a singular remedy in a case of this description!—and yet the Honiton Board of Guardians rejected a motion made by Mr. Christie (one of the Board) for the removal of their medical officer, when it had been distinctly shown in this, as well as in other cases, his treatment of those placed under his professional care had been incorrect, and inconsistent with the dictum of the Poor-law Commissions, as laid down by them in 1843!

To the letter containing this decision of the Poor-law Board I now refer you, viz. :—

“Poor-law Commission Office, 7th February, 1843.

“Sir,—I am directed by the Poor-law Commissioners to acknowledge the receipt of your letter of the 13th ultimo, enclosing a copy of a letter addressed to yourself by Mr. Newman, one of the medical officers of the Wells Union, in which he admits he follows the homœopathic system of medicine in the treatment of his pauper patients. In reference thereto the Commissioners desire to state, that they do not consider the homœopathic mode of treatment a system of medicine recognised by any legally-constituted body in this country, and the Commissioners think that the guardians, with whom the nomination of the persons rests, are, as trustees for the public, not justified in employing medical men who use a system of medicine not so recognised by the legal bodies presiding over the Medical Profession. I am, Sir, your obedient servant,

“To Mr. J. Badcock, clerk.”

“E. CHADWICK.

You will thus see, Sir, that the Poor-law authorities have virtually condemned the system of homœopathy because “it is not a system of medicine recognised by any legally constituted body in this country,” and yet this very Mr. Newman has been again appointed medical officer to the same Union, and such appointment has been ratified by the Poor-law Board!!

What will this Board now say? The system of homœopathy has not been unnoticed by a “legally constituted body;” it has been condemned as “irregular practice” by an Association of vast magnitude and importance, as well as by the Edinburgh College of Physicians and the Edinburgh College of Surgeons.

I say, then, with Dr. Williams, “it is high time that the Profession should speak out,” and that “the general interests of humanity and science loudly call for some guardian influence to warn the infatuated public with a voice of some authority.”

Let the Profession look to it. An evil of such magnitude cannot be removed without a strong effort; and I repeat, it is the duty of every Medical Practitioner, aided by an enlightened public, to endeavour to crush a system which has been declared to be “utterly opposed to science and common sense,” and “completely at variance with the experience of the Medical Profession.”

I am, Sir, &c.

A SOMERSETSHIRE PRACTITIONER.

DR. EVES' CASE OF TRANSFUSION OF BLOOD.

[To the Editor of the Medical Times.]

SIR,—Will you allow me to say that the case of “transfusion of blood” which Dr. Eves republishes in your *Times* of the 9th inst., extracted from the *Gazette Médicale de Paris* for July, 1851, and which he considers “unique, as regards the simplicity of the instrument used for its performance,” namely, “a small child's syringe,” which held about seventy grammes of blood, is anything but “unique?”

I fear, the Doctor has not fully investigated this subject before he troubled you by printing upwards of a column of an extract from the above *Gazette* on the subject, and submitted your readers to pursue it apparently to be told, at the last, that his “friend,” i.e., his son-in-law, “Dr. Speer, pointed” it out to him in the aforesaid publication, and thereby wishing us, I suppose, to understand that his “friend, Dr. Speer,” understood French.

Now, as both the Doctors' knowledge may be limited on this subject of “transfusion” by a “syringe,” will you, Sir, allow me to cast a little light around their paths, by referring them to the

London Medical and Surgical Journal, Vol. II., p. 29, where they will find that M. Dieffenbach, of Berlin, performed the operation with a common “copper syringe,” and on the following day by a “quill-tube,” quite as “unique as regards simplicity,” I presume, as a “child's syringe.” Again, if the Doctors refer to “Blundell's Midwifery,” edited by Dr. Castle, they will find, at page 424, that the Author says, transfusion “may be performed by a well-constructed two-ounce syringe,” evidently not meaning the apparatus “made according to his own whim.”

If Dr. Eves really meant to call the attention of his professional brethren to what he considered a *bond fide* “unique” case, I applaud him; but, Sir, I think before we trouble you to publish “unique” cases, we ought to be sure, if unicity—pardon the word, as I have forgotten my French—be our only object, that it is so.

I am, &c.

Cheltenham.

H. HASTINGS, M.D., &c.

SECRET REMEDIES.

[To the Editor of the Medical Times.]

SIR,—In the excellent remarks which you have made on the evils of using and recommending secret remedies appended to documents relating to “Dr. Warburg's New Febrifuge,” published in the number of your *Journal* for June 28, (No. 52,) you state, “it is generally supposed that the active principle of Dr. Warburg's nostrum is bibeerine, an alkaloid obtained from the bibeera, a tree of British Guiana, well known to wood-merchants under the name of ‘greenheart.’”

In a letter recently received from a friend in that colony (the author of the monograph on yellow fever,) referring to this subject, (Warburg's drops,) he remarks,—“He (Mr. Warburg) tried to establish here what he called his drops, said to be made from an Indian plant, as a substitute for quinine, but without success; they never came into use here.” My friend adds, “I don't believe that the basis of the medicine is bibeerine, or the product of any other Guiana plant. There is good reason to believe that his drops are quinine, disguised probably by tincture of aloes.”

I am, &c.

J. DAVY.

Lesketh How, Ambleside.

UNIVERSITY OF LONDON.

M.B. FIRST EXAMINATION.—1851.

EXAMINATION FOR HONOURS.

THURSDAY, AUGUST 14.—MORNING, 10 to 1.

Anatomy and Physiology.

Examiners, F. KIERNAN, Esq., and Prof. SHARPEY.

Commencing the dissection at the integuments, and continuing it to the anterior surface of the vertebral column, describe the parts successively met with in a portion of the neck bounded below by the upper border of the sternum and first pair of ribs, above by a line drawn across the lower part of the cricoid cartilage, and on the sides by lines corresponding to the external borders of the *Scaleni antici* muscles. The form, position, and connexion of the parts to be described, but not their internal structure.

THURSDAY, AUGUST 14.—AFTERNOON, 3 to 6.

Anatomy and Physiology.

Examiners, F. KIERNAN, Esq., and Prof. SHARPEY.

1. Describe the parts situated in the plantar region of the foot (except the bones) in the order in which they present themselves in dissection.

2. Explain the following points respecting the non-striated muscular tissue, viz.:—the parts of the body in which it occurs, its aspect and mode of arrangement as apparent to the naked eye, its microscopic characters, and the differences which it presents in different situations.

FRIDAY, AUGUST 15.—MORNING 10 to 1.

Chemistry.

Examiner, Professor BRANDE.

1. How was chloroform first obtained? What is the best process for its production and purification? Give the formulæ illustrative of its formation, and describe its properties, and the tests of its purity.

2. Give an outline of the proximate analysis of the muscular flesh of animals, and state the composition and properties of its several component principles, and the modes of separating them in a pure state.

3. Describe the phenomena, 1, of electro-static, and, 2, of electro-dynamic induction: explaining, 1, the influence of the charged conductor of the common electrical machine upon surrounding bodies through the medium of the air, and the conditions under which the charge of the Leyden jar is maintained; and, 2, the circumstances under which the volta-electric current produces induced currents in an adjacent conductor, and illustrate the latter subject by a description of the construction and effects of the apparatus commonly called the electro-dynamic machine.

(It is expected that detailed answers be given to the above questions.)

FRIDAY, AUGUST 15.—Afternoon, 3 to 6.

Materia Medica and Pharmaceutical Chemistry.

Examiner, Dr. PEREIRA.

1. You are requested to describe the cerebro-spinal class of medicines commonly called narcotics. The description is to include the enumeration and physiological classification of these agents, their effects, modus operandi, and medicinal uses.

2. Give the pharmacological history of mercury and its compounds, to embrace the medicinal and poisonous effects of those agents, their therapeutical uses, and antidotal treatment, and the preparation, composition, chemical characteristics, and special medicinal properties of those mercurial compounds which are contained in the London Pharmacopœia.

(Detailed answers to these questions are expected.)

SATURDAY, AUGUST 16.—MORNING, 10 to 1.

Botany.

Examiner, Rev. Prof. HENSLOW.

1. Define the following terms:—Umbilicus, Silicula, Embryo, Cirrus, Nucleus, Lodicula.

2. Explain the peculiar conditions of the Pollen in an *Asclepias*, and the mode of its action in securing the fertilization of the ovules.

3. Within what limits may we apparently restrict the production of Hybrids among plants?

4. Compare the modes in which the nutrition of a *Cuscuta* and a *Viscum* is carried on, as contrasted with the nutrition of a *Quercus*.

5. Explain the changes to which Starch is subjected, before it is rendered subservient to the development of tissue.

6. Describe the specimens on the table, in the same order in which they are numbered, and (so far as they may admit) according to the following scheme;—

- (a) STEM. General Character.
- (b) LEAVES. Arrangement.
- (c) ———. Stipulation.
- (d) ———. Composition.
- (e) ———. Form.
- (f) ———. Margin and Incision.
- (g) ———. Venation.
- (h) INFLORESCENCE. General Character.
- (i) ———. Bracteal Appendages.
- (j) FLOWER. Peculiarities of Calyx.
- (k) ———. Corolla.
- (l) ———. Stamens (noticing insertion).
- (m) ———. Disk.
- (n) ———. Pistil (as to Ovary, Style, Stigma, and Placentation).
- (o) FRUIT. General Character.
- (p) ———. Dehiscence.
- (q) ———. Placentation.
- (r) ———. Arrangement of Embryo in Seed.
- (s) Reasons for deferring the specimen to a particular Order to which it may belong or seem to approximate.
- (t) The "Regions" and "Stations" usually affected by the species of that Order.

EXAMINATION FOR HONOURS.

Anatomy and Physiology.—Hillier, Thomas, (Exhibition and Gold Medal,) University College; Tunzelmann, J. W. de, (Gold Medal,) University College; Roberts, William, University College; Ekin, James, University College; Robbs, William Edward, King's College; Ramskill, Josiah, Guy's Hospital; Carter, Henry Vandyke, St. George's Hospital; Winter, John Newnham, Guy's Hospital.

Chemistry.—Roberts, William, (Exhibition and Gold Medal,) University College; Ramskill, Josiah, (Gold Medal,) Guy's Hospital; Hillier, Thomas, University College; Tunzelmann, Julius Woldemar de, University College; Carter, Henry Vandyke, St. George's Hospital.

Materia Medica and Pharmaceutical Chemistry.—Ramskill, Josiah, (Exhibition and Gold Medal,) Guy's Hospital; Tunzelmann, J. W. de, (Gold Medal,) University College; Hillier, Thomas, University College; Mushet, William Boyd, University College; Winter, John Newnham, Guy's Hospital; Ekin, James, University College; Briggs, Henry, University College; Roberts, William, University College.

Structural and Physiological Botany.—Tunzelmann, J. W. de, (Gold Medal,) University College; Hillier, Thomas, University College; Ramskill, Josiah, Guy's Hospital; Briggs, Henry, University College; Winter, John Newnham, Guy's Hospital.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, August 21:—

COSSAR, THOMAS, Darlington.

EASTWOOD, JOSEPH WILLIAM, Chesterfield, Derbyshire.

LANGDON, JOHN, Bampton, Devon.

MICKLE, DAVID, Leeds.

ROUSE, JOHN OLIVER, Great Torrington, Devon.

PROFESSIONAL PRIZES.—The Council of the College have just announced the following as the subject of the Jacksonian Prize of Twenty Guineas, for the year 1852: "The Pathology and Treatment of Stricture of the Urethra." The Collegial Triennial Prize of Fifty Guineas, to be awarded early in the ensuing year, is on "The Functions of the several Parts of the Large Intestines in Animals of the class Mammalia." Competitors must be Members of the College. The Astley Cooper Prize of Three Hundred Pounds, open for competition to the whole world, is "On the Structure and Use of the Spleen;" being the fourth triennial prize under the will of the late Sir Astley Cooper, Bart. The subjects for the Fothergillian Gold Medals, offered for competition by the Medical Society of London, are, for March, 1852, on "The Mode in which Therapeutic Agents, introduced into the Stomach, produce their peculiar effects on the Animal Economy;" and for March, 1853, "On Wounds of the Abdomen, and their Treatment;" and an additional Gold Medal will be awarded for the best Essay on "The Pathology of Convulsive Action."

HUNTERIAN MUSEUM.—The Council of the Royal College of Surgeons have, in the most praiseworthy manner, decided on not closing the Museum for the annual dusting and arrangement of the preparations, in consequence of the great number of foreign Members of the Profession at present in London; it is necessary, however, to close the Library for the usual period, for the purpose of re-arranging and cleaning the books and cases.

OBITUARY.—On the 19th instant, at his residence, 38, Burton-crescent, Dr. Pacifico, in his 85th year. On the 21st instant, at his residence in the East India-road, Francis Henry Beall, Esq., surgeon, R.N., in his 77th year.

DR. OKEN.—We have just received intelligence of the death of the famous naturalist, Dr. Lorenz Oken, whose theory of the Cranial Homologies effected a revolution in philosophical anatomy, and led the way to the admirable researches of our own Owen. The name of Oken is in this country most commonly associated with his "Physio-philosophy," a translation of which work, by Mr. Tulk, was published by the Ray Society. It abounds in admirable generalizations, unfortunately immersed in much that is false and fantastic, and clothed in the cloudiest phraseology of German transcendental metaphysics. Oken's researches and speculations (for he was as practical as he was dreamy) extended over all departments of natural history. Of the value he set upon facts, and the industry with which he collected them, a lasting monument exists in the volumes of the "Isis," a vast library of abstracts of the science of his time, founded and conducted by him as a periodical. Few men have had greater influence on European science than Oken. Until forced to quit Germany on account of his political opinions, he held a Professorship at Jena. Latterly he was Professor of Natural History at the University of Zurich, in which city he died a few days since, at the advanced age of seventy-three years.—*Literary Gazette.*

NAVAL APPOINTMENTS.—Assistant-surgeons James W. Elliott and W. S. J. Ayre, and acting Assistant-surgeons John Angus and P. W. Govett (1851), to the Penelope steam-frigate, on the West Coast of Africa station. Acting Assistant-surgeons James Long and C. G. Woolfenden, to the Impregnable, flag-ship at Devonport. Acting-Assistant Surgeons John Little (1851) to the Impregnable

flag-ship at Devonport; and Alexander Fisher (1851) to the Victory, flag-ship at Portsmouth.

MILITARY APPOINTMENTS.—3rd West India Regiment: Assistant-surgeon Horatio George Martelli, from the Staff, to be Assistant-surgeon, vice Fyffe, appointed to the Staff. Hospital Staff: Assistant-surgeon William Johnstone Fyffe, M.B., from the 3rd West India Regiment, to be Assistant-surgeon to the Forces, vice Martelli, appointed to the 3rd West India Regiment. Assistant-surgeon John Irvine, M.D., from the 88th Foot, to be Assistant-surgeon to the Forces, vice John M'Namara, M.D., who retires upon half-pay.

CHARITABLE BEQUESTS.—The late Mrs. Hannah Nicholson, of Morpeth, has bequeathed 50*l.* to the Newcastle Infirmary, and 50*l.* to the Morpeth Dispensary. The Committee of University College Hospital have received notice of a legacy of 300*l.*, free of duty, bequeathed by the late Mrs. Mary Ann Bentham, of Upper Gower-street, and directed to be paid within six months after the funeral.

MSS. OF JOHN HUNTER AND MR. CLINE.—We understand that Dr. Hastings, of Cheltenham, has in his possession manuscript volumes of lectures delivered by John Hunter and Mr. Cline, in the year 1769; the former on "The Principles of Surgery," the latter on "Anatomy." The MSS. were never published, and are perfectly unique.

SPREAD OF EPIDEMICS.—The cholera, with its devastating influence and pestilential breath, still remains in various parts of this island, scattering terror and desolation in localities which had hitherto been unscathed. Medical skill seems to be entirely baffled, and naught but the interposing hand of Providence can put a stop to the ravages of the fell destroyer. In Kingston, which is free from the disease, measures are being adopted to remove all nuisances and sources of disease. The yellow fever is prevailing to an alarming extent in Surinam, Dutch Guiana, particularly among the shipping and the military. The following return has been made of the progress of the epidemic:—"From the 1st to the 30th of last month (June) the deaths were 41; while on the 1st and 2nd of July, there were no deaths at all; but from the 3rd to the 22nd of this month (July) no less than 64 deaths occurred: showing a ratio in the increase of mortality, as compared with June, of more than two to one." The cholera, or a disease which bears some resemblance to it, has manifested itself in one or two places in Cuba. It has not as yet shown itself as an epidemic.

MANSLAUGHTER.—John Stevens, potato salesman, grocer, and quack doctor, was tried, on the 23rd inst., at the Central Criminal Court, before Mr. Justice Wightman, charged with the manslaughter of an imbecile lad, named Davies. The prisoner termed himself a "medical botanist," practising the Coffin treatment, by which so many persons have been sent into eternity. The drugs he used, it appears, consisted of lobelia, valerian, hemlock, ginger, cayenne pepper, senna, a foreign kind of bark, etc. etc. The complaint for which this extraordinary farrago of drugs was used was said to be an affection of the bowels; Mr. Garrett, the surgeon who made the *post-mortem* examination, stated it to be inflammation of the intestines,—a disease which these drugs were calculated to increase. The non-possession of a medical diploma by the prisoner was shown. Dr. Letheby stated, that the drugs used by Stevens were the very worst that could possibly have been given. Mr. Ballantine, for the prisoner, contended, that the prosecution had arisen out of *prejudice against Stevens on the part of the Medical Profession!* The jury most unaccountably acquitted the prisoner, and thus the manslaughter remains unpunished, and the prisoner escapes unscathed. We recommend this man's case to the authorities of the Apothecaries' Company; if they do their duty, the facts proved at the trial will be sufficient to bring home to him the practising medicine and dispensing drugs in a medical case without the legal qualification. This is another fatal instance of the folly committed by Sir James Graham in refusing to put down quacks and quackery by a legal enactment. Morally speaking, Sir James Graham is as culpable as the empiric when death is the result of the proceeding adopted by the quack.

THE METROPOLITAN SEWERS.—The new Act to continue and amend the Metropolitan Sewers Act is now printed. Her Majesty may appoint one of the Metropolitan Commissioners of Sewers to be chairman, and another to be deputy-chairman. The salary of chairman is not to exceed 1,000*l.* a year. The chairman or deputy-chairman to preside at the Courts of Sewers. Two commissioners (one being the chairman or deputy) to be a quorum, except in special matters. No rates are to be made or mortgages authorised except by six commissioners, at least. The Metropo-

litan Sewers Acts, which would have expired, are continued for another year, together with the present statute.

THE Portugal-street burial-ground, known as the Green Ground, will soon be closed, under an Act of Parliament for enlarging King's College Hospital. It is crowded to excess with dead bodies, and according to the evidence before a Committee of the House of Commons, the earth is saturated, and the exhalations from it have caused a fearful amount of disease and death.

NOVEL ISOLATION OF A SMALL-POX PATIENT.—A passenger on board the Devonshire emigrant ship, having shown symptoms of small-pox, the captain caused him to be placed in the stern-boat hanging at the davits, several feet distant from the ship. Over this was erected a tent covered with tarpauling, and there the sick man was nursed and attended by the surgeon and the other officers of the Devonshire until his recovery. He did not once leave his "boat-house" during the voyage; and to this extraordinary plan of isolation Captain Hovey attributed the non-spreading of the disease among the passengers and his crew.

A LIBERAL OFFER.—The Guardians of the Farnham Union lately advertised for a duly qualified medical officer for the Shotter Mill district of the Union, which comprises all that part of the parish of Frensham lying south of the London and Portsmouth turnpike-road, but including the Huts, Kingswood Firs, and Wagner Wells, with a population of 400; the area of the district not mentioned. For remuneration they proffered the immense sum of *eight pounds* per annum beyond the fees for surgical and midwifery cases allowed by the Poor-law order. Such a proposal is an insult to the Profession—eight pounds annually to attend the pauper-sick of a population of 400, to visit and supply them with the necessary medicines, etc., and probably to travel over a large extent of country, besides paying turnpike fees and other incidental expenses. These guardians assuredly have no conscience, nor respect for decency and justice. Remuneration, forsooth! why it is a positive misnomer to use such a word for such paltry pay!

DISSECTIONS IN THE EAST.—From the Annual Report of the Medical College of Bengal we extract the following statement of the number of bodies brought to the College for dissection and operations during the Winter Session of 1850—51:—Number dissected, 501; used for operations, 92; in the examination, 23; for the lectures, 38; of which no use could be made, in consequence of rapid putrefaction, 68; total, 722. The same Report states, that the building of the Medical College Hospital has made considerable progress since the last report, the walls having reached their full height, and the roof now being covered in; and it is to be hoped, that, before long, the inhabitants of Calcutta will derive all the advantages which this magnificent structure is well calculated to afford them. The library at present contains nearly 7,000 works.

DEATHS in the Metropolis for the week ending Saturday, August 23, 1851.

CAUSES OF DEATH.	August 23.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	502	262	184	956	10533
SPECIFIED CAUSES	500	260	184	944	10496
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	254	35	25	314	3930
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	17	21	44	473
3. Tubercular Diseases. ...	56	103	11	170	1753
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses, ...	47	24	25	96	1060
5. Diseases of the Heart and Blood- vessels	8	12	4	18	259
6. Diseases of the Lungs, and of the other Organs of Respiration ...	25	19	28	72	721
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	24	23	16	63	740
8. Diseases of the Kidneys, &c. ...	...	7	6	13	74
9. Childbirth, Diseases of the Uterus	...	8	1	9	90
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	4	8	13	68
11. Diseases of the Skin, Cellular Tis- sue, &c. ... ..	...	...	...	...	10
12. Malformations	3	...	...	3	23
13. Premature Birth and Debility ...	30	1	...	31	226
14. Atrophy	39	...	1	40	258
15. Age ... ..	...	...	39	39	455
16. Sudden	1	2	2	6	50
17. Violence, Privation, Cold, and In- temperance	11	5	1	18	265
Causes not Specified	2	2	...	12	37

TO CORRESPONDENTS.

WE are requested by Dr. Bence Jones to state that he is not one of the Board of Managers of the Royal Institution, and that the Actonian Prize Essays, therefore, "were not examined by him." Also, that he has not read the successful essay of his namesake, Mr. Wharton Jones; and never heard that Mr. William Parker was a candidate.

Mr. Spratt's Spinal Chair will be described by our "Exhibition Commissioner" in due course. We hope to complete this interesting series of papers before the Exhibition closes.

Mr. Thomas can receive the papers he requires to complete his copy of Dr. Wardrop's Work, by application to our printer, Mr. Tyler, Bolt-court, Fleet-street, and enclosing postage stamps.

Dr. Malden has our best thanks.

The Report of the meeting of the officers of Lunatic Asylums sent to us, has already appeared in our pages. We fear that those to whom, upon principle, we give the most support are not always the most grateful.

A Country Student on coming to London, will learn at the Hospital at which he enters the works he is recommended to read during his first winter session.

Students.—Physiologists differ as to the specific gravity of arterial and venous blood. Davy and others assert that the density of arterial is lower than that of venous blood. Hamburger, on the contrary, found arterial blood denser than venous blood.

A Man about Town must confine his communications to their original channel; at any rate we will have none of them. No man, through the medium of these pages, shall be stabbed in the dark, or injured by insinuation.

Medicus Junior (1) must be very cautious in his opinion. It is not known for how long a person may communicate the infection of scarlet fever. (2) Dr. Percival relates a case in which contagion was transmitted from England to Ireland in a box of toys.

Zeta.—Many such cases may be found in the Ephemerides. But the growth of hair after death involves vascular action, circulation, deposition, and secretion, after the extinction of life.

Students.—The terms by most modern writers are regarded as synonymous, and that in spite of the old distich—

"Si fluit ad pectus, dicatur rheuma catarrhus,
Ad fauces bronchus; ad nares, esto coryza."

We shall give early attention to the Report for 1851 from the National Vaccine Establishment.

A Young Practitioner.—If you value your peace of mind attempt no such inane competition. He who would build lastingly must lay his foundation low. What! is a man the worse who lets his inferior go before him? Besides, when the carrying stream is greater than the bringing one, the bottom will be quickly waterless.

Echo repeats a cuckoo's note. The imposture is patent to the whole profession, and the impudence and quackery of the man notorious. The "oil" will not be necessary, for *facilis descensus Avernii*.

Simon's Chemistry, translated and edited by Dr. Day, now the Professor of Medicine at St. Andrews, was published by the Sydenham Society. The first volume appeared in 1845, and the second in the following year. The Author is Dr. J. Franz Simon, and not the Health Officer of the City of London.

Desirans, having applied elsewhere, need not have troubled us with his letter. We are very suspicious of the motives of those who apply to various journals for information on the same point.

Mr. Mapleson's Communication on artificial palate is declined.

Mr. Hawker's Reply to "H. R.," on self-supporting dispensaries, is inadmissible.

Mr. Moore's request shall be attended to.

Paracelsus will receive a more satisfactory reply to his queries by application to the Secretary of the Apothecaries' Company, to whom, therefore, we must refer him.

A Water-drinker.—The Government have distinctly stated, that, in their Bill, they would not enter upon the question of the source of supply; and, although evidence was received on this point before the Committee, any discussion on the subject was waived by common consent.

[To the Editor of the Medical Times.]

SIR,—In answer to your Correspondent who inquires what preparation of aconite M. Cazenave employs in the treatment of lichen and prurigo, I may refer him to the article he quotes from the *British and Foreign Medico-Chirurgical Review*, where he will find the extract specified. None but a very ignorant dispenser could confound it with aconitine.

I am, &c.

J. C.

[To the Editor of the Medical Times.]

SIR,—In alluding to an annual prize of £50 from the funds of the Provincial Medical and Surgical Association, I distinctly stated that the subject should not be fixed by the Association, but left entirely to the selection of the candidate for the honour. I shall propose at the next meeting, in accordance with the terms of the notice I have given, that the sum of £50 shall be given annually, under the denomination of the "Jenner prize," for the best original essay or treatise in the science of medicine or its collateral branches. Your correction of these little errors will oblige.

I am, &c.

C. R. BREE.

Strickland, Stowmarket.

[To the Editor of the Medical Times.]

SIR,—Will you kindly tell me why Irish kelp brings in the market more than double the price of that of the Hebrides, in one of which I am

A POOR SURGEON?

[The Highlanders are a wilful and an obstinate race; they plough as their fathers ploughed, and gather kelp as their fathers did before them. Thus they will persist in manufacturing from the *yellow wrack* (*fucus nodosus*) which, growing in shallow water, yields less iodine than the *black wrack*. Our Correspondent would confer a great benefit on the inhabitants of the Hebrides if he could induce them to discard the *fucus nodosus* for the *fucus serratus* and *laminaria digitata*.]

A College Lounger.—We are aware that the reviewed speaks of the reviewer as one of a "beastly mind." He must not forget, however, the doctrine, and in this case he may also aptly apply it, "*Similia similibus curantur*!"

A Candidate for the Navy.—The Blane medals were founded by the late Sir Gilbert Blane, and were sanctioned by the Board of Admiralty in March, 1830. Sir Gilbert invested the sum of £300 in the Three per Cent. Consols, for the College of Surgeons in trust,—the dividend to be applied every second year for the purpose of conferring two gold medals, of equal value, on two medical officers, surgeons in commission, or assistant-surgeons in commission in vessels not having surgeons, for such medical journals as shall evince distinguished proof of skill, diligence, humanity, and learning. The judges are the Presidents of the Colleges of Physicians and Surgeons, and the senior Medical Commissioner of the Navy; or, in their absence, the next in rank. If on any occasion there be not any candidates, four medals are to be granted at the next adjudication; but not more than four at any time. If there be money for more than four, the surplus is to be given to the supplemental fund for the children of medical officers. The College of Surgeons possesses the die for the medals.

[To the Editor of the Medical Times.]

SIR,—In your Journal of the 26th July, you published the list of Insurance Offices which you believed paid medical referees: among them occurs the name of the Norwich Union. On the 30th July I was called on at 2 p.m., to answer queries as to the state of health of an old patient, which must go off by post in half an hour. Knowing that it was of the utmost consequence to him, I filled up the paper, at the same time sending a bill to the Directors of the Office (the Norwich Union) for the usual fee of £1 1s. The Agent has received a letter, stating that the Directors should not pay me, as they had not employed me: which of course they did, when, through their Agent, they sent me a paper to fill up. If not intruding on your space, I shall feel obliged if you will insert this,—a warning to others called on to certify for the Norwich Union Life Assurance Office.—I am, &c.

Tenbury, Worcestershire.

JOHN LAXON SWEET.

[To the Editor of the Medical Times.]

SIR,—I yesterday received the "Medical Directory" Circular; they express therein a desire to know the opinion of the Profession relative to the insertion or not of the Homeopathic list. My answer was decidedly negative: not from feelings of illiberality, but a desire that the honour of the Profession should be as strictly upheld as is the Legal; therefore, that like the Legal, all who derogate from the honest and just principles of our deservedly-honourable Profession, should be expunged—in other words, "struck off the rolls." If not too great a presumption, I beg to propose your inserting something direct on the subject, in an early number of your valuable Journal,—judging that a word from you will be esteemed good, strong, and in season, by most, as it will be more especially by,

L. W. R.

[To the Editor of the Medical Times.]

SIR,—Will you have the kindness to give your opinion upon the following points in medical ethics and etiquette, and oblige yours,

A TIMES READER.

A engages B to attend her in her approaching accouchement. Near the time expected, B goes from home, and leaves his partner to attend during his absence. A dislikes the partner, and engages another practitioner—C. In point of honour is B or C entitled to the fee? If B, should C take the proffered fee, and hand it to B, or request A to do so?

[C is entitled to the fee. B cannot compel his patients to receive the attendance of his partner.]

A Country Surgeon.—In all autopsies for medico-legal purposes, examine thoroughly every part and organ of the body, and take copious notes. This is important in all cases, because, although you have every reason to believe that a particular organ which you neglect to examine is healthy, you cannot swear that it is so, unless you have examined it. When in court you may be asked in cross-examination, was the brain healthy? You answer, that you did not examine it. The question follows, can you swear that there was not disease of the brain, and that such was not the cause of death? Of course you cannot, and the counsel in his defence remarks severely on your negligence; assumes that disease of the brain caused death; and the prisoner is acquitted, although the circumstances of the case do not justify any such assumption.

COMMUNICATIONS have been received from—

Dr. SNOW BECK, of Langham-place; STUDENS; A YOUNG PRACTITIONER; A COUNTRY STUDENT; Dr. STEWART, of Belfast; A MAN ABOUT TOWN; STUDENS; Mr. BREE, of Stowmarket; MEDICUS JUNIOR; Dr. HASTINGS, of Cheltenham; ZETA; Dr. MALDEN, of Worcester; A POOR SURGEON; A COLLEGE LOUNGER; ECHO; Mr. SPRATT, of Brook-street; Dr. AYRES, of Wandsworth-road; Dr. BURNETT, of Alton; Mr. WILDE, of Dublin; Mr. THOMAS, of Pembroke; Dr. BENICE JONES, of Brook-street; Dr. JOHN DAVY, of Ambleside; A WATER-DRINKER; T. C.; PARACELUS; Professor BALFOUR, of Edinburgh; Mr. WATSON, of Halifax; Mr. WHARTON JONES, of George-street, Hanover-square; Mr. MOORE, of the Queen's Hospital, Birmingham; Mr. HAWKER, of Edward-street; Mr. SLIGHT, Portsmouth.

ORIGINAL LECTURES.

LECTURES ON PUBLIC HEALTH.

ADDRESSED TO THE STUDENTS OF THE
THEOLOGICAL DEPARTMENT OF
KING'S COLLEGE.

By WILLIAM A. GUY, M.B. Cantab.,

Dean of the Medical Department of King's College, Professor of Forensic
Medicine, and Physician to King's College Hospital, &c.

CONTENTS.—Overcrowding in Workhouses.—Report on the Metropolitan Workhouses in 1848.—Cubic Space per Bed in 36 Workhouses, varying from upwards of 800 to less than 300 Cubic Feet.—Cubic Space per Bed in 26^W Wards, varying from 1110 down to 130 Cubic Feet.—High Mortality in Workhouses.—The Poor-law Destructive of Human Life.—Description of the Sick-wards in Christchurch Workhouse.—State of the Low Lodging-houses.—Dr. Duncan's Description of the Lodging-houses at Liverpool.—Contrast afforded by Modern Prisons.—This Contrast supplies irresistible Arguments in Favour of Sanitary Measures.—Analogies of Typhus and Gaol Fever resumed.—A Board of Guardians in Ireland infected with Typhus Fever in the same manner as a Court of Law at the famous Black Assize at Oxford.—Typhus Fever fatal to large Numbers of Police, Relieving-officers, Clergymen, and Medical Men.—It attacked the Boys in Westminster School, and closed the London Mendicity Society.—Typhus Fever conveyed on board Emigrant Vessels as Gaol Fever was formerly on board Ships of War.—Frightful Mortality on board the *Larch*, *Virginus*, and *Avon*.—Typhus Fever conveyed from Town to Town by Tramps and Vagrants sleeping at the Low Lodging-houses.—Extracts from the Reports of the Registrar-General.

In to-day's Lecture, I resume the subject of overcrowding, as it has been shown to exist in the union workhouses. I think I may venture to assume, that the most ignorant of our parochial authorities must see the necessity of providing a larger space for the accommodation of sick persons than of healthy ones; if, therefore, it should turn out, on inquiry, that the infirmaries, sick-wards, and fever-wards of our metropolitan workhouses are greatly overcrowded, we have very fair ground for inferring, that the accommodation for the healthy is not upon the most liberal scale.

When we expected a visit from the cholera early in the year 1848, the Poor-law Commissioners were directed to institute inquiries as to the extent of accommodation which the metropolitan workhouses possessed for cholera patients; accordingly, my colleague, Dr. A. Farre, with Dr. Martin and Mr. Toynbee, were appointed to carry out this inquiry. The result I will now briefly lay before you.

I believe I am not misrepresenting the opinions of those who have given attention to this subject when I state, that an infirmary, or sick-ward, should be of such dimensions as to allow at least 1000 cubic feet of space to each patient, and that, in the case of fever-wards, it would be expedient to increase this space to at least 1200 cubic feet. Now, several of the wards inspected by these gentlemen were fever-wards, and several others were devoted to children, who are particularly apt to suffer from infectious diseases, and who, for that reason, require ample space, and good ventilation.

The dimensions of the wards were, in every case, ascertained, and the cubic space allotted to each bed calculated. I will first give you the average cubic space to each bed for each workhouse, and then the average cubic space to each bed for each ward. Out of the thirty-six workhouses submitted to inspection, two gave an average space of more than 800 cubic feet; two, of more than 600; ten, of upwards of 500; twelve, of between 400 and 500; eight, of 300 and upwards, but less than 400; and two, of less than 300. The greatest average was 822 cubic feet; the least, 288 cubic feet. In twenty-two out of thirty-six of these workhouses, or considerably more than half, the cubic space allotted to a sick person fell short of 500 cubic feet, and exceeded 600 in only four instances. In the best regulated workhouse it fell short of the just allowance of air by nearly 200 cubic feet.

If now, we turn from the workhouses to the individual wards, we find a state of things still less satisfactory. Out of two hundred and sixty wards, only one contained upwards of 1000 cubic feet to a bed, the precise number being 1110,—a very liberal allowance. In two instances, the cubic space to a bed exceeded 900 feet; in five instances it exceeded

800 feet; in ten instances it was more than 700; and in thirty-five instances more than 600; in forty-three instances it was between 500 and 600; in eighty-two instances (the largest number I have yet mentioned) it was between 400 and 500; in fifty-two between 300 and 400; in twenty-five between 200 and 300; and in five instances, it fell short of 200. In one hundred and sixty-four instances, therefore, out of two hundred and sixty, or considerably more than half, the cubic space allotted to a sick person, fell short of 500 cubic feet. The least number of cubic feet per bed was 130. From this minimum, the smaller numbers rise as follow:—

130, 132, 162, 185, 196, 221, 228.

Such being the restricted allowance of space and air to sick persons in these metropolitan workhouses, what may we not safely and justly infer to have been the dearth of these necessary elements—space and air—in the case of the healthy? This inspection naturally led to some improvements; but there is every reason to believe, that in almost every workhouse in London, the space allotted to the healthy, no less than the sick, is very, very far from being sufficient.

Overcrowding was carried to an extreme degree, and with very unsavoury and unwholesome accompaniments, in Christchurch Workhouse, attached to Whitechapel Union. This workhouse was found to contain eight sick-wards; three of which were devoted to children with fever, and three others are described as "Children's sick-wards." The average cubic space to each patient was only 288 cubic feet. The largest allowance 393; the least, 132! Of the three fever wards, one contained 351, another 312, the third 221 cubic feet to each patient!

Such being the very limited space allotted even to sick paupers within the walls of our London Workhouses, (and such being, in all fair probability, the state of our workhouses elsewhere) you will not be surprised to hear that the mortality in workhouses is very high. After premising that, in 1838, 25 in the hundred were admitted sick into the metropolitan workhouses, and 14 in the hundred into provincial workhouses, an authority whose words I have copied, though I regret to say that I cannot find the exact reference, goes on to say:—"This will account for part of the excessive mortality; infirmity for another part; age for a third part; leaving a large residual mortality to be accounted for in the same manner as the mortality of prisons," (viz., by idleness and confinement within doors.) "The mortality of paupers out of doors has not been ascertained; the mortality is probably raised 50 per cent. by confinement in the workhouses. In a depression of trade, or in a densely inhabited district, it must be considered a hazardous experiment to bring crowds of the sickly and depressed classes within the walls of one building. Nothing is more likely to generate an epidemic. The system of administering relief in workhouses, should, on this ground alone, be reduced within the narrowest possible limits."

An increased mortality of 50 per cent. !—such is the reality. To save men from starving, such is the object and aim of the existing system of Poor-laws. Who can doubt that these laws, devised in ignorance for the saving of human life, tend to its destruction?

I feel that this account would be incomplete, if I did not add, at least, one detailed description of the state in which the inspectors found some of these sick wards. The description applies to the Christchurch Workhouse, of which I have just been speaking. It is to the following effect:—"The sick wards "occupy a portion of two low buildings flanking one of the yards; the least of which is 3½ feet below that of the street; while the fever ward, which is on the ground-floor, and paved with brick, is again two feet below this. These rooms are very old, badly constructed, low, and dark. They are mostly destitute of means for ventilation, and at the same time give an average of only 288 cubic feet per person; in one ward the space being reduced to 132 feet for each, without any means of insuring change of air to the inhabitants. These rooms, however, are still superior to those which we have stated were recently obliged to be occupied, notwithstanding the orders to the contrary. Besides the faulty condition of these rooms, the inhabitants are further subject to the injurious influences of two of the worst nuisances in the neighbourhood; the one a factory for the desiccation of night-soil and bullock's blood; the other a depository for soil from the sweeping of Smithfield and Bevis Marks. These have been often complained of

as intolerable nuisances. We find, from the report of the medical officers, that gangrene and *cancrum oris*," (that is to say, a sloughing complaint beginning in the mouth or cheek, and spreading till it eats away a great part of the face,) "were very prevalent among the children who were attacked by these diseases generally during convalescence from various illnesses, notwithstanding every attention was paid to curative treatment; while the old are reported to suffer from diarrhoea and dyspepsia," (or indigestion.) "These effects are less observed when the wind blows from the north, the nuisances being situated on the south side of the house." You will observe, that the reporters speak of these disastrous effects being only less observed when the wind did not blow from the direction of these offensive nuisances; from which we are justified in inferring, that the confined space in which the patients were shut up was of itself quite competent to produce them.

I have now invited your attention successively to overcrowding in the dwellings of the poor in town and country, and to overcrowding in public establishments under the superintendence of the Poor-law authorities. I shall have yet to speak of overcrowding in shops and workshops, if I can find space for this subject in one of the two remaining lectures. I may also state, in general terms, that overcrowding prevails to a very great extent in schools, and also in a very disgusting form in barracks. I have only time at present to notice in connexion with fever, and by way of carrying out the analogy of the house of 1850, and the prison of 1774; of gaol fever and typhus fever; the state of the low lodging-houses. You have been able to form some notion of the condition of these places from what I said of the rooms in Church-lane, St. Giles, used for this purpose, as also of the part they play in the production and spread of typhus fever. These low lodging-houses are to be met with in every populous town, and even in the smaller provincial towns and larger villages, no less than in the worst districts of the Metropolis.

The following extract from a Report by Dr. Duncan, of Liverpool, will give you a very fair idea of these low lodging-houses. It is in strict accordance with all the descriptions of such places which I have seen; and many parallels to it may be found in the reports recently published by the *Morning Chronicle* :—

"The worst description of houses of this kind," says Dr. Duncan, "are kept by Irishmen, and they are resorted to by the migratory Irish among others, who may perhaps not remain more than a night or two in the town, as well as by vagrants and vagabonds of all descriptions. In every room of such houses, with the exception of the kitchen or cooking-room, the floor is usually covered with bedsteads, each of which receives at night as many human beings as can be crowded into it, and this, too, often without distinction of sex or regard to decency. But there are cellars, usually the double cellars I have described, which are used for the same purpose; and here the overcrowding is carried still further, if that be possible, and is certainly even more prejudicial to the health of the inmates, from the still more defective ventilation of these dark and miserable abodes. At night, the floor of these cellars, often the bare earth, is covered with straw, and then the lodgers—all who can afford to pay a penny for the accommodation—arrange themselves as best they may, until scarcely a single available inch of space is left unoccupied."

Dr. Duncan here touches with a very light hand the gross immoralities to which this state of things gives rise. The London reporter of the *Morning Chronicle*, in speaking of some of the low lodging-houses in the worst parts of London, frequented mainly by juvenile thieves and beggars, reveals a state of things which is almost too gross to be spoken of publicly or committed to paper. And yet, perhaps, it is well that you should not be ignorant of it. It is almost incredible, but, alas! too true, that there are houses which receive crowds of boys and girls, of fifteen and sixteen years of age, who sleep together in these dens, and carry their juvenile depravity so far as to change their companions night by night. And yet this is the middle of the 19th century of the Christian era, and, strange to say, we possess both a government and a police!

The imperfect sketch which I have given of prisons as they were in Howard's time, and of houses, and workhouses, and low lodging-houses as they now are, wants yet, to make it complete, some notice of prisons as they are. I extract a

description of a London prison from the pen of a very popular, but somewhat quaint writer of our day.^(a) The prison is one (to use the peculiar phraseology of the writer) "of the exemplary or model kind." It consists of an immense circuit of buildings; cut out, girt with a high ring-wall from the lanes and streets of the quarter, which is a dim and crowded one. Gateway as to a fortified place; then a spacious court, like the square of a city; broad staircases, passages to interior courts; fronts of stately architecture all round. It lodges some 1000 or 1200 prisoners, besides the officers of the establishment. Surely one of the most perfect buildings within the compass of London. We looked at the apartments, sleeping-cells, dining-rooms, working rooms, general courts, or special and private: excellent all; the *ne plus ultra* of human care and ingenuity; in my life I never saw so clean a building; probably no duke in England lives in a mansion of such perfect and thorough cleanness. The bread, the cocoa, soup, meat, all the various sorts of food, in their respective cooking-places, we tasted; found them of excellence superlative. The prisoners sat at work, light work, picking oakum, and the like, in airy apartments with glass roofs, of agreeable temperature and perfect ventilation; silent, or at least conversing only by secret signs; others were out taking their hour of promenade in clean flagged courts; methodic composure, cleanliness, peace, substantial, wholesome comfort reigned everywhere supreme. The women in other apartments, some notable murderesses among them, all in the like state of methodic composure and substantial, wholesome comfort, sat sewing; in long ranges of wash-houses, drying-houses, and whatever pertains to the getting-up of clean linen, were certain others, with all conceivable mechanical furtherances, not too arduously working. "Schools, too, were there; intelligent teachers of both sexes, studiously instructing the still ignorant of the thieves." The writer, after speaking in the highest terms of the superintendent of this prison, states that, of the two punishments which had been found most effectual with these prisoners—the treadmill and the cutting short of their rations—the first, the treadmill, had lately been taken from him; so that these outcasts of society were to be visited for their offences against the rules of the house with the same sort of punishment, and no other or more severe, than a father would inflict on a refractory child. And yet, "all around this beautiful establishment, or oasis of purity," "lay continents of dingy, poor, and dirty dwellings, where" honest hard working men "were struggling manifoldly, in their workshops, in their marble-yards, and timber-yards, and tan-yards,—in their close cellars, cobbler-stalls, hungry garrets, and poor, dark trade-shops, with red-herrings and tobacco-pipes crossed in the window," to maintain themselves. And it was by a tax on these, that this spacious, airy, comfortable, model lodging-house for prisoners was built and is supported, with its excellent diet, scrupulous cleanliness, and gentle though firm system of discipline.

It is well that we should know and bear constantly in mind, the existence of such contrasts and anomalies as these; it is well that we should remember, not only that what the prison was the dwelling of the labouring man now is, but that though the prison has undergone a complete reform, the dwelling of the labouring man remains, to a great extent, what it has been for half a century or more. These facts, I say, ought never to be absent from our minds; for, if we are in want of an argument in favour of sanitary measures,—an argument which no sophistry can weaken, no cunning elude, no reasoning resist—here is one which can never fail us. If we seek for an appeal which shall go straight as a bullet to its mark, to the hearts and consciences of men, we can draw it from the same fertile source. If we will not take care that the honest and industrious man shall be surrounded, in the place he lives in, with circumstances favourable to his physical and moral well-being; if we will not see that he is supplied with the things essential to cleanliness, comfort, and decency, when our cruel negligence has done its work, and the unhappy tenant of the pigstye becomes the inmate of the prison, then, for the first time, shall we be constrained (we cannot do otherwise if we would, for fever is no part of the prisoner's punishment) to do for the convicted criminal what we would not do for the honest working man. We cannot elude the force of this appeal by alleging, that what is easy to be done

(a) Carlyle's *Latter Day Pamphlets*, No. II.

for the inmate of a prison is altogether impossible for the tenant of a cottage in the country, the occupant of an humble apartment in town, the frequenters of cheap lodging-houses, or the inmates of our union workhouses. At any rate, we cannot allege that we are powerless for good, so long as the Law of Settlement remains unmodified or unreppealed, so long as the low lodging-houses in all parts of the country are free from the strict surveillance of the police, or so long as the greater part of this gigantic Metropolis is excluded from the benefit of a sound sanitary measure. May I not add, so long as metropolitan improvements may be carried out without compensation to the poor whom we drive away; so long as no power exists anywhere to compel the destruction and reconstruction of the buildings which have been authoritatively pronounced to be not merely unfit for human habitation, but utterly incapable of being rendered habitable; so long, finally, as we retain the tax upon timber, the excise upon bricks, and the window-duty.^(a)

Now, the measures calculated to remove these gigantic evils can only be brought about in this country by a change in public opinion, which shall first recognise their surpassing importance, and, secondly, the utter insignificance, by comparison with them, of all theories of popular liberty and non-interference. In bringing about this salutary change, we may hope for the full and hearty co-operation of the clergy. Upon its accomplishment depends all we hold most dear as philanthropists, as patriots, or as Christians.

The subject of typhus fever, though it has already taken up two lectures, is not exhausted. I have not yet fulfilled all my intentions with regard to it. I have compared its favourite haunts to those of the gaol fever, and have, as I hope, proved their close resemblance to each other. The analogy of the two diseases may also be considered sufficiently established for all practical purposes. I have also entered with sufficient (perhaps you will think, with more than sufficient) minuteness into the great fever-producing evil of overcrowding and its causes, both in town and country. But I have yet to demonstrate the striking analogy existing between typhus fever and gaol fever in the laws which govern its communication from person to person, and by means of individuals to bodies of men. After that, I have still to furnish you with the statistics of the number of victims which it claims year by year, and of the amount of sickness it occasions. It will be also necessary to adduce facts in illustration of the ease and certainty with which typhus fever may be rooted out and destroyed by the same simple means which have freed us from the gaol fever. I must also say something of its connexion with filth, as distinguished from overcrowding. Then there are some very important considerations of an economic and moral kind which I must not pass over in silence. So that the rest of this lecture, and a very considerable part, if not the whole, of the next will still have to be devoted to this very important and instructive topic.

Having, then, traced the analogies of gaol fever and typhus fever, as far as regards the causes which are common to both, I now proceed to a very interesting and instructive part of the parallel,—that, namely, which relates to the communication and spread of the two maladies,—if, indeed, it is correct to designate them as two maladies, and not as one and the same disease.

You will recollect the description which I gave you of the Black Assize at Oxford, and the reference which I made to analogous instances in which the gaol fever was communicated by prisoners brought from gaol to persons in authority, and in a better position of life, assembled to try them. Now, the typhus fever, as it prevailed in Ireland in the years 1846 and 1847, nursed into unusual virulence by the famine which re-produced, so to speak, the wretched and insufficient diet of the prisoners of Howard's time, assumed this feature of the old gaol distemper. The *Cork Reporter*, early in the year 1847, contained the following statement, which I adduce in illustration of this point:—

“The Board of Guardians met at the Workhouse, where a large number of applicants had assembled. Within the next two days, the following, who were present, were laid up with fever:—Mr. Commissioner Burke, Mr. G. Lawrence, Mr. T. Jennings, Mr. R. Dowden, Mr. Daniel Daly, guardians; Mr. R. J. O'Shaughnessy, Clerk of the Union,

and his brother; and Mr. Reeves, reporter of the *Constitution*; all of whom, it is remarkable, sat on one side of the Board-room, from which it will appear, the current of miasma entered the room in a particular direction.”

It is well known that, in the severe epidemic of typhus fever, to which I have just referred, as having occurred coincidently with the Irish famine, large numbers of police, relieving officers, clergymen, and medical men, fell victims to their intercourse with, or attendance on the sick; and it is probable that the instance just related is by no means a solitary one.

In the month of December, 1847, the “*Journal of Public Health*” gave a list of no less than forty-eight medical men, who, in different parts of the kingdom, had fallen victims within the short space of six months, to typhus fever, caught in the performance of their duties; and this list was confessedly very incomplete. The attacks of the disease were, of course, much more numerous, though the exact mortality among medical men was not ascertained. Some idea, however, may be formed of the risks which medical men, (contrary to a popular error, which represents them as less liable to catch disease than other persons similarly exposed) run, that, out of twenty-five medical officers engaged in the relief of the parish poor in Liverpool, twenty had fever. The relieving officers of the poor also ran great risks, no less than twelve of them being stated to have died in Liverpool alone. The clergy of different denominations also died in large numbers. One clergyman of the Established Church, one Dissenting minister, and ten Roman Catholic priests, died of fever in Liverpool. Five priests also died in Leeds, and ten in other parts of England, chiefly in the northern towns. Liverpool suffered thus severely, partly in consequence of the enormous influx of starving Irish, and partly in consequence of the always filthy and over-crowded state of that city.

Let me observe, in passing, that the liability of the clergy to fever affords a very proper personal motive to the improvement, to the utmost of their power, of the physical condition of the poor. This was one of the motives which I laid before you in my opening lecture. This same epidemic of typhus fever, of which I have been speaking, attacked the boys in Westminster-school, and closed the doors of the London Mendicity Society.

Another point in which typhus fever resembles the gaol distemper is its liability to be carried on board ship. Our vessels of war being no longer recruited from our prisons, as formerly, or from places in a similar condition, I have no instance to adduce of typhus fever infecting our navy, even during the recent epidemic of 1846, 1847, and 1848. But on board of emigrant ships typhus fever raged like a plague, and was conveyed by them to our colonies. Howard speaks of “the number of *sailors*, and of *families*, in America, that had been infected by transports.” We have, unfortunately, no lack of parallel cases; for we learn, on the authority of the Montreal Board of Health, that our emigrant vessels, which were allowed to ship two or three times as many passengers as the same vessels would have presumed to carry to a United States port, were large carriers and exporters of typhus fever. In ten only of the vessels that arrived at Montreal, in July, 1847, (four from Cork and six from Liverpool,) out of 4427 passengers, 804 had died on the passage, and 847 were sick on their arrival; that is to say, 847 were visibly diseased: for the result proved that a far larger number had in them the seeds of the disease, which they were the means of scattering through the Canadian towns. The *Larch*, which arrived at Montreal, from Sligo, August 12, 1847, “sailed with 440 passengers, of whom 108” (nearly one-fourth) “died on the passage, and 150 were sick. The *Virginus* sailed with 496; 150” (nearly one-third) “died on the passage, 186 were sick, and the remainder landed feeble and tottering; the captain, mates, and crew were all sick. The black-hole of Calcutta” (the Report goes on to say) “was a mercy compared to the holds of these vessels. Yet simultaneously, as if in reproof of those on whom the blame of all this wretchedness must fall, foreigners, Germans from Hamburg and Bremen, are daily arriving, all healthy, robust, and cheerful.”

The history of the *Larch* and *Virginus*, however, will not bear comparison with the horrors of which the ship *Avon* was the scene. This vessel, Nicholas Johnson, master, of 1100 tons register, with about 600 passengers, arrived disabled at Miramichi. She encountered, at the outset, heavy weather, lost several spars, and suffered in her rigging, which lengthened her voyage; but the violence of the elements

(a) The first-named tax has been reduced, and the last two have been abolished since these lectures were delivered.

sank into insignificance before the turbulent perverseness of the Irish emigrants who formed her freight. Though the captain and mate strained every nerve, and exhausted every form of persuasion, to induce them to adopt measures for their self-preservation, they would hearken to no remonstrance, and adopt no sanitary precautions, but even resisted and repelled with main force every attempt that was made to ventilate and clean the steerage. The typhus fever spread among them; but still the infatuated beings would not separate themselves from the dead, until the infection rose to such a pitch on board that, frantic with despair, the captain, uniting with the Presbyterian part of the passengers, and a few able hands of the crew still remaining, assailed the unruly in their stronghold, and, giving them regular battle, succeeded in removing them, when, to their horror and dismay, they discovered about sixty dead bodies stowed away in chests, or sewed up in beds! They were consigned to the deep, and followed by many fresh victims, until the majority of the passengers, and all the crew, except two hands, died.

This tragical history illustrates not merely the close resemblance of the typhus fever and the gaol distemper, but the unhappy ignorance and brutal obstinacy of the nation of Celtic savages with whom it is our misfortune to be so closely bound up. This history, I may add, is in perfect keeping with what I have heard from Irishmen themselves, of the almost insuperable difficulties with which those have to contend who wish to introduce any sort of sanitary or other improvement into the dwellings or personal habits of the Irish people. It is among such a population that the City Commissioners of Sewers have lately made a costly, but ineffectual attempt to introduce the means and appliances of decency. You may imagine, then, how the constant immigration of Irish labourers into England must tend to injure and degrade the English labourers with whom they come into competition and contact. From the education of the young, and from that only, can we hope to obtain any decided improvement in the habits of this most singular people.

From the communication of typhus fever to Boards of Guardians, medical men, and clergymen, and the passengers and crews of emigrant vessels, and from them to the inhabitants of our colonies, the transition is easy and natural to the conveyance of typhus fever from place to place. The prison, as you may remember, was formerly a focus of infection to surrounding towns and villages; the discharged debtor, or members of his family who had visited him in prison, conveying it to those among whom they lived. Of this, you may recollect, I gave you an example. Now, what the prison was, the low lodging-house is; what the discharged debtor or criminal then did, the tramp or vagrant now does. Here, again, we come to a subject full of interest, and pregnant with instruction and reproof. In illustration of it, I will give you a few extracts from the notes forwarded by the Registrars of our provincial towns to the Registrar-General, and published by him in the Quarterly Returns. I take my first extract from the Return of the Quarter ending March 31, 1847. It is from the pen of the Registrar of St. George's district, Manchester. He says:—"From the peculiarity of the district, fever and other epidemics are rendered more fatal than in most others; the poor dwelling in narrow streets and damp cellars, where scarcely a breeze of fresh air visits them; and being so densely crowded, it cannot be matter of surprise that the ravages of death are so fearful. The Registrar had occasion personally to inspect some of their dwellings. One cellar consisted of two compartments, each measuring four yards by four. In the first, the family of the house consisted of seven persons; in the other (the back apartment), were no less than twenty persons, twelve adults and seven children, and in the corner, the dead body of the child he had come to visit. In the last Report he stated something of the over-crowded state of the low lodging-houses; but he had no idea of the real extent of the evil till he had witnessed it. The mortality among the Irish poor had been greater this quarter than last, many of them dying after a few days' residence, not from organic or from old chronic complaints, but in very many instances from extreme debility, produced, no doubt, by the want of sufficient food, and exposure to the dangerous influences of the low lodging-houses to which they are compelled to resort."

On turning to the return for the quarter ending June 30, of the same year (1847), I find the registrar of the western district of Bolton, in Lancashire, reporting as follows:—

"The number of deaths (175), is above the average of the corresponding quarters of other years, owing to the prevalence of typhus for the last six weeks, sixteen fatal cases happening during that period. These have taken place among the poorest class, and among the most destitute, principally in common lodging-houses. Nine of them were Irish, who had resided only a short time in the town."

To the same effect is the report of the registrar of St. Mary, Shrewsbury, for the third quarter of the same year, 1847. He says: "Typhus is still prevalent, but confined to one or two districts, viz., a row of houses built back-to-back, the lower rooms below the bottom of the adjoining canal; and the north side of Castle Foregate, which consists of many lodging-houses, situated in close passages and in small squares, having entrances under back ways, and frequently having pigstyes and open privies, and heaps of ashes within a few yards of the doors."

These facts, in complete accordance as they are with what I stated to you in reference to that congeries of low lodging-houses and overcrowded dwellings—Church-lane, St. Giles; and the description of the low lodging-houses of Liverpool from the pen of Dr. Duncan, will serve to prove to you that the low lodging-houses in town and country are great sources and centres of the infection of typhus fever, small-pox, and other contagious maladies. A few quotations from the same source will equally serve to establish the agency of the tramps or vagrants in carrying typhus fever and other infectious disorders about from place to place.

On turning to the return for the quarter ending June 30th of the same year (1847), I find the Registrar of St. Ann's district, Nottingham, attributing an enormous increase of deaths to "typhus and other fevers introduced into the district by the extraordinary number of tramping Irish." "I have traced," he adds, "several instances of small-pox to two Irish women who had recently arrived, and whose children were already infected with this malignant disease."

The Registrar of the eastern district, Bolton, after recording, for the last quarter of 1847, a considerable increase of mortality, says: "The increase is owing to typhus (introduced by Irish immigrants,) measles, and scarlet fever of a very malignant kind." The Registrar of the district of St. Nicholas, Newcastle-upon-Tyne, in his report for the last quarter of the same year, 1847, says, "Fever occurred in about 25 per cent. of the deaths in the September quarter, and in this quarter it amounts to near 29 per cent. of the whole deaths. Of these 31 in the September quarter, and 45 in this quarter, occurred in the fever-house and vagrant-ward. From this, we may infer that the 'imported Irish fever' is making its way among our resident population."

The Registrar of Hereford city, after recording eighty-six deaths in the quarter ending June, 1848, says: "Typhus has prevailed in this district to a greater extent than any previous quarter. It was introduced into the low lodging-houses of the city by an Irish vagrant family at the commencement of the winter."

The Registrar of the town of Wigan, in his report for the same quarter of the same year, speaking of a decrease of mortality, gives valuable negative evidence to the same effect in these words:—"This result," (the decrease in question) "may be attributed in a great measure to the decrease in the influx of Irish vagrants, who brought disease with them into the town."

The Registrar of Tisbury, in Wiltshire, speaking of the first quarter of 1849, says: "Typhus has prevailed in the Union House to a considerable extent, in consequence of the want of proper wards for the separation of those paupers who are afflicted with malignant diseases. The disease was introduced into the house by a tramp; only three cases were fatal."

The Registrar for Cricklade, in the same county, says: "Small-pox, which was fatal in one case, was brought by an itinerant tinker's family."

The Registrar for Ellesmere, in Shropshire, for the second quarter of 1849, reports "One death from cholera of an Irish labourer passing through the district, and two of typhus, one of which was that of a vagrant, who was sent to the workhouse, where he died."

These quotations will, I think, suffice to establish the mischievous agency of vagrants or tramps in conveying typhus-fever and other infectious maladies from place to place. I shall have something more to say upon this important subject in my next lecture.

ORIGINAL COMMUNICATIONS.

PRACTICAL OBSERVATIONS

ON

DISEASES OF THE EAR;

WITH RECORDS OF CASES TREATED AT ST. MARK'S HOSPITAL, DUBLIN.

By W. R. WILDE, F.R.C.S., &c.

(Continued from page 93.)

No. 12.—SUBACUTE STRUMOUS MYRINGITIS.—
METHODS OF DEPLETION AND COUNTER-IRRITATION.

Mr. M'M., 16, male.—Gentlemen, it is quite manifest, from the way in which he speaks, that this boy has been deaf a long time. His utterance is indistinct. There is a sort of whistling sound in his speech, as if he sipped in the air, and then blew it out through his nose. His voice is hoarse and insonorous, and he labours under that peculiarity denominated, though incorrectly, speaking through the nose. These symptoms have not been produced by any affection or visible alteration in the parts subservient to perfect utterance; for, upon examination, you perceive that the hard and soft palate are both quite natural. The tonsils are not enlarged; the throat is normal, with the exception of a slight elongation of the uvula, but which is quite insufficient to account for the peculiarity of his speech; and the nose, as far as we can ascertain, does not exhibit any congenital peculiarity or acquired disease. Whenever I meet a case of this kind, I know it is of long standing, and that it is generally unfavourable; and I make it a rule to inform the patient or his friends of my suspicions, even before I make an examination. In such cases, you will generally find, if the patient is a person of intelligence, that he anxiously and intently watches the motion of the lips of the person by whom he is addressed, in order to assist him in making out what is said. I know several persons who can understand what is addressed to them by their friends or those to whom they are accustomed, simply by watching the motions of the lips. This boy says he has been deaf since childhood; in fact, he never remembers hearing well; he has had occasional slight pains in both ears, but they never amounted to any degree of intensity; never had a discharge from either side, but suffers from noise in the left. His amount of hearing varies considerably from time to time, and is much decreased whenever he catches cold.

Right Side.—Hearing distance three inches. Auricle and meatus normal; tympanal membrane white, thickened, opaque, and slightly collapsed, or pressed inwards from its natural curvature; its lower edge is vascular. He cannot inflate his drum; but the attempt to do so increases the inferior vascular crescent, and causes several large red vessels to appear upon the upper half of the membrane.

Left Side.—Only hears on touching. Membrana tympani exhibits a uniform pinkish colour, somewhat resembling the hue of a rose leaf. The thickening and deposit has not yet taken place. This is a case of subacute strumous inflammation of the middle ear, and its external membrane in particular. It is very analogous to an affection of the eye, well known as strumous cornetitis, in many instances of which, not only the cornea itself, but the tissues within the eye partake of the inflammatory action going forward. To introduce an instrument into the Eustachian tube, and force fluid or gaseous bodies into the middle ear, would, I believe, in all such cases, be of little avail until we subdue the local inflammation, and correct the constitutional tendency to its return. The treatment should consist in slight local depletion frequently repeated, long-continued counter-irritation over the mastoid process, and the exhibition of such internal remedies as we know by experience, from the diseases of analogous organs, improve the constitution and tend to correct the tendency to disorganising inflammation, such as the oxymuriate of mercury and bark, the preparations of iodine and potassium, cod-liver oil, bromine, etc.

As it requires some care and attention to apply leeches effectively to the ear, and as I think it necessary to reform the practice heretofore in use for that purpose, it may be well

to address a few observations to you on the subject now. Heretofore, leeches were seldom applied to relieve aural diseases, because the practitioner, not being acquainted with the nature or seat of the majority of these affections, and not possessing the means, or knowledge capable of effecting an accurate inspection of the parts engaged, seldom made an accurate diagnosis. He worked in the dark, and prescribed at random, more frequently than when treating any other class of diseases, no matter how obscure; and hence the opprobrious epithets which the public, and even many of the Profession, applied to the treatment of diseases of the ear. Such observations were, however, just as applicable to the treatment of diseases of the uterus and vagina until the introduction of the speculum into modern practice. When leeches were resorted to in aural affections, five or six were generally applied to the mastoid region; but they seldom proved effective. Two leeches, properly applied to the external auditory aperture, will prove more beneficial than three times as many elsewhere. As the space to which the leeches can be applied there is limited, and as it is often a tedious and troublesome operation, it requires some care and dexterity in its management. I generally mark the places where the leeches may be applied with spots of ink, in order that the apothecary may not make any mistake; for, if this is not done, you will sometimes find that the leeches have been allowed to attach themselves to the cavity of the concha, or other places on the pinna or auricle, where they are of no use, and often give rise to much irritation, œdema, and even erysipelas. The external meatus should first be filled with a bit of cotton wool, to a level with the external aperture, not so much for the purpose of preventing the leeches going in too far, as to exclude the blood, which is very likely to flow back and accumulate at the bottom of the meatus auditorius externus, coagulating and crusting over the surface of the tympanal membrane, thereby causing much annoyance to the patient, and even an aggravation of his symptoms. The posterior lip of the external aperture affords the largest and most convenient surface for the application of leeches. In an adult, three may always be attached thereto with facility. The anterior lip being more concealed and slightly concave, cannot so well be got at, yet two may generally be applied there. A leech-glass will facilitate your operations, but not that usually employed, which is much too large, and allows the animal too much space within it. The next best part to which to apply leeches, is the depression in front of the tragus, immediately below the inferior root of the zygoma, a spot on which the patient is so frequently susceptible of pain upon the least pressure in aural inflammation; and there, six or eight leeches may be applied if necessary. As leech-bites on any of those places which I have mentioned continue to bleed freely for a long time, the person employed to apply the leeches should be directed to stop them as soon as the proper quantity of blood has been removed. It is unnecessary to occupy your time by detailing the most approved means for this purpose, but it is necessary that you should be aware of the fact, that the hæmorrhage from leech-bites on the parts which I have specified, is more likely to continue than that from a similar cause in other places. The leech-bites do not cause extravasation and blackening of the auricle as they so frequently do the parts about the eye; but they often give rise to erysipelatous inflammation, and therefore in all such cases the idiosyncrasy of the patient in this matter should be previously inquired into. The cotton with which the auditory passage is stuffed, and the external portion of which always become saturated with the blood, should not be removed until the oozing from the leech-bites has quite ceased.

I have tried cupping behind the mastoid process in several cases, and, though the operation was always performed with great dexterity by Mr. Mapleson, and a very small scarificator and cupping-glass used, the results have not been as satisfactory as when leeches were resorted to.

With respect to counter-irritation: in acute cases, common fly blisters are the most convenient and effectual method, but in old chronic cases, where the disease is of long standing, and there is much thickening of the membrana tympani, I have found that the pustules produced by the application of tartar emetic ointment are the most effectual method. A small quantity of the ointment should be rubbed once or twice a day to all that part of the mastoid region which is not covered by hair—care being taken not to let the ointment spread over the back of the auricle, where it would

produce very angry and irritable sores—until a copious eruption is produced. A bit of soft linen should be applied between the auricle and the surface submitted to the action of the remedy. As soon as the pustules are fully developed, the application should be discontinued, and the part allowed to heal perfectly before it is resumed. To be effectual, however, this remedy must be continued for several weeks, or even months. As it is not always possible to measure or control its action, a poultice should be applied occasionally when the pustules spread or seem inclined to coalesce. A blister issue may be established, but cannot be conveniently managed for any length of time in the vicinity of the ear, particularly in males, as the Albespeyre's plaster or other stimulating dressing cannot be kept upon the parts without the use of a bandage. The usual rubefacient and vesicating linaments must be used with caution when applied to the mastoid region, as their action is very apt to spread over the back of the auricle, and cause considerable swelling and irritation. I have on several occasions seen the eruption caused by croton oil extend from the mastoid region, to which it was applied, not only over the external ear, but to the side of the face, and even produce œdema, redness, and intense itching of the eye-lids. Where there is much neuralgic pain complained of, extending from the ear over the side and back of the head, I have found that one of the most useful applications is the compound camphor linament, to which some extract of belladonna has been added; but in prescribing or mixing this preparation, care should be taken to rub the belladonna first with a little water in a mortar, otherwise it will not mix with the linament. In children and young persons, the strong tincture of iodine, containing some iodide of potassium, is a very useful remedy, and probably acts specifically as well as a stimulant. It should be applied with a camel-hair pencil every second or third day, unless the part begins to vesicate, or the cuticle to peel off, when the application should be discontinued for a few days. The use of iodine, however, by the endermic method, is only of value by being long persisted in.

No. 13.—MYRINGITIS WITH LYMPHY EXUDATION.

W. H., 11, a weakly boy, with several scrofulous marks on his neck.

Right Side.—Meatus filled with hard cerumen; hearing distance 4 inches. (a)

(a) Having in the observations already published in the *Medical Times*, fully explained my mode of conducting aural examinations, and described the symptom of each case at length, I think the details may now be condensed, and, therefore, I propose not only to avoid repetitions as much as possible but to use such contractions as will, I trust, enable the reader to understand my meaning, and shall at the same time economise the space of the Journal. It must be borne in mind, that one of the chief objects in publishing these cases is to give the Profession a general view of such diseases of the ear as present in a public institution, and which may, consequently, be taken as fair examples of the several aural affections to which the community in this country are liable. The contractions which for the future will

Left Side.—Hearing distance 3 inches; has had slight pain in this ear, which has been succeeded by a constant whitish discharge, upon removing which the membrana tympani was found coated over with a thick layer of plastic lymph, of a yellowish colour.

No. 14.—THICKENING AND INDURATION OF CUTICULAR LAYER OF MEMBRANA TYMPANI FROM IMPACTION OF WAX.—GENERAL OBSERVATIONS ON THAT DISEASE.

L. W., 40, male, applied on account of deafness of some weeks' standing in his left ear, but which has recently increased very much. Complains of noise like that of a boiling kettle. Hearing distance, 2 inches. Says that his hearing varies from time to time, but that it was always better after eating until lately. Occasionally he experiences a loud noise, as if a report took place in his ear, after which the hearing is improved. Disease has been of twelve-months' standing. Upon examination, we find the external auditory passage filled to within a quarter of an inch of its aperture with hard, brownish, inspissated cerumen. It is so hard, that percussion with a probe conveys the sensation to the fingers as if it struck against a body as hard and resisting as stone. Numerous short but firm hairs grow around the external aperture, and some of the more internal ones are probably mixed up with the hardened cerumen, and so assist to keep it immovably fixed in its place. The mere projection of a stream of warm water from a syringe will not easily remove such a thoroughly impacted mass as this. It must be assisted out with a little silver spatula, slightly bent at the end, like the old lever used in midwifery. But the ear should be syringed from time to time as we proceed with our manipulations. As it is now well loosened, you see I can remove it *en masse* with a pair of fine forceps, and you perceive that with it comes out a large collection of hairs, which had become entangled within it, and that all its lower portion and its extremity is covered over with a layer of soft, white, thickened cuticle, the natural lining of the surface with which it has been so long in contact, thickened and separated by the pressure exercised upon it by this foreign body. Immediate relief to all the symptoms under which this person laboured has been experienced by the removal of this foreign substance. The hearing has increased to twelve inches, and the noise has lessened considerably. Upon inspection through the specu-

be used in these cases are as follow:—M., male; F., female; R. S., right side; L. S., left side; H. D., hearing distance with an ordinary ticking watch, the same being used in all cases; In., the distance in inches between the auricle and watch; M. T., membrana tympani; E. T., Eustachian tube, &c. In future the date will be omitted, except where there has been a second note of the case.

The following Table, arranged upon a plan similar to that published along with the introductory remarks to these observations at page 314 of the preceding Volume of the *Medical Times*, exhibits the ages and sexes in 321 cases of

Diseases of the Ear Registered at St. Mark's Hospital from March 1850, to March 1851.

DISEASES	Under 5.		6 to 10		11 to 15		16 to 20		21 to 30.		31 to 40.		41 to 50.		51 and Upwards		TOTAL.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Males.	Females.	Grand Total.
Otitis	1	2	1	...	...	...	...	...	2	...
Acute Myringitis	1	1	...	...	...	...	1	2	2	...	1	...	...	...	4	...	7
Chronic Myringitis ...	1	...	5	1	2	1	8	2	4	6	4	...	1	1	1	...	14	12	38
Subacute Myringitis...	1	...	...	...	2	...	1	...	...	...	1	...	...	...	4	1	5
Thickening of Membrana Tympani	2	...	6	3	8	10	10	7	7	6	6	4	6	1	45	31	76
Otorrhœa, Chronic ...	6	6	14	3	6	7	8	7	2	6	9	2	1	2	2	...	48	41	89
Do. Acute	1	...	...	...	...	...	...	...	...	...	1	...	1
Do. with Polypus	2	...	...	1	1	...	1	...	...	...	...	1	...	...	...	3	4	7
Do. with Perforation	1	...	...	4	...	1	1	1	...	...	1	...	...	6	7	13
Do. with Caries	1	1	...	...	...	...	...	...	...	...	1	...	1
Inflammation of External Meatus	1	...	...	...	...	...	...	1	1	2
Contraction and Ulceration do.	1	...	...	...	...	...	...	...	...	...	...	...	1	1
Abscess in do.	1	...	...	...	...	...	...	...	...	...	1	...	1
Eczema Aurium	2	2	1	...	...	...	...	2	...	1	...	...	...	1	...	2	7	9
Congenital Malformation	1	...	...	...	...	...	...	...	...	...	...	1	1
Foreign body in Meatus	1	...	...	...	...	...	...	...	...	...	1	...	1
Nervous Deafness	1	...	...	...	...	...	...	...	...	1	...	1
Tinnitus Aurium	1	...	...	...	...	...	...	...	...	1	...	1
Otalgia and Neuralgia	1	1	...	...	...	...	...	...	...	1	1	2
Cerumen	1	2	1	1	3	3	9	8	5	8	2	11	4	38	25	63
Hæmorrhage from Ear	1	...	...	...	...	...	...	...	...	1	1
Total ...	7	10	55	13	17	14	34	37	31	36	32	16	18	11	25	9	184	137	321

lum we perceive the membrana tympani whitish and succulent, and having the parboiled appearance of the piece of cuticle which has been removed from it. We can also perceive several large red vessels ramifying upon its surface, and, in particular, coursing along the insertion of the malleus. This condition has, no doubt, been caused by the pressure of the accumulated and hardened cerumen; but in a few days it will recover its natural character.

There is a circumstance connected with this case worthy of your attention. You observed that, several times during the removal of the wax, the patient was seized with a fit of spasmodic coughing, apparently caused by some irritation in the larynx, and now I can reproduce the phenomenon simply by the introduction of a probe into the meatus, and touching ever so gently a particular spot upon its surface. This is not a very unusual phenomenon, although it cannot be produced in all cases. I never witnessed it in children or young persons. It is most common in males about middle of life, and is in nowise connected with any previous disease existing in the respiratory apparatus. In some persons the slightest touch of the floor of the external auditory passage, about midway between the inferior attachment of the membrana tympani and its external outlet, will bring on some irritation and spasmodic action in the larynx similar to that which you have just witnessed. The patient will generally tell you, upon inquiry, that he does not experience pain; but that the moment you touch this very sensitive spot he feels a tickling sensation in his throat, which immediately increases to the feeling one has when "a bit is gone astray." What the nervous connexion may be which induces this I cannot say, but the fact is worthy of note. The different degrees of sensibility of the several parts of the external ear are worthy of remark. In some persons the simple act of syringing with tepid water will produce syncope, although such patients will tell you it is not from the pain they feel. The removal of a granulation, or small polypus, from the external auditory passage, will at times produce sickness of stomach, and even fainting.

Gentlemen, I am not in the habit of recording the cases of deafness proceeding from accumulation of cerumen; they are so numerous, and so easy of cure, that it seems unnecessary to occupy your time with them, while so many other diseases of the ear present themselves more worthy of our attention, because less known, and more difficult to treat. Yet let me tell you, that the ability of making a diagnosis in such cases is not always possessed even by good surgeons and physicians. From week to week I meet with cases of deafness attended with tinnitus aurium, which have been ascribed to and treated as depending upon functional or organic derangements of other organs, the stomach and the brain in particular, and for which constitutional means as well as topical applications had been employed at considerable length, but which, upon examination, proved to be nothing more than a firmly adhering piece of hardened wax, similar to that which you just now saw me remove. Unless illuminated by some means, natural or artificial, the external auditory passage is a dark cavity, and, without a proper inspection, it is not possible to know, by any set of symptoms of which the patient himself is conscious, whether his disease proceeds from the simple mechanical impediment of a plug of wax, disease of the middle ear, or threatenings of serious mischief in the brain itself, because the two most prominent symptoms, deafness and tinnitus aurium, are common to all three, and to many other diseases of the ear and of the brain also; in the same manner as you have impaired vision and muscæ, common to so many diseases of the eye, as well as symptomatic of cerebral affections. I see few cases of incipient cataract, in the upper ranks of life, which have not already undergone a little doctoring, under the impression that the disease depended upon the state of the stomach; and blue pills, bitter mixtures, and dietetic regulations, have had full sway. But, where so much has been achieved for medical science during the last twenty years by greater attention to diagnosis, thus rendering the healing art a more accurate science than heretofore, I do not think it is too much to ask the surgeon or general practitioner to possess himself of a small tubular speculum, and take a peep at the state of the parts he is prescribing for, before he resorts to the routine treatment for "deafness." This is, properly speaking, one of the errors of omission. Now, I will tell you one of commission. A patient is seized with deafness and a singing noise in one of his ears. The medical attendant supposing it might be wax, squirts hot water

with a powerful syringe into the auditory passage for half an hour together, and as "nothing comes out," he syringes the harder. All this time the patient laboured under inflammation of the drum of his ear, which, I need not tell you, was not improved by the treatment adopted. You saw an instance in proof of this position here very lately; therefore, gentlemen, let me entreat of you never to syringe an ear, nor to drop any stimulating application into it, until you have carefully examined the state of the parts, and assured yourself of the presence of wax or other foreign body.

The ceruminous glands are more liable to morbid changes than the Profession are aware. The moment an inflammation is set up in the neighbouring structures, they cease to secrete. When otorrhœa is present, their function seems also suspended. At times they secrete a thin, light-coloured, honey-like cerumen so quickly, and in such quantity, as to pour out of the external meatus. This I have chiefly seen in weakly females, and often occurring as a sequel to some febrile attack. From children of a year old to persons of extreme age we meet with collections of hardened wax in the ear, and are called upon to remove them; but they are more frequently seen in middle life than at any period antecedent thereto. They are not always accidental, as you may learn from the same person coming back to you again and again, at intervals of two or three years, to have them removed. The vitiated secretion probably depends upon some chronic inflammation of the ceruminous follicles themselves. The wax is always darker in colour than natural, at times resembling pitch in its tenacity and hue. In other cases, where the more fluid parts have evaporated, it becomes as hard as a piece of mortar or concrete, and forms an accurate cast of the meatus auditorius externus. As soon as this has occurred, hearing is much impaired, as you may naturally suppose; but, from time to time, the patient feels a slight report in his ear, particularly after eating or moving his jaws, and then the hearing is much improved for a short period. The improvement is caused by the motion of the external portion of the tube slightly disadjusting the cork of wax, and so allowing air and sound to be temporarily transmitted to the drum-head; but the improvement is lost as soon as the plug has regained its former position, or an additional deposit of wax fills up the space, and again occludes the air and sound. This circumstance, trivial as it is, is worthy of note, because you have something very similar taking place in another disease of the ear, arising from a totally different cause. In catarrhal inflammation of the middle ear, with thickening of the lining membrane of, or mucous collections within, the Eustachian tube, you have, as, perhaps, many of you have yourselves experienced when labouring under catarrh or influenza, a sudden report, as if something gave way in the ear, followed by an immediate accession of hearing. In some cases of total impaction of wax, particularly where it is very hard and of long standing, you will find the patient does not hear the watch, even when held to the auricle, pressed against the mastoid process, or laid upon the forehead—symptoms generally indicative of some great lesion of the internal or middle ear, or paralysis of the auditory nerve. Yet, as soon as you have removed the mechanical impediment, the hearing becomes exalted to a degree which is painful to the patient to bear. I cannot but think, that, in such cases, the loss of power has arisen from the pressure exercised by the foreign body upon the tympanal membrane, and, through it, transmitted by the chain of ossicula to the internal ear.

Squirting hot-water into the auditory passage, even with the most powerful syringe, will not always succeed in removing the offending body. In fact, if not properly done, it rather increases the impaction. I have, however, seldom met a case in which, with a little care and patience, I could not remove the wax at one sitting. One of the cases which proved an exception to this, was in a person who had a natural hour-glass contraction in the middle of the passage, and another where there was an exostosis about the size of a pea in the same locality. The best syringe to employ is a metallic one capable of holding three or four ounces of fluid; but it should be so constructed that it can be worked with facility with the right hand (a) while the left grasps the top of the helix, and, by drawing it slightly upwards, outwards,

(a) See a description of the instrument, and a representation of the vessel for holding the water, in the *Dublin Quarterly Journal* for November, 1847. Vol. IV., p. 580.

and backwards, assists to straighten the meatus, and thus facilitate the exit of the plug of hardened cerumen. The jet of fluid should not be directed point-blank against the cork of wax, but rather to its edges, where it is attached by a number of hairs, and is often intimately united with the cuticle. From time to time we should introduce the speculum, and see what progress is being made. A fine long-bladed forceps may sometimes be slipped down upon the offending body, and it can be thus withdrawn; or, what I find much more useful, the small silver spatula which I have already described to you, and which, acting as a lever, moves the plug and so allows the water to get behind it and force it out. There is another instrument very useful in such cases. It is a fine blunt curette, made of silver, and with the end bent for about a line in length at a right angle with the shaft. By slipping this down between the cork of hard wax and the wall of the meatus, and then, when it has proceeded some distance, giving it a half turn, so that its point fixes in the plug, the latter may often be removed *en masse*. Care must, however, be taken in using these little instruments, not to abrade the skin, which at the lower portion of the meatus is very delicate, and apt to bleed upon the slightest irritation. You read in books on aural surgery, and in lectures and details of cases given in periodicals, of various substances employed for the purpose of softening wax; the last of which I heard was glycerine; but, if you will attend to the directions I have now given you, exercise some patience, and proceed with care and delicacy, I do not think you need often have recourse to any of the quack nostrums recommended for softening and removing wax. Should you, however, at first encounter any difficulty, or the patient experience much pain from your manipulation, it is better to desist, and drop a little warm oil into the ear once or twice a day, or keep a bit of cotton, moistened with oil, in the passage, until the wax has been partially softened.

ON THE PATHOLOGY OF THE UTERUS, ITS ANATOMY AND PHYSIOLOGY.

By T. SNOW BECK, M.D. Lond., F.R.S.,

Fellow of the Royal College of Surgeons of England.

Physician to the Farringdon General Dispensary and Lying-in-Charity.

[Continued from page 206.]

ON THE EXISTENCE OF ULCERATION OF THE UTERUS, AS A COMMON DISEASE.

WHEN considering this subject, Dr. Bennet describes it as occurring:—(1.) in virgin females; (2.) in pregnant females; (3.) during and after abortion and parturition; (4.) in advanced life, after the cessation of menstruation; (5.) as a concomitant of polypi and of fibrous tumours of the uterus; and these chapters are preceded by inquiries into the employment of the speculum by the ancients; the anatomy and physiology of the organ, and the pathology of the disease. It will be necessary to examine each of these subjects, though not in the exact order adopted by this author.

In the "preliminary remarks" Dr. Bennet wishes to show, apparently as an apology for the frequent employment of the speculum, which is advocated, that "not only was instrumental examination of the uterine neck known to the ancients, but they were evidently quite familiar with this mode of investigation," p. 5; that "although the fact is not generally known, it is, nevertheless, quite certain that ocular inspection of the cervix uteri, by instrumental means, was known to the ancients, perhaps, from the earliest times," p. 4; and that the knowledge obtained by this means, and the use of the instrument itself, "appear to have fallen into complete oblivion for centuries, until M. Recamier revived the use of the speculum, and by its means resuscitated the knowledge so long dormant," p. 6.

The knowledge of the ancients is considered "satisfactorily proved by the practical information respecting diseases of the cervix uteri which they possessed; information which they could only have acquired by the ocular demonstration afforded by the use of the speculum. Thus, in the section of Paulus Ægineta's works, on "Ulceration of the Womb," we find inflammatory ulceration of the cervix uteri, its causes,

varieties, and treatment, described at some length. (a) It is thus that we find different agents recommended, according as the ulceration is "clean or foul, spreading or not spreading; attended or not with inflammation."—Pp. 5, 6. The speculum, under the name of dioptra, is also spoken of as "an instrument in general use. In the section on ulceration of the uterus, he (Paulus Ægineta) states, that the ulceration is to be detected by the dioptra, evidently a kind of bivalve speculum." P. 5.

From the manner in which the subject is discussed, we would naturally conclude, that there must be decided grounds for these statements. The ancients certainly described various morbid appearances as "ulceration of the womb;" but there is no mention, in these descriptions, of any part corresponding to the cervix uteri; nor does it appear from the context of their writings, that by ulcerations of the womb they meant the diseases of the organ which we, at present, understand by that term. The way in which it is directed to apply various substances to the ulcers, and to inject other substances into the womb, as if it was an ordinary operation, and readily performed; and the mention of abscesses of the womb, as of a disease of frequent occurrence, these lead to the inference that there is some difference between the ancient signification, and the present meaning of the term "womb." This inference is confirmed by a passage in "Paulus Ægineta," Vol. II. p. 381, wherein he says, "The cauda is a fleshy excrescence, arising from the mouth of the womb, and filling the female pudendum, sometimes even projecting externally like a tail; and it may be removed in the same manner as the nymphæ."

All doubt, however, upon this point, is removed, by referring to the older works on anatomy. Dionis, in his "L'Anatomie de l'Homme," the fifth edition of which was published in 1716, gives the following description:—"(b) The womb is round and oblong; for it runs from a broad basis or bottom, and terminates gradually in a point towards its internal orifice, which is its narrowest parts, so that it resembles a small cupping-glass, or rather a pear. If to this body you add its neck, it has the figure of a bottle turned upside down. Since we have already compared it to a bottle, we must own, that it ought to have a bottom, a neck, and two orifices; one internal, which is the orifice of the bottom; and the other external, which is that of the neck. In regard, the external orifice presents itself first to our view, we shall begin with that. Without repeating the different names given to this part, I shall content myself with giving you to know that 'tis commonly called the pudendum. 'Tis composed of several parts, some of which present themselves to our view upon the outer surface, as the pubes, the mons veneris, the lips, and the great slit; but the others are only descryed after the deduction of the lips, such are the nymphæ, the clitoris, urinary passage, and the caruncles. The inner orifice of the womb is a perforation, not unlike that of the head of a man's yard. 'Tis the beginning or entry of a very narrow passage, which enlarges itself to afford a passage to whatever enters or departs from the womb. The neck of the womb is a round and long passage, lying between the inner and outer orifice; which receives the yard like a sheath, and therefore is called vagina. The last part that remains to be demonstrated, is the bottom of the womb, which is its proper body, and the principal part for which all the others were made. The passage which reaches from the inner orifice to the principal cavity of the womb, is called the short neck, by way of distinction from the vagina, which is the true neck of the womb. It is about an inch long, and so wide as to receive a goose-quill. Its cavity is uneven and wrinkled."

Winslow, when describing the vagina, says, "The great canal, formerly called the neck of the uterus, is situated below the urethra, and above the extremity of the intestinum rectum." (c) And Fyfe likewise says, "The orifice of the

(a) The uterus is often ulcerated from difficult labour, extraction of the foetus, or forced abortion, or injury of the same, occasioned by acrid medicines, or by a deflexion, or from abscesses which have burst. If, therefore, the ulceration be within reach, it is detected by the dioptra, but, if deep-seated, by the discharges; for the fluid which is discharged varies in its qualities.—Vol. I. p. 624.

(b) The quotations are taken from the English translation, "The Anatomy of Humane Bodies," by Monsieur Dionis. Translated from the third edition. London, 1716, Pp. 183—294.

(c) "An Anatomical Exposition of the Structure of the Human Body." By James Benignus Winslow, Professor of Physic, Anatomy, and Surgery in the University of Paris. Translated by G. Douglass, M.D. Third Edition. Lond. 1749. Vol. II. P. 208.

vagina, termed, likewise, os externum uteri, is placed immediately under that of the urethra." (a)

These anatomical descriptions show, that when the ancients spoke of ulcerations of the neck of the womb, they meant the part which is now called the vagina, the orifice of which still retains a portion of its ancient name, as the os externum, though the terminal word uteri is dropped.

The use made of the dioptra was also very different from that which Dr. Bennet has represented; for it is evident, that this instrument was only used for operations near, or to detect ulcerations within, the orifice of the vagina. "Abscess in the more exposed parts is discovered by means of the surgical instrument called dioptra, or the touch of the finger, and from the pains being more violent, owing to the nervous nature of the mouth; as when the collection is in the fundus and vagina it is attended with less pain, and no swelling is felt heavy upon the fingers, and the mouth appears less tumid." Paulus Aegineta, Vol. I., p. 623. "When the abscess is situated at the mouth of the womb (i.e., the orifice of the vagina,) so that it can be operated upon, we must not be in haste in having recourse to incision,—[here follows a description of the mode of using the dioptra, ending with the caution,]—But if the abscess be within the mouth of the uterus, (orifice of vagina) we must decline operating." (Vol. II., p. 385.) "If, therefore, the ulceration be within reach, it is detected by the dioptra, but, if deep-seated, by the discharges." (Vol. I., p. 624.) Such was the use made of this instrument by the ancients. (b)

The descriptions given in the chapter devoted to the "Anatomy and Physiology of the Uterus," might be passed over, were it not for certain statements which are said to "bear closely upon pathology," and explain the "novel and important facts" (page 10) detailed, and the parade which is made of these "novel and important facts," "of the utmost importance, as they will enable us satisfactorily to account for numerous pathological facts, otherwise inexplicable." (Page 11.) A few examples will serve as a specimen of the whole.

Dr. Bennet says:—"This fibro-muscular tissue, (which composes the body of the uterus,) according to the recent researches of M. Jobert de Lamballe, is entirely devoid of cellular tissue, there not even being any between it and the investing peritoneal membrane;" and afterwards asserts the same upon his own authority:—"The structure of the cervix uteri is fundamentally the same as that of the body of the organ; but it differs by the presence of a certain amount of cellular tissue, of which, as I have stated, the uterus itself is devoid." (Page 11.)

It is difficult to meet statements like these, the accuracy of which depends upon an anatomical demonstration, in any other way than by the counter-statement, that the body of the uterus *does* contain cellular tissue.

In January, 1851, I showed a specimen of disease to the London Medical Society, wherein the cellular tissue in the body of the uterus was not only demonstrated, but was also infiltrated with colloid cancer cells, (*Medical Times*, Feb. 1.) In the following month, Dr. H. Bennet detailed to the same Society the case of a corroding ulcer of the uterus, in the microscopic examination of which, "loose, fine, filamentous, or cellular tissue," was found. He, at the same time, remarked—"The filamentous cellular tissue found at the ulcerated edge showed that disease developed cellular tissue in the uterine tissue so as to render it visible, but did not prove that it existed in a demonstrable form in the non-pregnant uterus; although he was very willing to admit, that the microscope might prove such to be the case," (*Medical Times*, March 1.) There is, certainly, something singular in this attempt to escape a difficulty. Cellular tissue is found in a corroding ulcer of the uterus; and this, Dr. Bennet says, showed that disease developed cellular tissue! But, where is the proof that the cellular tissue found was not the healthy tissue of the uterus, and not formed by the disease; especially when the microscopic examination led to the inference that the disease "depends on a process of decay or disintegration taking place slowly." The presence of this cellular tissue did not prove that it existed in a

demonstrable form in the non-pregnant uterus, although the microscope might prove such to be the case. If the microscope proved the presence of cellular tissue, was that not showing that it existed in a demonstrable form? At a subsequent discussion of the same Society, in April, 1851, Dr. Bennet finally admitted that he had taken his anatomy from the researches of M. Jobert, who he believed had never used the microscope, but examined the organ with the unassisted eye. Yet, upon researches conducted with so little care as this, and himself unable to determine whether they were correct or incorrect, Dr. Bennet comes forward and makes a confident assertion, that the body of the uterus is devoid of cellular tissue, and founds upon this an important pathological law. I need scarcely add, that neither the assertion, nor the law deduced from it, are worthy of the slightest credence.

When describing the mucous membrane of the uterus, Dr. Bennet says:—"The mucous membrane lining the cavity of the uterus is in an elementary condition; so obscure, indeed, that its very existence has been denied by many anatomists; while that of the cervix is dense, vascular, well-organised, forms numerous transverse folds, and is easily demonstrable. It presents, moreover, a large number of mucous follicles, endowed with considerable functional activity." (P. 14.) "The body of the uterus is lined by a merely elementary mucous membrane; the uterine neck, by a thick vascular mucous membrane studded by numerous mucous follicles." (P. 15.) "As a necessary result of this anatomical difference in structure, the mucous membrane of the cavity of the uterus is rarely affected with inflammation, whereas that of the cavity of the cervix is very liable to inflammation." (P. 14.)

Nothing can be more incorrect than this description; but, that the contradiction may not rest solely upon my own authority, I quote the account from "Quain's Anatomy." "The mucous membrane which lines the uterus is thin, and closely adherent to the subjacent substance, especially in the body of the organ. It is continued from the vagina, and into the Fallopian tubes. Between the rugæ of the cervix, already described, it is provided with numerous mucous follicles and glands. In the body of the uterus the mucous membrane is thin, smooth, soft, and of a reddish-white colour. When seen by aid of a lens, it is found to be marked over with minute dots, which are the orifices of numerous simple tubular glands, somewhat like those of the intestine. Some of the tubular glands are branched, and others are slightly twisted into a coil. These glands can be distinctly seen in the unimpregnated and in the virgin uterus; but they become enlarged and more conspicuous on impregnation. The epithelium is columnar and ciliated as far down as the middle of the cervix, below which point it becomes squamous, like that of the vagina and vulva." (a) I have frequently, in my own researches, verified the correctness of this description, by which it will be seen that the mucous membrane of the body of the uterus is anything but in an elementary condition. Moreover, in a pathological point of view, it is sometimes of extreme importance, as being the primary seat of tuberculous deposit. Rokitsansky mentions this:—"Tubercle occurs primarily as tubercle of the uterine mucous membrane; it occurs in the shape of an infiltrated mass, which fuses into and attacks the uterine parenchyma to a greater or less extent." (a)

Recently (July, 1851), I examined the uterus of a virgin, who died from typhoid fever, which confirmed these views. Instead of any difference existing in the structure of the mucous membrane of the body and that of the cervix, the two are identical so far as the middle of the cavity of the cervix. And if, at the lower parts, it presents the appearance of lying in folds, this is caused by the proper substance of the organ projecting inwards, the arbor vitæ, over the surface of which the delicate membrane is carried. An elevation of the proper substance of the uterus, covered by a delicate mucous membrane, is, however, very different from a membrane, "dense, vascular, well-organised, forms numerous transverse folds, and is easily demonstrable." And it follows, as a consequence, that the pathological deductions, said to be "a necessary result of this anatomical difference in structure," are not to be depended on, seeing that

(a) "A Compendium of the Anatomy of the Human Body." By Andrew Fyfe. Three Volumes. Edin. 1800. Vol. II. P. 139.

(b) Since the above was written, I am informed, that this question has been examined by a French author, who arrived at a similar conclusion. My informant could not refer me to the paper, nor remember the name of the author.

(a) "Elements of Anatomy." By Jones Quain, M.D. Edited by R. Quain, F.R.S., and W. Sharpey, M.D., F.R.S. Lond. 1848. Vol. II. Pp. 1.62-3

(b) "A Manual of Pathological Anatomy." By Carl Rokitsansky, M.D. Translated for the Sydenham Society. Lond. 1849. Vol. II. P. 299.

the anatomy from which they are deduced is very far from correct.

The presence of an internal sphincter, which is said to become relaxed under the influence of inflammation, is another of these "novel facts." "At the union of the two cavities (of the body and of the neck) there is, during life, a natural stricture or coarctation, which closes the cavity of the uterus, which is not mentioned or described by anatomists. From its universality, and occasional persistence after death, it must be the result of the anatomical structure of the parts, and, probably, of the presence of a kind of muscular sphincter," (p. 14.) "The two cavities are distinctly separated one from the other, as I have explained, by a coarctation or natural sphincter, which has not been described by anatomists, but which is sufficiently powerful to offer a decided obstacle to the introduction of the uterine sound into the cavity of the uterus in the healthy state." (P. 46.) This constriction has been known ever since the uterus was anatomically examined, and will be found in almost every anatomical description of this organ. Not only is this the fact, but the coarctation, and occasional adhesion of the tissues at this part, under the influence of inflammation, has long been recognised by practical physicians, producing, in the latter case, retention of the catamenial fluid in the cavity of the body of the uterus, and requiring the adhesions to be broken down by the end of a probe to allow the menstrual fluid to escape. But the "novel fact" consists in the presence of a natural sphincter, which has not been described by anatomists, for the obvious reason, that no such sphincter exists. It cannot be necessary to offer any laboured refutation of this imaginative anatomy, which is first spoken of as "probable," and afterwards described as an ascertained fact; yet I cannot withhold a strong protest against this method of stating errors as ascertained anatomical facts, in order to support an imaginary pathology.

9A, Langham-place.

(To be continued.)

ON HYPOCHONDRIASIS, AND OTHER FORMS OF NERVOUS DISEASE.

By H. HUNT, M.D.

(Continued from page 204.)

I WILL now proceed to make some separate remarks on the dietetic measures which specially bear on the subject of my paper.

EXERCISE AND AIR.

"The human frame is so constituted, that the vital powers unexcited by motion, grow gradually languid; as their vigour fails, the bodily functions are imperfectly performed, and obstructions generated. From obstructions proceed disease, and those pains of the body and despondency of mind which render life a burden to ourselves and a source of misery to our friends."

Exercise duly apportioned, on the contrary, conduces to health, by acting as a stimulus to every vital action. By exercise, the muscular system is strengthened, and the nervous kept free from undue irritability. By it all the secreting organs are stimulated to an increased activity, the organs themselves kept free and pervious, the blood purified by the elimination of deleterious matters. Exercise, by accelerating the circulation, and by quickening respiration, exposes the blood more frequently to the purifying influence of the air in its passage through the lungs. All these important actions, receiving simultaneously an increased impetus from exercise, cause a greater expenditure of old materials and create a necessity for new, thus contributing in a high degree to insure appetite, and to the maintenance of the vigour and health of the body and elasticity of mind.

The beneficial effects of exercise are much enhanced when taken in the open air. In proportion to the purity of it, so is the benefit increased. Pure air cleanses the blood, by separating the carbonaceous matters from it, and gives vigour and life to it by supplying it with oxygen; but impure air contaminates it further by imparting to it the noxious matters with which it is itself impregnated. Hence the necessity and importance of selecting for exercise the most open, airy situations and furthest removed from all contaminating

principles. Fresh, open, mountain air, is, as a general rule, the most healthful; and the air that most nearly approaches it in quality the better. The salubrity of fresh sea air is well known. Some constitutions are benefited by the first, some by the second, and all by an occasional change from one to the other.

The very different effect produced by exercise in high, open ground, and in low, secluded, ill-ventilated valleys, is very remarkable. If two persons of equal strength and of the same degree of muscular development and nervous energy, set out for the purpose of taking exercise, one selecting the high, open country, the other, low, close valleys, the former will be enabled to bear a continuance of active exercise which would quite overpower the latter. He will increase in energy and activity at every step he takes; he will return fresh and exhilarated, with an appetite prepared to enjoy, and powers of the stomach strengthened and enabled to digest his food, which will be followed by sound and refreshing sleep. While the second will be seen crawling along, scarcely able to draw one leg after the other, and, on reaching home, he will feel weary and exhausted, spiritless and oppressed, weak and sinking, yet without the slightest inclination for food, or powers of digesting it, if he had. This may be considered rather a highly-coloured statement, but it is a faithful description of what I have often witnessed in others, and, to a certain extent, have experienced in my own person. The increased strength and renewed vigour of the first can only be explained by the stimulus the purified blood affords the nervous system, and the weariness and oppression to the enervating effects of the deleterious exhalations, always more or less abundant in deep valleys, which had been imbibed by the second.

To derive all the benefit exercise can confer, and to avoid the injurious effects it can produce, it must be regulated, both as to time and extent, so as to be commensurate with the strength of each individual. Walking and horse-exercise are the best, but they should not be taken in excess, *i. e.*, should not produce exhaustion. Exercise should never be allowed to interfere with the process of digestion. I have already observed how exhaustion of the nervous energy impedes digestion,—therefore, a certain time must be allowed to rest and recruit the strength previous to the principal meals, and during the progress of digestion; but moderate exercise after that process is completed, or towards the termination of it, generally proves advantageous. However, whilst precaution is requisite to avoid exhaustion, we must discriminate between the feelings of listlessness arising from want of energy and oppressed vital powers, and those of real fatigue from exertion. This precaution is especially necessary in persons of previous indolent or sedentary habits.

If possible, the hypochondriac should avoid the solitary and sauntering walk; he should have some object of interest, some settled purpose in view, which he should always make a point of attaining. Every individual must have observed the increased activity and energy in his own person, whilst in the pursuit of some important or pleasurable object, and the fatigue induced by the listless, uninteresting, constitutional walk, as it is called. The former imparts vigour and health to the system, while the latter serves only to increase the torpor of the nervous, and the depression of the whole system.

FRICTION, BATHING, &c.

The importance attached to the maintenance of a free action of the skin has been already noticed. There are few remedies more useful than friction, though none more neglected. Friction of the whole surface daily, and sponging it with cold water, vinegar, or salt and water every morning, the use of the shower bath throughout the year, an occasional tepid bath, are of infinite value, in not only removing impurities from the surface, but in exciting an increased action of the cutaneous vessels, by which they will throw off from the blood many deleterious matters, and also prevent an undue accumulation of blood in internal parts, and thus assist in the re-establishment and maintenance of health. These measures, however they may compensate for the want of exercise in the open air, must be considered as auxiliaries only, and by no means as substitutes for it.

The frequent change of the inner clothing is also very desirable, as well for the comfort imparted to the feelings of the person as for the prevention of the injurious effect which

would result from the re-absorption of the various matters thrown off by perspiration. The clothing should be sufficient to retain a requisite degree of warmth on the surface of the body, to secure the same object for which friction is recommended, viz., an active cutaneous circulation, to enable the cutaneous vessels to perform their functions, and to prevent, as I have already said, a loaded and congested state of the internal viscera. The clothing worn next the skin should be of flannel, or of some woollen texture, especially in the ever-changing climate of England. But in avoiding the evils which would arise from deficient clothing, the opposite extreme must be guarded against with equal jealousy by invalids and hypochondriacs. The oppression and injury accruing from immoderate clothing exceeds what may be anticipated, and occur much more frequently than is generally supposed. Perhaps I may be considered as dwelling too much on these apparently trifling details; but the experienced medical man will bear testimony to the necessity of attention to them, for it is scarcely credible to what an absurd extent some invalids heap garment on garment from fear of cold, or some equally ridiculous fancy. Indeed, some examples of this propensity have occurred in my own practice, which I will not relate, almost fearing they would be considered untrue.

Hypochondriacs should also avoid the oppression and relaxing effect of hot feather beds, of excess of clothing at night, and ill-ventilated bed-rooms; a fire in a bed-room is far preferable to many blankets; both produce warmth, the former by imparting heat, the latter by retaining it; but in retaining it, the escape of noxious exhalations is also prevented.

Early and regular hours are of much importance, both in rising from and retiring to bed. The early walk seldom fails to create an appetite and assist digestion. It is of less consequence to insist on the hour for retiring; for the invalid who rises, walks early, and takes sufficient exercise during the day, is generally glad to seek rest at a proper season.

In the selection of food, we must always remember that the structures of the body are composed of various kinds of elementary matter, therefore it is essential that the diet should contain all the elements of which the body is formed, in order to secure the perfect nutrition of it.

As the digestive organs of hypochondriacs are always more or less disordered, we should select for them the most digestible food, and, as the nature of the disorder varies in different individuals, we must regulate the quality as well as the quantity of it to meet the peculiarities of each case.

The advantages of a properly and judiciously regulated diet is generally acknowledged, and nearly as generally neglected. Simple as is the expression, "attention to diet," few subjects are less understood, even in relation to health, much less in reference to disease. It is true, that many persons have their own peculiar systems; one recommends the exclusive use of bread and meat; a second, a diet almost exclusively of vegetable; a third, one of milk, and so on; each appropriate to certain conditions of the body, but equally inapplicable to other states of it. Yet the same system will be often recommended for every disease, especially by non-professional persons.

Another and a frequent source of error arises from the belief, that, if a certain quantity of food, whatever may be its quality, is consumed, the body must be nourished; hence it is that we often see, even among affluence and plenty, ill-fed, badly-nourished, in fact, half-starved children, a prey to diseases of defective nutrition. Moreover, I continually find it a difficult task to convince parents, that a child may be as effectually starved although a sufficient quantity of food is eaten, if such food be defective in the essential elements of nourishment, as it will be from a deficient quantity of wholesome food; and a yet more difficult duty to make them understand, that it is vain to expect from medicine alone what can only be obtained by a judicious admixture of dietetic with our medicinal remedies. The agriculturist may as well expect an abundant crop of healthy corn from ground which contains only nourishment enough for briars as that we can have healthy blood, strong bone, firm muscle, and sinew produced from food defective in the natural constituent elements of those important parts of the animal machine. If we were to imitate the rearer and trainer of animals in the management of (*i. e.*, dieting and exercising) our children, a large proportion of the diseases to which we are liable from infancy to old age, would cease as completely as the scurvy from our ships. Unfortunately, this is

little thought of, much less practised. Instead of endeavouring to preserve health by such means, and to restore it when lost, by the aid of appropriate dietetic with our medicinal remedies, all fly at once to drugs alone, as if it were not better to cut off the supply which furnishes the elements of disease than to remove it by calomel, &c., or to expect on the other hand, that bark and steel (valuable as these remedies are) will supply the want of beef and bread.

A diet sufficient to maintain life, all the other natural laws being observed, is simple and palpable enough; but I question very much, whether in reference to the production, prevention, and cure of disease, we understand the effect and operation of different articles of diet, as well as we do that of our medicinal remedies; at all events, I may state, without much fear of contradiction, that we seldom exercise the same degree of care, judgment, and discretion in our application of them.

We are sufficiently conversant with the effect of a general superabundance and deficiency of food in the production of certain classes of disease. We see the influence an excess of food exercises in the generation of inflammatory and other disorders of plethora in the affluent and luxurious, and in those persons, butchers for example, who live almost exclusively on highly azotized food. The maladies of the poor and needy make known to us the effect of a deficiency of food. The remedial agency of a restricted diet in relieving those of the first class, and of a generous and nutritious one in curing the second, removes all doubt, if any could exist, on the subject. To descend more into detail, limited as our knowledge is of the special effect on the constitution of an excess, or the contrary, of any particular article of diet, there is a sufficient number of established facts on record to show the importance of the subject.

Scurvy is a striking example of a disease resulting from a deprivation of some particular element afforded by vegetables and fruits, and of the value of diet in the treatment and cure of it. We know that some persons cannot venture to take a glass of wine without paying the penalty of the transgression in a fit of gout; others, again, are obliged to refrain almost entirely from animal food,—indeed from all kinds of the more highly azotized,—for the same reason. We are all acquainted with the impracticability of retarding the progress of diabetic diseases, whilst the patient will not refrain from food containing saccharine matter: also the difficulty of correcting the state of the system known as the oxalic acid diathesis, unless the same kind of food is forbidden.

An interesting example of the cure by diet is related by Dr. Blackall, of Exeter, as having been witnessed by his friend Mr. Johnson, on board of an Indiaman, off Canton:—"Towards the conclusion of the voyage, the sailors had been attacked with dropsical swellings, coming on suddenly, and without those signs which are thought strictly to characterise scurvy,—sponginess of gums and petechiæ. This attack could be attributed to nothing but the use of damaged rice, to an allowance of which they had been unfortunately reduced. On their arrival in port, the principal improvement in their diet was well-fermented bread, which operated as an active diuretic within twenty-four hours after they had begun its use. No doubt remained in the minds of any of the sick what it was that performed the cure. Those who preferred the native vegetable acids did not obtain the same immediate benefit." Although in this case the quality of the rice might have contributed, in part, to the production of the disease; much of it, I think, might be as correctly attributed to the deficiency of nourishment, from the "short allowance," and the cure as much to the nourishment afforded by the bread as to its diuretic effect.

These examples are sufficient to cause a regret, that we have not more recorded facts in the shape of well-regulated tables, to show how different articles of food, and a superabundance or deficiency of any particular kind, tend to produce certain diseases, and how others act as remedial agents and cure them. Could we supply this want in our knowledge, we should be, perhaps, able to remove (as nature often does unknown to us) many diseases by simple and mild dietetic remedies—remedies which cure some diseases by correcting, others, by supplying the absent element in the blood; others, again, by exciting an increased action in the secreting organs, and thus cause a removal of noxious matters from the system, instead of resorting to those chemical and mineral compounds, on which we now so exclu-

sively rely. If this principle could be well and thoroughly worked out and established, it would probably lead to a beautiful and most desirable simplicity of treatment and cure. Although little can be done by any single person, yet the aggregation of facts from individual observers would at length not only give us the knowledge we now require, but would tend to explain many doubts, to reconcile many apparent anomalies, and to afford an insight, hitherto rather "desired than expected," into the nature of the various conditions of the blood and secretions, and as a natural consequence, into the causes and nature of many disordered actions now but imperfectly understood. As I propose to treat of the principal modifications of hypochondriasis separately, the kind of food most proper for each variety will be best considered at the same time. I shall, therefore, limit my present remarks to those general rules which are more or less applicable to all. I may first observe, that it is very important that our instructions for the guidance of hypochondriacs should be most simple, so as to be easily and readily followed, that the patient may be persuaded to disregard all minute maxims and observances on which they are so prone to dwell. They only tend to produce an increased vigilance to discover any unpleasant feelings that may arise during digestion, and which their apprehension tends greatly to create. Everything that will divert the attention of these invalids from themselves during the process of digestion will contribute greatly to facilitate the proper performance of that function; it is, therefore, advisable that he should rather incur the risk of slightly transgressing the bounds of prudence, in eating and drinking in cheerful society, than by taking the more prudent meal in solitude. (a)

"Most stomachs are able to digest a little of almost any kind of food, but not much of the most digestible. What sits easy on the stomach, and produces no inconvenience, may be presumed to be properly digested and wholesome as regards that individual." (b) Moderation in eating, then, is of great moment, and, to insure it, food should be eaten slowly and masticated thoroughly. Eating should be discontinued at a point short of uneasy repletion. If these rules be strictly attended to, and digestion be not interfered with by active exercise of mind or body, the stomach will generally perform its duty thoroughly, and prepare the food in a proper manner for the subsequent processes of assimilation.

Experience also proves, "that crowding the meals in too rapid succession, especially of animal food, is productive of great injury to the stomach," for that organ requires rest after exertion as does every other part of the body. Sufficient length of time, therefore, should be allowed to elapse after a meal, to insure rest and the perfect digestion of it before another is eaten; a rule frequently infringed (from the sensation of sinking at the stomach, which is so common in hypochondriacs), at the expense of preventing appetite and producing indigestion.

In considering the quantity and quality of food, we must remember, that the strength of the patient must be supported by a sufficiently nutritious diet, which must be modified to meet the necessities of each case. It is also a judicious plan to vary the nature of the aliment occasionally, blending vegetable and animal food, but varying the proportions of one kind or the other, as circumstances may make necessary; at all times taking care to avoid those kinds which are well known to be difficult of digestion,—such as salted and prepared meats, and crude, especially raw, vegetables, &c. The propriety or necessity of allowing some stimulant is always a difficult question to answer. In the early stages of hypochondriasis, whilst the nervous system is depressed, a moderate quantity of stimulus may be safely taken, and with great advantage.

We must be guided in our decision, in each case, by the individual temperament and previous habits of the patient, remembering always that it is a powerful agent,—that whilst a moderate quantity, habitually taken, may be beneficial to some constitutions, it is equally injurious to others. The remark as to the necessity of some stimulant is peculiarly applicable to those persons who have been in the habit of indulging in wine or other stimulating beverages; for, if they are suddenly and wholly deprived of it, uneasy sensations will be experienced in the stomach, indicating an im-

perfect performance of its functions. But stimulants should not be taken excepting with the principal meals, as it is wrong to stimulate that organ when it has no task to perform, and no more should be taken than is sufficient to enable it to fulfil its duties.

If hypochondriacs seek proper advice at an early period of the malady, whilst it is still uncomplicated, relief can often be given quickly and without difficulty; but unfortunately the disease is generally so increased by neglect, more firmly rooted by mismanagement, and has become complicated with congestion before any systematic remedial measures are brought to bear upon it; that the favourable opportunity of affording speedy relief is often lost. Yet the treatment of its most simple form may be considered with advantage before I describe the various complications of its later stages. This arrangement will have some advantage even in the future consideration of the management of the more complicated cases. As the general system is invariably disordered, due regard must always be had to the constitutional treatment, although modifications of it will necessarily be required, as well as a variation in the local remedies to adapt them to the peculiarities of each case. After what has been written I need scarcely repeat, what however must ever be borne in mind, that hypochondriasis is a malady of the body,—that the morbid sensations, although much exaggerated by the patient, have a real existence.

The unhappy state of his mind makes it imperative that the hypochondriac should be treated with much kindness and forbearance, combined with firmness. In order that a habit of obedience may be early induced, I generally explain to him the cause and nature of his malady, and the object sought to be effected by the remedial measures. This practice has also the further advantage of impressing his reason with the necessity of strictly following out the method of treatment, and of paying equally strict attention to the various adjuncts to medicine comprised under the term dietetics, and of convincing him how vain must be his hope of relief from medicine, while he habitually infringes those natural laws which cannot be infringed with impunity.

Considering the theory of the disease which I have ventured to suggest, it necessarily follows that the principle to be kept in view in the medical treatment, is to remove from the system the *materies morbi*, whatever that may be, and to correct the abnormal state of the blood. This can be best effected by exciting an increased action in the secreting organs, by which we shall get rid of the impurities with which it has been loaded. I am convinced, that the practitioner who steadily pursues this as his chief object, will treat the disorder most easily and most successfully. Notwithstanding the apparent importance of the local disorder, while proper attention and appropriate measures are adopted to relieve it, our chief reliance must be placed on that course of treatment which will act on the general system through the secreting organs; and here I would remark, that, in working out the principle laid down, the immense surface of mucous membrane may fairly claim an equal degree of importance with the liver, kidneys, etc., which usually attract the greatest share of attention.

The medical attendant should not be deterred from the use of sufficiently active remedies, or those which are usually considered depleting, by the apparent debility of the patient; for there are few more fruitful sources of error in practice than that of regarding want of energy as an evidence of mere debility,—a term often incorrectly and indiscriminately applied to several different species of disordered action. In this disease it doubtless arises in part from a congested state of the chylipoietic viscera; but, as I have before observed, probably in a much greater degree from the want of the natural stimulus healthy blood supplies to the nervous and muscular systems. In proportion as the influence of this natural stimulus is restored by the purification of the blood, and the relief of the congestion, lassitude will diminish, and body and mind will recover their wonted energy.

A correct and minute history of the patient's ordinary occupations, habits, and external circumstances should, if possible, be acquired, to ascertain if there is, or has been any moral cause of a depressing nature; whether there has been any change in his mode of life, such as from activity to idleness, either of mind or body, or if he has been exposed to the influence of any physical cause of depression. A knowledge of these apparently trivial matters will lead to a clearer understanding of the case, by laying open more mi-

(a) Maxims well expressed by Dr. Holland, in his *Notes and Reflections*.

(b) Prout.

nutely the cause of the malady, and assist the judgment in the selection of appropriate remedies for its cure.

68, Brook-street, Hanover-square.

CASES IN SURGERY,

By HENRY SMITH, F.R.C.S.,

Surgeon to the Westminster General Dispensary.

ULCER IN THE RECTUM.

I was requested by Mr. Welch, of Blackmore-street, to see a respectable married woman about thirty years of age, in February last. She complained of excessive pain at the lower part of the rectum; it was constantly annoying her; and the agony was great whenever her bowels were moved. She stated, that some months previously, she had contracted a discharge from her husband; for which she had undergone treatment, and of which she had been ultimately cured. For nearly a month previous to my seeing her she had suffered with her present symptoms; there was a discharge of purulent matter from the gut, and local treatment in the form of lotions, &c., had been tried, but no relief was obtained. Latterly the pain and annoyance had become so great, that she was excessively reduced in flesh and strength, and looked like one who had some incurable organic disease, especially with reference to the anxiety of countenance.

On examination I found a small ulcerated fissure running up into the rectum from the right side of the anus, and, on passing the finger into the gut, a rough surface was felt, involving a third of its circumference, and extending upwards about an inch. The introduction of the finger produced horrible pain. I ordered the patient to go to bed, and to take a dose of castor oil, to get the bowels unloaded; and, on the following day, I passed my left fore-finger into the rectum, carried a sharp-pointed bistoury along it to the distance of an inch, and cut well through the lining membrane of the gut, and such of the fibres of the sphincter as enabled me to pass the finger again with scarcely any resistance. The incision was made opposite to that side which was ulcerated; a small pledget of lint, dipped in oil, was introduced, and a dose of laudanum given.

The relief from this slight operation was extraordinary; from that time she had no more pain, not even when her bowels were moved, and she was only kept to the house two or three days; the ulcer rapidly healed, and instead of suffering a life of misery, this woman became freed from her sad complaint, and restored to health.

There are few affections which produce more suffering than slight fissures of the anus or ulcerations of the rectum; they are not commonly found in persons above a certain sphere of life; but in hospital and dispensary practice we meet with them not unfrequently, especially among persons who have suffered from some venereal affection—women chiefly. They are very frequently overlooked if the patient makes any complaint; and, if the surgeon be not careful, and neglects the examination of the rectum by the finger, the origin of the suffering will not be assigned to the true cause, and, in all probability, lotions and ointments will be used in vain to the external parts for weeks and months. Sometimes only a slight fissure can be perceived to account for the patient's sufferings; but, in the majority of cases where a previous gonorrhœa has existed, this fissure will be seen running upwards to a more or less extensively ulcerated surface, and, on introducing the finger, that peculiar roughness at one spot is felt by the surgeon, which cannot be mistaken, and the dreadful pain is experienced by the patient, which, combined, to a certainty indicate the disease.

It is almost useless to lose time, and put the patient to constant pain, by employing local applications; the best plan of effectually and speedily curing the affection, is to adopt that which the ordinary principles of surgery teach us with reference to ulcerations on other parts of the body, more especially those situated in parts exposed to constant or periodical motion, and this is, to keep them in a state of quietude. The mode of cure consists in making an incision, more or less deep, through the coats of the rectum, so as to remove, or rather prevent, the spasmodic contraction of the gut; if the ulcer is extensive, it will be well to divide the sphincter completely, but in some instances it will be sufficient to divide the mucous membrane fairly, and only some

of the fibres of the sphincter. The proceeding is very simple, little blood is lost, and both patient and surgeon will be amply repaid by the great relief which is at once given, if the operation be properly performed. That ingenious and talented practitioner, both in medicine and surgery, Dr. James Arnott, has informed me, that a very successful remedy, in fissure of the anus, consists in simply passing a bougie made of common yellow soap up the rectum, from time to time. I have not yet tried this plan, but shall certainly do so, on that gentleman's recommendation, in any case where the simple operation above spoken of will not be assented to.

STRICTURE—RUPTURE OF URETHRA— EXTRAVASATION OF URINE.

At five p.m. on May 2, I was hastily summoned by a physician in the neighbourhood to a miserable garret in one of the vile courts of St. Giles', where I found a poor fellow, about 50, in the following condition:—He was suffering great pain in the region of his genitals; his countenance was truly expressive of something very serious; pulse quick and rapid; tongue hard and black. On turning up the bed-clothes, I found the scrotum, penis, and perinæum one large, red, and shining tumour, and inflammation had already extended up the groins. The swelling had come on quickly since the previous night.

The patient told me that he had had stricture for many years; that for some weeks he had been under the care of a neighbouring practitioner with fever and shivering fits, until he applied to the gentleman who sent for me, and who had discovered that there was some threatening mischief about the urinary organs, but had, unfortunately, not appreciated to its full extent the serious nature of it until several days had elapsed.

Seeing the desperate nature of the case, and that no time was to be lost if any attempt was to be made to save the man's life, with the assistance of my friend Mr. Coombs, of King's College,—a gentleman to whom I am much indebted for his kind services in several surgical operations,—I got the patient to the end of the bed, put myself on a chair in front of him, planted each of his feet on either of my knees, and in this disagreeable position set about the troublesome task of opening the urethra through the perinæum. A No. 6 catheter being previously passed down the passage to the bulb, where it was gripped by a tight and firm stricture, I cut through the centre of the perinæum, opening an enormous abscess, and readily found the urethra, and opened it at the point of the catheter. I was anxious, if possible, to get the instrument onward into the bladder, and spent some minutes in endeavouring to do so; but, from the want of sufficient assistance, the cries of the patient, his exhausted condition, and the uncomfortable position I was placed in, and, moreover, from seeing that a free vent had been made for urine and pus, I did not deem it prudent, or even justifiable, to attempt to do what would be merely overcoming a surgical difficulty. Some incisions were made in the scrotum and penis, and the patient was placed in bed, some opium and alcohol being given.

At 11 p.m., great relief from all his pain; urine coming freely away by the wound; he had slept. To take beef-tea and ammonia.

May 3.—Has passed a very fair night, and is in no pain; urine has been coming freely away by the wound, and there is less swelling of the parts; pulse 92; tongue moist, countenance good. I endeavoured to pass a catheter into the bladder, but, finding a difficulty in doing so, desisted at once. He is to take some beef-tea and wine, and to have the parts well fomented.

From this time the man went on well; in fact, far beyond my expectations. Nearly all swelling subsided, and the signs of the previous extravasation diminished; and, notwithstanding the condition he had been in, and the present evil influences he had to contend against—an unwholesome dwelling, a dirty bed, and the other concomitants of almost absolute destitution—the improvement for a week was so great, that those who saw the man with me, and myself, had reasonable expectations that he would entirely recover; but on the 9th severe bronchial irritation set in, a slough formed on the lower part of the scrotum, the pulse became more rapid, and the countenance more anxious. Still the urine came freely away by the wound, and some dribbled per urethram. Beef-tea, wine, and expectorants were given.

10th.—Diarrhœa has set in, and the man is much weaker

since yesterday. From this time he gradually began to sink, and died on the 12th, ten days after the operation.

In this case we have presented to us one of the most terrible accidents which can happen to a man, namely, the giving way of the urethra behind an impassable stricture, and the escape of urine into the cellular tissue. It is, in fact, the worst and most unfavourable result of neglected stricture; the patient is too often rapidly destroyed by it, the surgeon, for the most part, not being called until the mischief has gone too far. The majority of such cases are seen amongst the poor, who either have neglected their complaint, or else have been grossly mal-treated; and thus it happens that so many of these cases turn out unfavourably after the necessary measures have been adopted.

In the present instance there must have been sad neglect on the part of the Practitioner who had attended this poor man, for the latter had called attention to his urinary organs. Still no investigation was made; and thus merely the symptoms—the “ague”—of the already commenced mischief were treated, instead of the malady itself; for it cannot be doubted that suppuration had taken place in the perineum some weeks previously, when the patient first complained of fever and shivering fits. Had this matter been evacuated, and the stricture properly treated, he would not have added another to the many who have been sacrificed at the shrine of ignorance and carelessness.

Two other like cases of neglecting the symptoms and proper treatment of stricture have fallen under my observation. In the one, a respectable man was being dosed with physic by a well-known individual, “very clever at curing strictures,” whilst the catheter was laid aside; meanwhile the urethra suddenly gave way, and fortunately the individual in question was frightened into sending for a surgeon who knew his business, and who with difficulty rescued the patient from impending dissolution. In the other instance a gentleman who had the means of commanding the best attendance, suffered from ague for near a month, and was treated for such, although he had complained of his urinary organs. After having been dosed all this time, and brought to such a state, that he began seriously to think of his latter end, he was, by some chance, transferred to my hands. I found an enormous abscess in the perineum, which had been the sole cause of all his symptoms, and which, on being opened, the patient recovered.

Such cases not only point out the necessity of examining the urino-genital organs, when feverish symptoms, attended with repeated rigors, continue unchecked, but they also show the danger there is in neglecting opening up an impassable and old stricture, especially when there is a frequent tendency to retentions of urine. No one can say at what time the urethra may not suddenly give way; it is better in such cases to get a passage into the bladder by severe measures, such as by cutting or caustic potash, rather than to trust to the slow and uncertain process of dilatation. I am only speaking now of the hard, long, and gristly stricture, which will not admit any instrument.

The treatment when extravasation has occurred must be prompt, and, when suddenly called to such a case, the surgeon must lay aside all hesitation. I believe it will be far better for the patient if the surgeon, at the same time that he lays open the perinæum and urethra, can manage to divide the whole of the stricture, and carry the catheter onward into the bladder; it will save time and trouble afterwards; if there be plenty of assistance at hand, and the patient be in a condition to bear the operation, which must necessarily be more or less protracted, it had better be done; but still it is not necessary, if it be ascertained that a free outlet be made for the urine. In such a case, if the patient recovers, a fistula will be formed, which will serve as an outlet for the urine, and the stricture must be treated afterwards.

Caroline-street, Bedford-square.

EXTRAORDINARY ACCIDENT.—A man was lately admitted into the Portsmouth, Portsea, and Gosport Hospital, under the following singular circumstances:—He was trying to extract a cork from a large stone beer-bottle with his teeth, when it was suddenly driven into his gullet by the force of the carbonic acid which had been generated in the bottle. Medical assistance was immediately obtained, but unavailingly, and the man was taken to the hospital, where œsophagotomy was at once practised, and the cork, which measured about three inches and a half in circumference, was extracted.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. GEORGE'S HOSPITAL.

By DR. BARCLAY,
Medical Registrar.

ŒDEMA OF THE UPPER HALF OF THE BODY, FROM MALIGNANT GROWTH WITHIN THE THORAX.

THE particulars of this very interesting case, both before admission and after his leaving the hospital, were kindly communicated by Mr. Keen, the medical officer for the southern district of Chelsea, and the *post-mortem* examination was conducted by Mr. Cadge.

Charles A., aged 70, originally a sailor, latterly a lamp-lighter, had been, through his whole life, much exposed to the weather, and a hard drinker, but was still a hearty man for his years; he had been twice married, and had a family of twenty-four children. During the last five or six years he had been more or less subject to bronchitis, and was again more severely attacked by it in May, 1850, with copious expectoration and considerable dyspnœa, recurring in paroxysms, and increasing in frequency and urgency till the first week in June, when his face became puffy, œdematous, and congested, especially in the morning; his aspect was bloated; his cheeks, and especially the nose, of a dark purple hue.

There was now dulness observed on percussion on the right side of the chest, and loud mucous and sonorous râles were everywhere to be heard, but loudest and most distinctly on the left side. The œdema extended itself to the neck and upper part of the chest, especially on the right side, and involving also the arm. The superficial veins became enlarged, and their course could be plainly traced over the whole anterior part of the chest, while their finer divisions appeared in arborescent patches both before and behind. The œdema did not extend below the epigastrium, and the feet and legs were not at all swollen. No abnormal sounds were detected with the heart's action; and the urine was healthy, but rather scanty and high coloured. He was seen by several medical men about this time, and all agreed in presuming that there was obstruction to the passage of the blood through the vena cava superior in some part of its course, but were unable to decide upon its cause. He was treated by blisters, expectorants, and diuretics, without much benefit; and was then removed to St. George's Hospital, where he was admitted under the care of Dr. Page, on the 3rd July, 1851.

On admission into the hospital, there is most striking œdema of the upper half of the trunk extending over both sides of the chest, and through the neck into the face, as well as occupying both upper extremities, limited inferiorly by the edges of the ribs, where it gradually subsides, the abdomen and lower extremities being entirely free from swelling of any kind. Large blue veins course superficially over the chest, arms, and neck, and the breathing is heaving and laboured, but has especially the character of some obstruction to the exit of the air from the chest, which also interferes with his speech, and weakens his voice. There is marked dulness, on percussion, on the right side of the chest, as compared with the left; and although on both sides the sound is somewhat obscure, from the existing œdema, it is evident that slight percussion elicits a sound of superficial resonance, while, in making firm pressure, and striking harder, deep and distant dulness, on percussion, exists. This is observable over the whole of the right side, and there is no marked difference between the respiratory murmur and vocal resonance, on either side, anywhere to be discovered, except that air does not enter so freely into that lung. The heart's sounds are somewhat indistinct and distant to the ear, but no bruit can be heard; its action is quiet and regular, and the pulse is also regular. The urine is deep-coloured, but healthy.

His only complaint is of shortness of breath, and giddiness of the head, especially in stooping. Bowels open; tongue whitish. General health said to be good.

R Hydrarg. chlorid., gr. iij.; pulv. jalapæ co., gr. xx.
Hâc nocte horâ somni sumend.

℞ Infus. digitalis, ʒij.; spir. æth. nit., ʒss.; decoct. scopar., ʒx. Misce. ft. haust. ter die sumend.

5th.—Some difference is observed in comparing the strength of the pulse at either wrist, which seems only due to a greater amount of œdema in the right than the left arm; for, when sufficient pressure is made to remove this source of fallacy, the inequality disappears. A careful examination elicits no aneurismal souffle anywhere in the chest. Complains more of giddiness, which interferes with sleep.

C. C. nuchæ ad ʒviii. Pt.

8th.—For the last two or three days he has been complaining of pain in the right side of chest, shooting through to the back. He lies most easily on the right side. The respiration is more difficult. Hands and arms more swollen.

C. C. inter scap., ad ʒviij. Pt.

9th.—Slight hæmoptysis came on last night. He is now propped up in bed; the breathing is much more laboured; pulse feeble and intermitting. He complains of drowsiness, stupor, and pain in the head; and there is much more œdema of the right than the left arm, which may, perhaps, be accounted for by his position, which still inclines to the right.

Omitt. haust c. tinct. digit.

℞ Tinct. scillæ, ʒxxx.; spir. æth. nit.; spir. ammon. arom., aa. ʒss. Mist. camph. ʒxj. Ft. haust. 4tis horis sumend.

Four ounces of gin daily in water.

13th.—Hæmoptysis has continued, but it is of no great amount, consisting chiefly of a few dark clots in the expectoration. The breathing has gradually become easier, and is now very decidedly relieved. He still heaves his chest much in inspiration, and puffs out his cheeks in expiration.

15th.—Breathing more easily.

25th.—Chest symptoms gradually relieved; œdema much diminished.

27th.—Feeling very comfortable: walking about the ward. He still has difficulty in drawing his breath, and his voice is feeble, as if some obstruction existed to a free current of air passing out from the trachea; œdema has nearly disappeared.

His treatment has continued nearly the same; is now taking—Decoct. scopar., ʒiss.; spir. æth. nit., ʒss.; potass. nit. gr. v., ter die.

August 3rd.—œdema has been slower in disappearing from the right arm than from the left. There is still comparative dulness on the right side on deep percussion, with general deficiency of respiratory murmur for a person of his appearance; but this is not much more marked on the right than on the left side of the chest. Breathing still heaving. Heart's sounds to be heard preternaturally loud on the right side of the sternum after each expiration. No abnormal sound detected.

August 7th.—Discharged relieved. He subsequently came to the hospital on one or two occasions to receive a cough mixture, presenting much the same general appearance as at the time of his discharge, without exhibiting any of the cachectic symptoms generally accompanying malignant disease; and the last time he was seen he said that he had returned to his ordinary avocation of lamplighter.

September 20.—Being unable to attend at the Hospital any longer as an out-patient, he once more placed himself under the care of Mr. Keen, whose report is subjoined:—The dyspnœa is now great, and much increased at intervals. He has frequent violent fits of coughing, with profuse mucous expectoration mixed with blood. The whole of the upper part of the chest is now perfectly dull, and the respiratory sound almost inaudible; while the other parts of the chest, especially on the left side, are filled with loud mucous and sonorous râles. The œdema of the upper half of the body has again increased, and the extensive superficial venous circulation seems to be now completed, by the veins from the arms, neck, and thorax anastomosing directly with the superficial epigastric and iliac veins from below. These continued to increase in size, until at length they became, especially during the act of coughing, nearly as large as the little finger. He was again treated with diuretics, &c., and was once cupped, but without relief. The symptoms gradually but steadily increased, with the exception of the œdema, which gradually subsided, and a month before his death had altogether disappeared. The only indication was to support his strength, and attempt to alleviate the more urgent symptoms; the dyspnœa and cough had become

so severe, that each expiration became a shout, and a fit of coughing was little short of suffocation. The auscultatory sounds were more and more obscured, until scarcely any breath-sound could be heard, and percussion only elicited dulness over every part of the thorax. The sputa continued profuse and bloody.

For some weeks before his death he did not lie down, but sat in a chair at the table, with his face buried in a pillow, gasping for breath. His countenance became pallid, anxious, and staring, and his general surface cold and clammy. The heart's action was feeble and embarrassed, and the pulse weak and irregular. His body was emaciated, and the œdema of the upper part of the trunk having subsided, the legs began to swell, and at last attained a great size. He lived chiefly upon gin and water and beef tea; his strength gradually gave way, and he died on the 16th January, 1851.

The *post-mortem* examination was made on the 18th, by Mr. Cadge, and the following account is from him:—

The body was well formed, and scarcely at all decomposed. All trace of the large superficial veins had disappeared, and there only remained slight œdema of the hands and feet.

Thorax.—Each pleural cavity contained a large amount of straw-coloured transparent serum; about three pints on the right side, and two and a half on the left. Slight old adhesions existed between the pulmonary and costal pleuræ at the right apex. The lungs themselves were collapsed, slightly œdematous, and contained a considerable amount of frothy serum, but were otherwise perfectly healthy. The pericardium contained some ounces of straw-coloured serum; the heart was natural in size, and healthy in structure. A solid tumour was discovered in the mesial line, but inclining most to the right side, situated between the upper part of the sternum and the spine, about the size of a man's double fist. It was placed chiefly above and behind the arch of the aorta, and extended downwards on each side so as to include and surround the roots of the lungs. The trachea was entirely enclosed in its substance, emerging from it above. Neither the primary bronchi nor the trachea appeared to have suffered from pressure, or to have diminished in calibre, but they were so enclosed, that it seemed impossible they could have either expanded or contracted.

The four large arteries springing from the arch of the aorta (for the left vertebral had a separate origin) passed through the tumour, and escaped from its upper surface; they were scarcely, if at all, affected by the pressure. The corresponding veins, though by position more favourably circumstanced, were greatly altered both in size and structure. The superior cava innominata, and left brachiocephalic, were much diminished in calibre, the latter scarcely allowing the passage of a blow-pipe, while the cava itself would barely admit the tip of the little finger. The lining membrane was rough and scabrous, and allowed the tumour to be seen through it.

The œsophagus was flattened against the spine, and its fibres implicated in the disease. The bronchial glands were generally enlarged, some of them exhibiting their ordinary appearance, while others were incorporated with the tumour, and assimilated to it in structure.

Abdomen.—All the viscera were healthy. The inferior cava was nearly empty of blood, and quite free from obstruction in its whole course. Some of the mesenteric glands were enlarged to the size of a horse-bean.

The tumour itself had all the appearance and character of the encephaloid variety of carcinoma; it was soft and easily broken down, and, on section, exhibited a white, loose, fibrous texture, from which a thick creamy fluid exuded in abundance. Under the microscope this fluid exhibited a vast variety of cell-structures, from small simple granules and cells up to the large compound nucleated cells, which were probably indicative of the malignant nature of the growth. The solid part showed the same structures, with the addition of some fibrous stroma.

The preceding case is interesting, no less from its rarity than from the circumstance, that careful clinical examination was successful, in spite of many difficulties and obscurities, in pointing out the probable cause of all the complex phenomena which were present. A somewhat similar case came under my observation in St. George's Hospital, in October, 1843, the particulars of which I abstain from detailing, because of the length of the present communication. There was, as in the preceding case, remarkable œdema, limited to the upper half of the body, caused by the pres-

sure of a malignant growth upon the superior cava, and similar evidence of some solid substance within the thorax during life. The chief differences found on *post-mortem* examination, were the situation from whence the disease originated, viz., the anterior mediastinum, and the circumstance, that the lungs were found to contain a number of small masses of encephaloid disease within their substance, which also probably hastened its termination.

It was manifest that the general condition was one of obstruction to the venous current returning through the superior vessels, and its cause was apparently one of long standing and gradually increasing, and therefore probably was pressure from without the vessels. Percussion indicated that there was a non-resonant body deeply seated, while superficial resonance over the whole chest, so far as could be made out, at the time the patient was in the hospital, associated with the existence of vesicular breathing close to the surface of the chest, although generally weak and defective, especially on the right side,—all pointed to the root of the lung, and more particularly of the right lung, as its situation. It might be an aneurism, which is the more common condition in such circumstances, and the most frequent cause of œdema limited to the upper half of the body, as stated by Dr. Watson in his lectures; or it might be malignant growth. The absence of abnormal sound in the course of the great vessels was against the former supposition, and most especially was it negatived by the absence of any evidence of enlargement of the heart; and the only evidence in its favour, viz., the inequality of the pulse at the two wrists was proved to depend on a totally different cause. The cough, too, was not that which generally accompanies aneurism, but was more like that of emphysema; and the laboured expiration, with no proportionate difficulty in inspiration, was quite peculiar, and in no respect similar to the condition implied by diminution of calibre from pressure on the trachea, but is beautifully explained by the loss of power to contract in expiration which the air passages must have undergone, from their being completely surrounded by solid matter, as shown by *post-mortem* examination.

Doubt was thrown on the correctness of the diagnosis by the appearance of blood in the sputa; but its quantity was small, and its gradual subsidence tended rather to confirm the previous conclusion. The chief ground for hesitation was derived from the comparative state of health of the patient, and the absence of that cachexia, the malignant aspect as it is termed, or any degree of emaciation such as generally attends on carcinomatous disease. But when he left the hospital, the conviction was very strong, that a malignant growth, originating probably in the bronchial glands, was the true cause of this somewhat anomalous state.

An important observation was made by Mr. Cadge in conducting the dissection, that while the veins were more favourably situated with relation to the tumour than the arteries, they were very seriously diseased, while the latter were scarcely, if at all, affected; exhibiting, as he remarked, a notable instance of the power of arteries to resist disease external to themselves.

SEAMEN'S HOSPITAL.

By H. L. T. ROOKE, M.D.,
Resident Medical Officer.

COMPOUND FRACTURE OF THE RIGHT LEG, IMPLICATING THE ANKLE-JOINT. SIMPLE FRACTURE OF THE LEFT LEG.— RECOVERY.

ANDREW MAHONEY, aged 29, was admitted December 24th, his legs having been jammed between two heavy bars of iron an hour previously. When brought to the hospital it was ascertained that both his legs were fractured, that of the right being compound. The right tibia was broken just above the malleolus, and the fibula at its lower third. Corresponding with the seat of fracture of the fibula, was a small punctured wound of such a nature as would be caused by a pointed fragment of bone; the broken extremity was not protruding; there was considerable venous oozing from the wound; the soft parts were much bruised, and from the livid appearance of the limb, the cellular tissue seemed infiltrated with blood. The fracture of the left leg was simple. The fractures were reduced and put up in wooden side-

splints. In a few days suppuration was established in the right leg; incisions were necessary to evacuate the retained pus. As soon as a free opening had been made for the discharge, the symptoms of constitutional irritation which had manifested themselves ceased. Three weeks after the operation the patient was in the following state:—Union had partially taken place in the left leg, which was now directed to be put up in pasteboard splints. In the right leg the skin over the inner border of the tibia had sloughed, leaving a large sore, the odour of the discharge from which indicated the presence of dead bone. On examining with a probe, the internal malleolus was found to be loose, and Mr. Buck removed it.

The apparatus which had hitherto been employed in the treatment of this fracture consisted of two wooden side splints; these were now found inconvenient, from the disturbance caused by the necessity of daily dressing the wound. The limb was accordingly placed upon a Liston's iron splint, and to avoid the troublesome consequences of sloughing of the heel, an accident so liable to occur in cases of compound fracture of the leg, where it is necessary to retain one position for a considerable time, a water cushion was designed to fit the vacant space of the lower portion of the splint; upon this the heel rested. The cushion was made by Mr. Hooper, of Pall Mall. This contrivance answered admirably; although the limb remained for several weeks upon the splint with only occasional removal to substitute clean bandages. He complained of no soreness, nor was there any abrasion or sloughing of the integument covering the os calcis. Union became complete at the end of three months, with ankylosis of the ankle joint.

ABSCCESS OF THE PROSTATE, BURSTING INTO THE URETHRA.

William Delahay, aged 25, admitted April 16. He has been lately paid off from his ship; since that time he has been drinking hard, and indulging in venereal excesses. He states, that, ten days ago, he felt great pain and itching at the end of the penis after passing the last drops of urine; these were followed by a little blood. He had a sensation of weight in the perinæum, tenesmus, constant desire to empty the rectum, and great irritability of the bladder, which constantly disturbs him in the night to pass his water. No pain or tenderness in the loins. On admission, the above symptoms were present; his skin is hot; there is considerable constitutional disturbance; has had rigors. The urine is high-coloured; he states that he sometimes passes pure blood after the discharge of urine. Leeches to the perinæum. Warm bath. Ol. ricini, with tinct. hyoseyami.

When he had been on board the ship two days, the constitutional symptoms subsided, the blood in the urine lessened, but its place was supplied by a copious purulent deposit. From this time, the irritability of the bladder diminished, the purulent deposit also slowly ceased, and he was quite well at the end of ten days.

This case—undoubtedly one of abscess of the prostate opening into the urethra, was most probably the result of excessive venery, although the patient ascribed the symptoms to a strain and blow on the loins. It was first thought to have been a case of stone. Mr. Busk, however, by careful sounding, ascertained that this was not the case.

The treatment also included small doses of copaiba.

INCARCERATED SCROTAL HERNIA OF FOUR DAYS' STANDING.

William Earwing, aged 50, admitted May 9th, with a large scrotal hernia, which has existed four days.

History.—Twelve years ago, he ruptured himself whilst taking violent exercise; the tumour, at first the size of an egg, gradually increased. For eleven years he neglected it, as it caused him no uneasiness; the only precaution he took was to wear a bag truss, to relieve himself of its weight.

Last November, he was troubled with occasional pain in the umbilicus; for this he consulted a surgeon, who reduced the hernia for him without much difficulty. A truss was applied, which he has worn ever since.

On Monday last, May 5th, whilst at the wheel, he was suddenly seized with pain in the belly, felt sick, and was obliged to leave his post. He then found that the hernia had descended. He had bilious vomiting, which lasted all that evening and the following day. On Wednesday he had hiccough; this ceased towards the evening, since when he has been free from pain or uneasiness. His bowels had not

acted from the time of the accident until this morning; the discharge was very scanty.

Present State.—The tumour in the right side of the scrotum is very large, so much so as to implicate the skin of the penis, the testis is plainly visible at the bottom of the tumour. The patient has no pain, there is tenderness over the external ring, but this is superficial, and is owing to the skin being chafed by pressure from the truss. The tumour itself is not in the least tender; on coughing, decided impulse is given to the finger placed on the ring. Says he feels quite comfortable; has no pain or swelling of the abdomen; tongue clean and moist; pulse 80; no vomiting or hic-cough. The taxis was tried in the bath, but unsuccessfully; the liquid and gaseous contents were easily returned, but the gut contained masses of hardened fæces, which prevented its reduction. A bladder, containing ice, was ordered to be constantly applied.

May 10th.—The taxis was again unsuccessful this morning. He has passed a good night; there are no urgent symptoms to require an operation. His bowels not having acted, he is to have a turpentine enema.

May 11th.—In an hour after the administration of the enema, his bowels acted. He has had two copious motions. The tumour is smaller, but still, irreducible, hard, knobby masses can be felt in the intestine. Ordered a second enema.

May 16th.—Has had an enema daily since last report; the bowels have acted freely, and this morning the intestine returned without pain.

May 20th.—Ordered to resume his truss, and to be discharged.

PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

QUEEN'S HOSPITAL, BIRMINGHAM.

By W. J. MOORE,
House Surgeon.

STRICTURE OF URETHRA—RETENTION OF URINE—OPERATION.

ALTHOUGH stricture of the urethra will, in the majority of cases, yield to well-directed trials with the bougie and catheter, still it occasionally happens that the passage remains impervious, that retention takes place, and the position of the patient becomes eminently dangerous. Cases of this nature will often yield to opium, the warm bath, leeching, &c.; but, if the case does not happily terminate so, it then becomes necessary to form an artificial opening, and relieve the bladder from its state of distension, and the patient from the misery dependent thereon. Such a case being presented to the surgeon, it becomes a question of vital importance to which of the three modes of relieving the bladder he shall have recourse; all have proved successful again and again, while on the other hand, patients have died after each operation. I am not aware of any statistics showing the amount of mortality after each operation, but should consider it would be a valuable addition to surgical literature, could such an account be prepared. Puncture of the bladder above the pubes is perhaps the most dangerous of the three, from the difficulty of preventing extravasation of urine, &c., and is generally considered as a last resort; and when the other operations are from various causes inadmissible, it is then had recourse to. There have, however, lately been more than one case detailed where this operation was attended with success. Puncture of the bladder through the rectum is not difficult, and perhaps is not estimated as high as it deserves; but it is apt to leave a troublesome fistulous communication between the bladder and bowel. It is also inadmissible in cases where the prostate is enlarged, the anatomical relation of the part being then changed, and consequently there being danger of wounding the fold of peritonæum, or even of not reaching the bladder at all. Some time back, however, this operation was successfully performed in the Stafford General Infirmary, and, as appears by the report of Mr. Masfen, the wound was quite healed in a few days. Cutting down on the stricture certainly has one advantage

not possessed by the other operation, viz., that the stricture is generally radically cured. Of this operation Mr. South observes: "The operation of opening the membranous portion of the urethra, and introducing a catheter into the bladder, is the most effectual. If there be stricture, it is the surgeon's own fault if the stricture and retention be not cured at one and the same time." The success Professor Syme has met with, as regards these operations, would seem to divest them of much of their danger, with which, at first sight, they appear surrounded; and in sudden cases of retention of urine from stricture, when relief cannot be afforded by other means than operation, this latter mode, for the various reasons stated, seems to afford the best chance to the patient of permanent and speedy recovery. Mr. Sands Cox lately relieved the bladder of a man who was admitted suffering from retention by the operation last spoken of. The following is an account of the case:—

James Snow, aged 32, admitted November 1, 5 p.m. It appears that he has had a stricture for some years, and has had occasional stoppages of his water, but which have always been relieved by the aid of the warm bath. He now states that he has not made any water since 7 a.m. this morning, and that during the previous night he had made but little, and that that little required much straining for its expulsion. He is now in great pain, with considerable fulness of the hypogastric region. The skin is hot, pulse quick, and countenance anxious. The catheter, warm bath, opium, with tartar-emetic and enema, having failed, Mr. Sands Cox was sent for, who quickly arrived. Another careful trial with the catheter having failed, it was concluded that nothing but an operation would afford the patient a chance of relief; and as his frequent and powerful straining threatened rupture of the bladder, and consequent extravasation, it was deemed advisable not to delay its performance. At this time, 11 p.m., the state of the patient was worse than on admission; and, notwithstanding the full doses of opium he had taken, he was, if possible, every moment suffering more pain; the pulse was also weaker. Accordingly, Mr. Sands Cox cut down on the stricture, and, with a few strokes of the knife, succeeded in relieving the bladder, the catheter being then passed, and retained by strings in the usual manner. The patient remained in a precarious state for two or three days, but afterwards made a speedy recovery, and now pursues his trade of a knife-grinder in the streets of Birmingham, completely cured of his stricture.

The time which may elapse before an operation becomes necessary in these cases of retention varies much, and no given time can be specified as to when it should be performed, some cases requiring interference in a few hours, and in others a day or two may elapse before it becomes necessary. In this respect it is analogous to hernia, in which latter affection much judgment is also required as to the length of time which may be suffered to pass away without resorting to the knife. In retention, various circumstances must be taken into the account; the tongue, the pulse, the countenance, the distention of the bladder, and the amount of pain present, must all be attentively considered, and the determination to operate or to defer must be arrived at from such consideration, rather than the absolute amount of time which may have elapsed since the patient last made water.

THE MEDICAL TIMES.

SATURDAY, SEPTEMBER 6.

REPORT FROM THE NATIONAL VACCINE ESTABLISHMENT.

Our readers will naturally turn with much interest to the document which we this day lay before them,—a Report issuing from the highest medical authorities in this country, and addressed to the Secretary of State for the Home Department. The subject of this Report is one of the most important which can engage the attention of physicians, or fix the regards of the public. It is nothing less than the preservation of the people of this country from one of the most cruel maladies which afflict the human race. Our

readers are well aware of the unusual interest which the subject of small-pox and its antidote has excited during the past year, and they will naturally fly to this document, propounded by the President and Senior Censor of the College of Physicians (aided by the powerful mind of the President of the College of Surgeons), in the sure and certain hope, that here all their doubts will be dissipated, all their pathological difficulties smoothed, and their minds set at rest on some knotty questions of practical application. We grieve to say that, if such be the anticipations of our readers, they are doomed to experience the most bitter,—the most distressing disappointment. Sir George Grey and both Houses of Parliament appear to be perfectly satisfied with the kind and amount of information here afforded them, for they have voted 2,000*l.* for the sustentation of the National Vaccine Establishment for the coming year, and have continued it under the same superintendence. Whether the Medical Profession in this country will be equally satisfied, is, with us, a matter of considerable doubt. To aid their decision, we will venture on a brief analysis of this document, and extract all the novelties, whether in theory or practice, which are therein submitted to our notice.

We are first presented with a statement of the number of persons vaccinated, of the number of vaccine points (or charges) issued, and of the distant stations which have been supplied. We are then favoured with the opinion of a negro chief (the King of Keenang) on the subject of vaccination, and are informed that he has allowed his family to be vaccinated. This Royal condescension will doubtless have its due weight in this country; but we confess we should have been better pleased to have learned whether His Majesty the King of Keenang, and His Majesty's brothers and sisters, had been vaccinated, or had preferred, *for their own individual security*, the ancient practice of *inoculation*. Considering that we have been labouring assiduously for the last forty years to diffuse vaccination among the natives of Western Africa, (and the exertions of the late amiable Dr. Ferguson were, in this respect, unceasing,) it does seem strange to inform Parliament, in the year 1851, that a negro King has recently consented to have his children vaccinated!

England next comes out, but in sad contrast with the banks of the Gambia. Here the spread of vaccination has been materially impeded by ignorance and prejudice. We are also informed, that obstacles to the spread of vaccination are "*supplied by vaccinators failing to prosecute the question, whether the vaccine vesicle has duly run its course.*" We hope Sir George Grey understands this; but the sense is, unhappily, lost to us. We can understand that such laxity is reprehensible; but how the neglect to examine the child's arm after the fifth or eighth day is to affect the "*spread*" of vaccination, is to us a perfect mystery.

A singular hint is then given to vaccinators. They are told not to take virus from a subject apparently unhealthy, "*for fear of exciting the fears of the public.*" We are not told that lymph from such a source is in itself bad, but merely that we are to avoid using it, in order to humour the prejudices of ignorant parents. If the children are vaccinated from *points*, the rule does not, of course, apply; and lymph taken from subjects apparently unhealthy may, we presume, safely be used to charge points and glasses. This appears, at least, to be the doctrine of the Vaccine Board!

The Report winds up by a repetition of some statements made in former years, one of which is, that seventy-one persons were reported by Dr. Thompson (meaning, we suppose, Dr. Thomson) to have incurred variola after inocu-

lation in Edinburgh, in 1819; but it is not stated, that the same Dr. Thomson firmly believed in the identity of small-pox and chicken-pox (the varicella of Heberden).

The last paragraph of this most meagre Report informs us, that the theory which would restrict the protective power of vaccination to any term of years, is neither proved by facts nor supported by analogy, while the continued diminution of mortality by small-pox negatives any disparaging inference against vaccination which that hypothesis might suggest.

The substance of a lady's letter, we know, is always found in the postscript, and on this principle, we suppose, the Vaccine Board fire off their great gun in their last sentence.

We venture to differ from the learned authors of the Report in all the three points on which they so confidently rely. First, as to *analogy*. Almost all the recorded cases of small-pox after small-pox, occurred at *long* intervals from the *primary* attack. We are quite sure that all the *unequivocal* cases of recurring (or secondary) small-pox exhibit intervals varying from ten to sixty years.

Secondly, *fact*. If there is one fact more clearly made out than another by the labours of modern writers, it is, that small-pox after vaccination is most frequent between the ages of fifteen and twenty-five. The concurrent testimony of all authors who have written on the subject, British and Continental, establishes this point beyond the remotest possibility of controversy. What further proof of *restriction in protective power* the Board may require, we are at a loss to comprehend.

Lastly, *mortality*. We fearlessly maintain, that mortality has nothing whatever to do with the question. The question at issue is, whether *vaccinated* persons are more liable than *inoculated* persons to an attack of small-pox at distant intervals from the date of the respective process. The Board reply, that the mortality by small-pox does not augment. True; but what are the *numbers attacked*? It is possible, that *every* vaccinated person might have small-pox in after life, and still the mortality by small-pox might diminish. The truth is, that the mortality by small-pox, as it occurs among the vaccinated, is very small. At Copenhagen, it has been as low as 2 or 3 per cent., and in this country, perhaps, is not much higher. A thousand deaths by small-pox, therefore, which, last century, indicated 3,000 cases, now indicate 33,333 cases. We respectfully submit to the learned Presidents of our Colleges, that this simple sum in arithmetic puts them out of court.

The Report makes no allusion whatever to the practice of re-vaccination. It cannot, consistently, recommend it, but it has not the boldness to discourage it. It is equally silent on the propriety of recurring to the cow for fresh supplies of lymph. We could hardly expect that any reference should be made to the *vexata quæstio* of identity. But if the Board are silent on that debateable topic, we have at least the satisfaction of knowing, that an African King, with probably a very small modicum of inexpressible habiliment, has consented that his amiable daughters should be vaccinated!

METROPOLITAN WATER SUPPLY.

It would be extraordinary if, among the multiplicity of plans that have been suggested for the supply of London with pure water, in addition to the present sources, not one can be made available for the object. Is our boasted engineering skill unable to cope with this imperative demand? Is it impossible to achieve the task, or is it merely the indecision and ignorance of Government officials, that retard the realization of this incomparable blessing? It is curious to observe how contradictorily public questions are dealt with in this country.

As the Government may be strong or weak, and local interests dominant or feeble, measures of the most vital importance to the well-being of the public are either treated upon their merits, or clipped, dwarfed, and emasculated until they have ceased to represent the principle they were intended to realise. Acts of Parliament are thus botched with incongruous conditions, and it is discovered at last that they are either nugatory or impracticable. Thus, law-making is an unceasing want, and the Legislature is in a perennial bustle, for want of time to repair old blunders and to commit new ones.

We can hardly say how many sources have been declared suitable for the water-supply of the Metropolis. One projector has advocated the Lee, another the Colne, a third the percolations of Bagshot Heath, a fourth the reservoirs of the London basin, a fifth the Thames, a sixth the lakes of Wales, and a seventh, a source no less distant and wonderful than the Grampian Hills! If we put our trust in the advocates of these schemes, there are excellent reasons for adopting either with a certainty of success; but these gentlemen have not yet triumphed over the irresolution or the incredulity of the Government, and the public are loth to commit themselves to calculations they do not understand. If we agree with Sir George Grey, we must assume that there are objections incident to either of these plans, fatal to its practical success. By one scheme there is no assurance of an adequate supply; by another, of its purity; and by a third, that the cost will transcend the advantages expected to be obtained. The quality of water required for domestic consumption is now so well understood, that it would be pedantic for us to present to our readers a chemical table of the quality of the water best suited for private use; and, setting aside from consideration this branch of the subject, we shall merely advert to what we conceive to be the causes of the protracted delay in the settlement of this long-debated question.

In the first place, the vested interests of existing corporations are undoubtedly the main cause of the procrastination and timidity evinced by the Government, equally in the principles, time of presentation, and the management of the Bill lately debated in the House of Commons. How differently has the Government acted in the case of the Interments Bill, and in that of the Water Supply.

In the former instance, the opposition of the clergy being assuaged, the Ministry, true to their instincts, did not hesitate to throw the administration of the Act into the hands of an irresponsible Board, and to obtain powers from Parliament to buy up all the cemeteries in the neighbourhood of the Metropolis. By these measures, an enormous monopoly would be created, and the principle would be realised in the simplest and most direct manner; in fact, in a manner rather too much at variance with the constitutional usages of the country. In the latter instance, although a question of equal importance to the health and comfort of the population of London, the Government, disliking to contend with the opposition of water companies, merely attempted to re-organize the administration; so that, instead of a Government monopoly, it should be a monopoly of a huge leviathan private company. Thus, free from opposition, the Ministry incontinently erect a Government monopoly; bending to it, they can invent nothing better than a private monopoly of a worse character. In either case, the principle has been regarded only as an accident in the question.

Next to this cause, we believe a difficulty will be found to exist in the theoretical notions entertained by the advisers of the Government. They are embarrassed by the absorb-

ing unity of their idea. They must have but one source of supply, under one administration. The single administration is no doubt to be wished for; but if, after so much research and experiment, no plan can be devised to supply London with pure water at a cheap rate from a single source, it is time to consider whether water cannot be obtained from two or more sources, equal to the requirements of this mighty City. Is there any reason why the present supply should not be limited to merely domestic purposes, such as washing, cleansing, sewage, &c., while, artesian wells being struck in the London basin, a bountiful supply of pure fresh spring-water might be enjoyed for drinking, cooking, and the various culinary operations? It has been asserted, that the reservoirs in the chalk strata on which London is built, are sufficiently ample for every purpose. This has been denied; but it is probable that at any rate a considerable quantity might be supplied. We apprehend that this scheme presents no greater difficulties of realisation than any other that has yet been offered to the public. At any rate, this question cannot be procrastinated for a much longer period, for the public are impatient of delay. However it may be settled, we trust that an abundant and constant supply of unpolluted wholesome water will be the end achieved, as nothing short of this can meet the exigencies of the public.

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF
MEDICINE AND SURGERY.

[FIFTEENTH NOTICE.]

FOREMOST in the ranks of the contributors of surgical instruments to the Exhibition are Messrs. Weiss, who have a magnificent case of instruments, differing from those of all the other contributors in being complete, not in the sense of containing every known surgical instrument, but in containing sets of instruments for all surgical operations. These instruments, as might be anticipated from the well-known reputation of the makers, are of the first quality in form and finish, several among them whose value has been long acknowledged being made from designs of the members of the firm. The case contains complete sets of amputating, trepanning, lithotritry, lithotomy, and cupping instruments, those employed for the removal of necrosis, for the examination of the vagina and uterus, for extraction of teeth, for operations on the eyes, fistula lachrymalis, strabismus, tenotomy, diseases of the urethra and bladder; and finally, the less obtrusive, but no less useful dressing-cases, besides a host of miscellaneous instruments for special purposes. What we have already said will characterise the ordinary instruments of which it would be worse than useless to give a detailed description. We shall, therefore, confine our attention to some of the more novel and interesting among the instruments exhibited.

First among the amputating instruments we observe the new form of tourniquet, invented by Mr. Skey, of St. Bartholomew's, in which, unlike the ordinary tourniquet, which compresses the whole limb by a tight band, we have a circle of steel, capable of being enlarged or diminished by a peculiar arrangement, on one side of which is a fixed pad, while, on the opposite side, is the moveable pad with the screw of the ordinary tourniquet. When used, for example, to compress the femoral artery, the larger fixed pad is applied to the back of the limb, and the moveable pad is brought over the artery and screwed down as in the common tourniquet, so as to compress the vessel, these being the only two points on which pressure is made by the instrument. This tourniquet has been successfully employed at St. Bartholomew's Hospital.

Two other tourniquets, devised for long continued compression of the femoral artery in cases of popliteal aneurism, are also contained in the collection of Mr. Weiss. One of these, invented by Bulley, is on the same principles as Skey's tourniquet, but with two screw-pads, so as to compress two points of the artery, without preventing the collateral circulation in the remainder of the limb. Mr. Phil-

lips's tourniquet for the same purpose is a very ingenious contrivance; it consists of a well padded frame of steel, which surrounds the hips much in the same way as a truss, so arranged, that a screw-pad, when tightened, presses directly on the femoral artery, thus relieving the limb itself of all compression. The cure of aneurism by compression either of the sac itself, or of the artery above the seat of the aneurism, is by no means new; many have been the attempts in former years to follow out this method, but, until of late, all these efforts have proved unsuccessful. The merit of bringing this method of cure to bear successfully, is due to the Dublin surgeons, and the number of successful cases reported will claim for it full investigation, and probably ultimate adoption on this side the Channel, in favourable cases, in preference to the somewhat severe, and sometimes dangerous operation of tying the artery above the seat of the disease.

Weiss's fistula bistoury is a very ingenious little instrument, consisting of a double blunt blade, within which slides another blade, with a cutting edge extending its whole length, which can be protruded or retracted by a very simple mechanical contrivance. The instrument is introduced with the cutting edge within the sheath, and when the groove of the director within the fistula is found, the cutting edge is protruded and the fistula divided. The advantage of this instrument is, that it can be introduced on the finger into the rectum without fear of doing mischief.

The specula for examining the different outlets of the body are numerous in almost all the collections of instruments. We have here Hilton's and Weiss's speculum ani. That of Mr. Hilton is the most modern; it consists of a hollow cone of speculum metal, rounded at its smaller end, and deficient in about one-third of its circumference, which enables the surgeon, after introducing it, to see a portion of the walls of the rectum. A handle is fixed obliquely at the base of the cone, opposite to the deficient part. Here we see, also, Weiss's speculum oris, formed of two strong plates of polished metal, which, before introduction, lie in close approximation, and are separated by a powerful screw. It is useful in those cases in which patients obstinately refuse to open their mouths, and in operations on the mouth in which it is necessary that the mouth should be kept open for a considerable time. Weiss's jointed throat speculum is an ingenious instrument, which is capable of bending, after introduction, so as to pass further down the throat than a straight instrument.

Mr. Avery has in this case a number of specula, which show great ingenuity in their contrivance, and also a lamp, for giving a better view of the parts. The lamp is formed of an argand burner, with a reservoir to contain gaseine, a fluid resembling mineral naphtha, the vapour of which gives a strong light in burning. Attached to the reservoir, in a convenient position, is a concave mirror, with a hole in its centre. The light is concentrated, and thrown into the cavity to be examined; and, on looking through the hole, the parts are seen with great distinctness, without any fear of interrupting the light. His speculum nasi consists of two blades, about 2½ inches long, gradually becoming broader towards the scissor handles to which they are attached, and roughened at the points, so as to be used at the same time as a pair of forceps for extracting any foreign body that may be found in the passage. The ear specula are small funnel-shaped instruments, with a tube of about an inch in length, made of speculum metal, and of three or more different sizes. But perhaps the most curious among these instruments is the urethra speculum, which could only be employed with a powerful light, such as that given by the speculum lamp we have already described. This instrument consists of a straight tube, open at both ends, made of silver, highly polished on its inner surface, and having a small funnel at one end. The instrument in Mr. Weiss's case was about six inches long, but we were assured that a perfect view of a stricture, for example, might be obtained a greater distance from the orifice of the meatus, by means of this instrument. Even with the imperfect light in the building, we could see letters on a piece of paper placed at its lower end. We cannot doubt that these instruments will prove powerful auxiliaries to the clear determination of the morbid conditions of the passages to which they are adapted, and more especially the lamp, which is perfectly new in its construction.

In this collection is a beautiful little instrument, devised by Dr. Marshall Hall, whose elaborate researches on the

functions of the nervous system have given him a world-wide reputation, for facilitating the operation of tracheotomy. One of the great dangers of this operation arises from the admission of blood from the external wound into the trachea. This danger is entirely obviated by a very simple contrivance, by which a circle of the tracheal walls may be cut out without allowing a particle of blood to enter the tube. The instrument looks, at first sight, very much like an abdominal trocar, with its canula. It consists of a stem with a handle, having at its extremity a small, short, corkscrew-like projection. A steel canula, having a sharp cutting edge at its extremity slides over the stem, leaving the corkscrew projecting. The primary incisions being made, and the trachea exposed, the corkscrew is twisted into one of the rings of the trachea so as to hold it firmly, and the canula being rotated, a circular disc of the trachea is cut out, which is removed with the stem, leaving the canula projecting into the tube of the trachea. As the canula exactly fits the opening into the trachea, it is manifest that no blood or other fluid can penetrate into the air passages.

Among the instruments for lithotripsy are those of Liston and Fergusson, and the modification of the latter introduced by Messrs. Weiss. All these instruments consist of two blades, forming, when closed, a sound, the inner or upper blade sliding within a groove of the lower, and the force by which the two blades are approximated being furnished by a screw; but in Messrs. Weiss's modification the chief force is produced by a rack and pinion. They have given the name of calculo-fractor to this modified instrument.

Mr. Avery, with his usual ingenuity, has introduced an instrument for facilitating the operation of lithotomy. We are not able to make any statement as to the operative value of the instrument, as we have before us no information of its application in practice. The instrument has the shape, when closed, of an ordinary sound with a handle and some machinery attached to it. After introducing it into the bladder and making the external incisions, by turning a pinion a curved trocar is protruded downwards and forwards, so as to project into the wound. This is removed by the fingers and a knife, constructed for the purpose, introduced into the opening, which slides along the groove adapted for it in this instrument, and completes the section of the membranous portion of the urethra and the prostate. There are some other contrivances connected with the instrument, the object of which did not appear manifest to us. We shall look with interest for accounts of operations performed with the assistance of this apparatus. There are numerous instruments among Messrs. Weiss's collection, that demand the scrutiny and praise of the practical surgeon, both for ingenuity of construction and beauty of finish, which we have not space to notice,—those we have described appearing to be among the most novel and ingenious.

A very simple and ingenious apparatus for transfusion, invented by Mr. Whitehead, is also seen among Messrs. Weiss's instruments. It consists of a graduated glass funnel for receiving the blood, connected by a piece of flexible tube, with a glass tube about eighteen inches long, at the lower end of which is another piece of flexible tube several inches in length, to which the pipe is attached. On the lower piece of flexible tube is fixed a metallic ring, with a screw which compresses or opens the tube, and prevents or allows the flow of the blood. The pipe introduced into the vein is of the ordinary shape, and is attached to a metal plate to be bound round the arm of the patient by a piece of ribbon or tape. This apparatus is much simplified by the absence of a syringe, the force by which the blood is introduced being that of a column of blood nearly three feet in height.

One of the prettiest instruments in the whole collection is Messrs. Weiss's osteotome or circular saw. In many operations where portions of deeply-seated bones are to be removed, and where it would be either dangerous or inconvenient to enlarge the incisions so as to permit the employment either of the ordinary, or Hey's saw, the osteotome steps into our assistance. It consists of a circular disc with a sawing-edge, which cuts in any direction in which the disc may be turned. This is moved with great rapidity by another larger wheel situated nearer the handle of the instrument, and a jointed endless rack, which moves round the pinions of both wheels. A small handle is attached by a ball-and-socket joint to the larger wheel, by which a rapid motion can be given to it, and, consequently, one still more

rapid to the circular saw. To the handle of the instrument a sort of blade is attached by a rivet joint, a curved portion being placed so as to embrace a portion of the circumference of the saw. This blade is intended to hold the bone fast and steady during the action of the saw. The circular saw is especially adapted to the resection of the lower jaw.

We shall next pass under review the collection of instruments exhibited by Mr. Coxeter. This is by no means so large as that of Messrs. Weiss and Son, but it contains some interesting specimens of surgical ingenuity. Among these, although at first sight of a trifling and unimportant character, are his improvements in caustic-holders. It must be well known, by sad experience, how constantly the silver caustic holders are getting out of repair, how the nitrate of silver acts on the solder with which the joints and seams are made, and how often an appeal must be made to the instrument-maker for repair. Nitrate of silver has really little or no action on pure silver, but, when this is in contact with other metals more easily attacked by acids than itself, a galvanic current is set up, which increases the action, and the rapid destruction of the joint or seam follows. Mr. Coxeter has, to a great extent, remedied the inconvenience, by the construction of caustic holders without seams.

Mr. Coxeter has also a vaginal speculum which we have seen repeatedly in use in Dr. Murphy's hands, and for which we should be glad to exchange our own instrument—the three-bladed dilator, with a screw movement and the glass tubular speculum. It is a two-bladed speculum, of white metal, which combines the advantages of the tube and the dilator. The dilatation is effected by means of a screw-lever, which diminishes the handle to a short branch of only an inch in length, while those now in use are usually five or six inches, and form very clumsy instruments for the pocket. The blades are so shaped, that, when fully expanded, the vaginal folds cannot obstruct the view. The instrument can be thrown completely open and readily cleansed; it is very portable, and is fitted with a plug, so arranged as to contain a caustic-case, lancet, and lint-holder, the whole being enclosed in a leather case, little larger than the speculum itself. In our judgment, Coxeter's speculum is more convenient in practice than any other modification of the instrument yet produced.

Mr. Coxeter also exhibits trusses with improved pads; the pads made of inflated bags of vulcanised India-rubber, which, as he states, adapt themselves more easily than any other form of pad to the shape of the parts and the changes produced by movements of the body, and preventing excoriation. He also claims the merit of substituting and applying tubes of the same material to stomach-pumps and enema syringes intended to be used in hot countries, where the surface of the ordinary flexible tubes is soon melted, and the tubes themselves rendered useless. These, he states, will bear the heat of any climate without injury. He also exhibits an artificial leech, as a substitute for the real animal. Several such instruments have been invented, but we are very doubtful whether any of them will ever supersede the real leech. The same material is applied by Mr. Coxeter to rectum bougies. The bougie consists of a stilette and an elongated cylindrical bag of vulcanised India rubber, which can be easily passed through the stricture, and subsequently inflated, the pressure of atmospheric air being employed for effecting the dilatation of the stricture. The bougie is withdrawn with equal facility, after letting out the air. He also manufactures inflated pessaries of the same material, and informs us that the mode of inflating them has been much simplified with an improved valve.

Mr. Coxeter also exhibits an improved pessary for prolapsus uteri, made of gutta percha, which has a cup-like cavity on its upper surface for the reception and support of the os uteri, and an opening through the stem for the escape of discharges or the introduction of injections. The instrument is retained in position by straps of vulcanised India rubber, which adapt themselves, by their elasticity, to the varied position of the body.

Mr. Coxeter has also in his case a scissor-guillotine, for removing the whole or part of the tonsils. This instrument is lengthened in form, has an opening at its terminal extremity, through which the enlarged tonsil is made to protrude, and the portion thus included is snipped off by a scissor blade moved by a series of levers, and at the same time the excised portion is seized by a fine barbed hook, and brought away. He has also a pair of scissors for the same

purpose, with a serrated hook at the points to catch the excised portions.

Mr. Coxeter has also constructed a peculiar form of forceps for applying ligatures to deep-seated arteries. These forceps are an improvement on the original idea of Mr. Luke, by the addition of Liston's spring catch and tenaculum teeth, and by cutting out the head so as to leave only, as it were, four fine wires over which the ligature has to slide, and the operator is enabled, by this instrument, to take up and tie a deep-seated vessel without assistance, in cases of emergency.

The other instruments in Mr. Coxeter's collection, of his own invention, we have space to notice, are his roto-lever scarificator for cupping, in which the lancets are placed in position with much greater ease, and the click is much lessened, and an eye speculum for holding down the lower lid, in which a piece of fine watch-spring passes down the face, terminating in a pad furnished with a piece of spinous skin of the dog-fish, which passes under the chin, and is retained there by the fine points of the fish skin.

A compound needle, for injecting small cysts, designed by J. Marshall, Esq., surgeon to University College Hospital, is also exhibited.

Another contribution to Mr. Coxeter's collection, is an admirable little instrument designed by Dr. Richard Quain, for taking exact measurements of the movements of the thorax during respiration, which he has denominated the stethometer. Dr. Quain's appointment at the Hospital for Consumption has directed his attention to the importance of this subject in connexion with diagnosis, and he has succeeded in producing an instrument at a moderate cost which, with ordinary care, and a little dexterity in its use, gives the most accurate comparison of the relative amount of respiratory movement on each side of the thorax, and also in individual portions of that region. The nature of all measurements of the movements of respiration is dependent on the fact that these movements correspond to and are influenced by the condition of the contained organs. Nothing is more common than in cases of consolidation of one lung, or a portion of the lung, than to see the movements of the parietes of the chest over the consolidation either altogether abolished or very much diminished. Such extensive change is visible to the eye; but the relative amount of movement on each side can only be ascertained with accuracy by actual measurement.

The instrument resembles in external appearance a watch-case, with an index and a dial divided into fifty parts, each of which is again subdivided into five parts, so that the whole circle has 250 divisions. The case itself contains a mechanism so arranged that each complete revolution of the index indicates a movement of a quarter of an inch, and each of the fifty primary divisions a movement of $\frac{1}{250}$ of an inch. The rotation of the index is produced by drawing out a silk cord, which may be equal in length to the whole or half the circumference of the thorax, passing through an aperture in one side of the case, so that for each quarter of an inch that the cord is drawn out, an entire revolution of the index is effected. If, for example, the instrument be placed on the spine, and the cord carried round the chest during inspiration, the amount of expansion will be indicated by the extent of the revolutions of the index. If both sides of the chest be examined in the same manner, it is evident that any inequality of expansion will at once be indicated and measured with great exactitude. Care must be taken that the cord be carried over corresponding parts of the opposite sides of the thorax. The expansion during inspection of smaller segments of the thoracic parietes may likewise be accurately measured by this instrument. Dr. Quain (a) gives the following precautions as requisite in the use of this instrument:—"1st. That exactly corresponding parts of the chest be examined, and that the stethometer should be applied in the same way on each side. 2nd. That the patient breathes in the same manner when the opposite sides are examined. 3rd. That the cord should be sufficiently tense to act on the index at the commencement of the observation."

Dr. Quain does not suggest this instrument as in any way superseding that invaluable instrument, the spirometer of Dr. Hutchinson, which will be noticed hereafter, as a means of comparing the capacity of the lungs of different individuals for air, which it is almost impossible to do with any

(a) "London Journal of Medicine," October, 1850.

degree of exactitude by external measurement, but (a) "as a means of ascertaining any want of symmetry, independently of malformation, and, therefore, indicative of disease, in the movements of the corresponding parts of the same chest. It is not my intention to discuss here the various conditions under which this want of symmetry may occur. Obstruction, for example, of a bronchus by a foreign body in, or by a tumour pressing on it, will interfere with the movements of the side of the chest containing the lung to which such bronchus is distributed. Disease of the substance of the lung, tuberculous, malignant, or inflammatory, and emphysema affecting the air-cells, also prevent free expansion of the lungs, or parts of them affected. Diseases of the pleura, viz., acute or chronic pleurisy; bands binding down the lung; pleuritic effusions, or tumours in the pleura, have a like effect. Pleurodynia and diseases of the external walls of the chest may, of course, interfere with all its free movements. *However trifling the degree of limitation of motion which may be produced by any of these diseases, or by many others not here enumerated, I believe this instrument, if properly used, will inevitably indicate it.*" Of course, the cause of such limitation of motion must be ascertained by the other means of diagnosis. The instrument is equally applicable to the measurement of the movements of the abdomen during respiration, and to the increase or decrease in bulk of solid tumours, or other swellings. Dr. Marshall Hall has suggested that it may be employed for the admeasurement of the changes of bulk of muscles during their contraction. Dr. Quain deserves the thanks of the Profession for this adjuvant to physical diagnosis.

Dr. Hutchinson's spirometer, that invaluable instrument for measuring the relative capacity of the lungs of different individuals for air, is also exhibited. It is a modification of a gasometer, so arranged, that the number of cubic inches of air which a person can expel from the chest after a strong inspiration, is indicated by the height at which a column of water stands in a glass tube, to which a scale is attached. When pursuing his researches on the relative capacity of the chest in a very large number of individuals (5000 or 6000), Dr. Hutchinson discovered, that the lungs being in a normal condition, the number of cubic inches of expired air have a direct ratio to the height of the individual; and he has constructed a table of the corresponding heights and capacities which is extremely accurate in actual practice. *Apropos* of this instrument, the attendant in the Exhibition told us the other day, that two eminent French surgeons, M. Lallemand and, we believe, M. Roux, when visiting the Exhibition, and looking at this instrument, were quite incredulous of its value until they had made trial of it on a very considerable number of the visitors, after which trial, they expressed astonishment at the exactitude of the results. We need not give any other praise to this instrument, than that it is used in almost every hospital and insurance office in this country, either for assistance in diagnosis in disease, or for ascertaining the dynamic power of the lungs in health.

Mr. Weedon, of Hart-street, exhibits a small case containing a set of instruments for microscopical dissections, and for stuffing birds, which are excellent. The only other contents of the case are a set of scaling instruments for dentists, on which we have nothing to remark.

Mr. Brown, of Newcastle, has here an instrument for treatment of aneurism by compression. It consists of two arcs, each having a pad near its free end, connected by a sort of hinge-joint, apparently moved by a screw and rack; but we were unable to inspect it so closely as to determine the mechanism. He has also male and female urethra dilators, in which the movement of the blades appears to be performed by similar means. Whatever may be said of the principle of action, the workmanship and finish of the instruments are anything but commendable.

Mr. Machill, a surgeon, exhibits an ingenious circular saw, which is small in bulk, and seems to act very well; but the mechanism of its movements is so enclosed, that, although we had the instrument in our hands, we were unable to determine the principle of its action. He has also specimens of a fountain enema syringe.

Mr. M'Dowell exhibits what we may characterise as an original and extremely ingenious form of lithotrite. It consists of two blades, which, when closed, have the form of a

sound, but when open, that of a lithotriptic instrument; but with this difference, that the outer blade has a groove which admits a series of drills attached in the manner we are about to describe on the inner blade. The drills are fixed in position, but moveable on their centres. To each of them a cog-wheel is affixed, which fits that of the next drill, and so on for the whole series, until we arrive at the straight part of the instrument, into which a stem passes with notches at its distal extremity, which correspond with the cogs of the last drill, while to the proximal end a winch is attached, by which the stem is rotated. It follows, that when the central stem is turned by the winch, the whole of the drills will rotate with equal velocity, and, supposing a stone to be grasped by the blades, it will be pierced by a series of holes corresponding in number with the drills. By changing the position of the stone, fresh holes may be made, until the stone is finally reduced to powder, and evacuated.

We shall close this Article with a notice of the invention of a benevolent baronet, Sir G. Cayley, of an artificial arm, designed, we were informed, for the son of a tenant who had had the misfortune to lose one arm. It consists of an open frame of sheet-iron, reaching above the elbow, into which the stump of the arm fits. A circular band of the same material for the extremity of the stump is moveable and puts in action a lever, which, acting on a series of other levers connected with the finger and thumb, also made of plates of sheet-iron, causes them either to open or close. The hand is covered with a glove made of some composition of gutta-percha, so perfectly natural in appearance, that it might be mistaken for the original hand, and which, although it has remained in the Exhibition three months, is perfectly flexible, and adapted for the uses for which it is intended.

REVIEWS.

Des Maladies du Sinus Maxillaire. Par DR. GIRALDÈS, Professeur agrégé de la Faculté de Médecine, Chirurgien des Hôpitaux, etc. etc.

We have perused with interest a thesis on diseases of the maxillary sinus, written by Dr. Giralès, and presented by him at the Concours for the chair of Clinical Surgery, vacant in the Faculty of Medicine of Paris. Dr. Giralès, who has frequently visited this Metropolis, where he is known and respected by a large number of his English professional brethren, commences with a few general remarks upon the anatomy of the sinus of Highmore, mentioning the fact of its non-existence in the fœtus, and showing its connexion with the roots of the molar teeth in the progress of its development. He then proceeds to the consideration of its pathology. Fractures are generally accompanied with injury and contusion of the surrounding parts, and scarcely, therefore, require special notice. Béclard relates the case of a man who received a blow from an umbrella; the iron ferule fractured the sinus, and, becoming detached, fell into the cavity, where it remained some time. Brodie has seen necrosis of the superior maxilla follow a blow over the face in a child.

Extravasations of blood in the sinus uncomplicated with other disease, are, according to our experience, rare; although cases have been related by Dupuytren, Jourdain, Knortz, and Velpeau. Dr. Giralès does not attach much importance to the plan of M. Bermond, who proposes to determine the question of the presence of air or blood in the maxillary sinus by *auscultation* (!) of the jaw! He prefers the use of a grooved needle, and an exploratory puncture, from which much more satisfactory information can be obtained.

There is a good account of the progress and symptoms of inflammation of the sinus, with directions respecting the extraction of carious teeth. Perhaps, when all cause of irritation has been removed, there is no occasion for the injection of iodine into the sinus. Upon that point we do not quite agree with the author, who speaks of the employment of *eau iodée* for the purpose of producing a change in the mucous membrane. He also recommends the same practice in necrosis. We cannot see how iodine can either produce a change in the carious surface, or favour the expulsion of the dead parts.

Section III. is devoted to hydropsy of the sinus—or a collection of fluid which gradually distends and renders thin and elastic the bony walls which surround the cavity. The

(a) Dr. Quain, loc. citat.

fluid must be evacuated by puncture. The prognosis is favourable; the great inconvenience is the deformity which it occasions to the face.

The chapters upon "Tumours" are written in the best style, and comprise the more correct modern views upon this important subject. Tumours are either analogous in their structure to some of the normal tissues, such as fibrous, cartilaginous, or bony growths, or are of a totally different character, as in the instance of soft cancerous or fungous growths. Tumours, again, may originate within the antrum, or, arising from the gum or some part external, make their way into the interior from without. Cases of both kinds have been related and properly contrasted by Stanley, in his work on Diseases of the Bones.

We must refer the reader to the remarks upon fibrous, fibro-cartilaginous, fibro-cystic, enchondromatous, and osseous tumours. Erectile tumours, observes the Author, are rare in the maxillary sinus. Fatty tumours still more so.

Dr. Giraldès establishes two classes of heterologous tumours. 1. Fibro-plastic tumours. 2. Encephaloid tumours. They may occur at any age, from infancy upwards. As regards the causes of these affections, we know simply nothing. We have noticed only the mode of development and the changes which they produce upon surrounding structures.

The uncertainty as to the origin of these morbid growths makes it necessary that every part should be carefully examined before operation. The nasal fossæ, the mouth, the pharynx, should be explored with the finger in every direction. The seat of the disease being known, it remains that its nature should be determined, and surgeons cannot always be sure as to the growth being solid or fluid. We recommend this part of the work to the perusal of the young surgeon.

The treatment of these morbid conditions of the sinus of Highmore must of necessity depend upon the nature of the disease we are called upon to treat. A solid tumour generally requires the removal of a large part, or even the whole, of one superior maxillary bone; indeed, in the case of malignant, or, as they are called, heterologous formations, no other measure is permissible. The employment of caustic is rarely needed.

The whole thesis is carefully written. There is none of that wordiness and superfluous discussion with which so many of the French surgeons often inundate practical remarks of true value and originality. It exhibits considerable research, and is in every way creditable to the author.

On Diseases of the Mucous Membrane of the Throat, and their Treatment by Topical Medication. By WILLIAM WAGSTAFF, M.A., M.D. London. 1851.

Six years since, Dr. Horace Green, of New York, laid before the Profession, in a book entitled "Treatise on the Diseases of the Air Passage, etc.," the great advantages to be derived in those diseases from the topical application of a solution of nitrate of silver. In consequence, the remedy has been pretty extensively used in this country, and experience has confirmed, in many particulars, the statements of Dr. Green.

Dr. Wagstaff has, in the little book before us, added his testimony to the value of the nitrate of silver in the treatment of the diseases of the mucous membrane of the throat. We do not see that Dr. Wagstaff has told us much, if anything, that previous writers on the same subject had not said; and those who have not already applied the nitrate of silver to the pharynx and larynx may find his book useful. We are rather surprised, however, to find Dr. Wagstaff maintain, after six years' experience, that a sponge cannot be passed through the rima glottidis. That it can be carried into the trachea with perfect facility, no one who had the opportunity of witnessing Dr. Green's operations when he was in London a little while since can question.

The First Step in Chemistry. By ROBERT GALLOWAY, F.C.S., Lecturer on Chemistry, Putney College, formerly Chemical Assistant in the Museum of Practical Geology. London. 1851.

Last year, Mr. Galloway published an excellent little Manual of Qualitative Analysis; he has now given us an equally useful little book on the first principles of chemistry. It is not intended as a class-book for medical students, but

for the use of schools and for self-tuition, and is admirably suited for its purpose. The youth who masters it will really understand the rudiments of chemistry, and will not have, as is too often the case after having read a popular treatise, to begin the more profound study of the science at a disadvantage.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

LAW OF INFANTICIDE IN AUSBURGH.

Dr. Beck, of Weissenhorn, has recently published the particulars of a trial for infanticide, which shows how superior our own laws on the subject are to those prevailing in some parts of Germany, and that medical evidence is just as susceptible of being perverted to mischievous purposes as forensic eloquence. A woman, as appears by her subsequent confession, bore a child with ease; its face was bluish, and, although it did not cry, it repeatedly moved. She swung it round, so as to strike its head several times forcibly against a wall, and then stabbed it in several places, dividing the large vessels, and penetrating to the spinal marrow. Upon her apprehension, Dr. Beck, a rural juridical physician, after a careful examination, declared the child was at its full time, and at the time of its death was viable; and here the case would naturally end by consigning the cold-blooded murderess to her doom. But a town juridical physician, delivered an *epicrisis* on the report of Dr. Beck, in which he declares the child was not a viable one, founding his opinion upon the large size of its head, and the softness of its brain. He stated, that obstetric writers are agreed that the normal longitudinal diameter is at most $4\frac{1}{2}$ inches, the transverse $3\frac{1}{2}$, and the perpendicular $3\frac{1}{2}$; while in this child the first and last of these were 5 inches, and the transverse 4; and he attributed the softened state of the child's brain to a process of intra-uterine softening. This evidence, which was produced too suddenly at the trial to admit of its errors being exhibited, Dr. Beck analyses in the present essay, showing that such absolute statements in reference to the size of the head are not admitted by obstetric writers, and that the actual size in this case was far less than that usually given for hydrocephalic heads. Indeed, the usually allowed peripheric admeasurement of 15 inches was not attained by 2 inches. He also states that the supposed softened state of the brain was partly due to its natural soft consistence at this time of life, and partly to the concussion it had undergone from the violent blows the cranium had been subjected to. Moreover, none of the usual marks of congenital hydrocephalus were present.

This might serve for men of science; but a honest Ausburgh jury, on being asked by the advocate who had procured this medical ally, whether they did not consider the testimony of a town doctor of far more value than that of a country one, answered affirmatively; and delivered a verdict to the effect that the child killed was *non-viable*; and its murderess was consequently sentenced to six years hard labour only, just as she would have been had she committed some petty theft.

Dr. Beck regrets that the rule is not observed that prevails in Würtemburgh, where, in all important cases, the medical evidence is submitted to professional referees of high standing; or, at all events, that it is not compulsory to furnish the reporter with a copy of the objections to be made to his statements the day before the trial.—*Henke's Zeitschrift*.

DR. HOFFMAN ON THE INCREASE OF THE SIZE OF THE CHILD IN PROTRACTED PREGNANCY.

Dr. Hoffman, of the Würzburg Lying-in Institution, entertains no doubt of the occasional protraction of the period of pregnancy; and believes, judging from three other well-marked cases of such protraction, which, besides the present one, have come under his notice, that, so far from the child in such cases dying, or becoming emaciated before birth, as in the manuals it is said to do, it may reach an abnormal size. In this communication he details a case at great length, an outline only of which we can find room for. A. S., aged 23, a single woman who had previously enjoyed excellent health, last menstruated 20-27th Sept.,

1848, and at the end of September, or beginning of October, fell pregnant. The author does not state the grounds for his belief that this occurred exactly at this period, but says there can be no doubt of the matter. She went through her pregnancy pretty well, except for the inconvenience caused by her large size. The first labour pains commenced 31st July, 1849, i.e., at the beginning of the forty fifth week of her pregnancy. They long continued of a very feeble and indeterminate character, notwithstanding some doses of ergot; and eventually, in consequence of headache and fever, venesection, salines, and aperients were resorted to. The waters had given way a few hours after her labour had commenced, but the os was not effectually dilated till the 2nd August, when the head became firmly fixed at the entrance of a well-formed pelvis, the pains continuing ineffectual, but the uterus contracting round the child with a stony hardness. As the sixtieth hour of labour was attained without any advance of the head, and the child had ceased to live, perforation was resorted to. The skull being opened, the case was again left to nature, a little warm water being injected into the vagina occasionally, and some stimuli administered to rally the depressed state of the nervous system, and induce pain. Little pain followed, but the general state improved a little, and the head entered the pelvis somewhat more. On the 3rd of August, however, (eighteen hours after perforation, and the seventy-eighth of her labour) her state had become alarming, her pulse being 140 and she delirious, the head still advancing a little, though there was no pain. The forceps were applied in vain, as by no exertions could the progress of the head be accelerated by them, and the operator could not find a sufficiently firm purchase for the hook. She died during these attempts, and on the removal of the child by the Cæsarian section, it was found to be as large as is usual at the age of three-quarters of a year. Its length, from the heel to the vertex, was 26 inches, and the circumference of its chest measured 17. The diameter of its shoulders was $6\frac{1}{4}$, and of the hips $5\frac{1}{4}$ inch; the conjugate diameter of the pelvis being $4\frac{1}{4}$ inches. The size of the head could not be appreciated after mutilation. This excessive development of the child rendered delivery *per vias naturales*, in a perfectly normal pelvis, completely impossible; and the author observes that, could this state of things have been anticipated, the Cæsarian operation should have been early resorted to, by which the child's life might have been certainly, and the mother's possibly preserved. But he adds, what accoucheur could have recommended this in a perfectly normal pelvis?

Dr. Hoffman refers to three other cases of protracted pregnancy he has met with during the last ten years, in which, on account of the large size of the child, the mothers all died undelivered after perforation. He suggests, in similar cases, the propriety of the artificial induction of labour.—*Neue Zeitschrift für Geburtskunde.*

REPORT

FROM

THE NATIONAL VACCINE ESTABLISHMENT. 1851.

PRESENTED TO BOTH HOUSES OF PARLIAMENT
BY COMMAND OF HER MAJESTY.

In the course of the past year 179,370 charges of lymph have been supplied in answer to 7,965 applications; 124,217 cases are reported as vaccinated; of these, 10,025 were vaccinated by our stationary vaccinators in London.

In accordance with directions received from the Colonial Office, large supplies of lymph have been forwarded to various West India islands by every mail during the past year; and the Board have reason to believe, that great and permanent benefit to the Colonial population has been the result. Beside a large and increasing demand answered by us for lymph for military stations at home and abroad, ships of war, prisons, &c., supplies have been sent to North America, Australia, New Zealand, the Coast of Africa, the Philippine Islands, and Hong-Kong. We have also furnished a supply to Egypt at the request of the Viceroy, through Her Majesty's Consul at Alexandria, and to Baden-Baden, at the request of medical authorities there.

The accounts received from the Coast of Africa deserve some

comment. We learn through a letter to Earl Grey, forwarded to us by His Lordship, from Governor M'Donnell, that by the persevering energy of Staff-Surgeon Kehoe, after many difficulties and disappointments, vaccination has been extensively carried out at Bathurst, and hopes are entertained that it will spread in the native tribes on the banks of the Gambia. "It may be interesting to your Lordship," observes Governor M'Donnell, "to learn that one of the chiefs who received Dr. Kehoe most kindly, and who most readily allowed his family to be vaccinated, was the King of Keenang, with whom I was engaged last year in serious hostilities." We are also informed by the Governor, that he has received much assistance in this charitable work from the Wesleyan Missionaries.

Yet we regret to learn, that in our own country the spread of vaccination is still materially impeded by influences emanating from ignorance and prejudice in the lower orders, and from prejudice in many who cannot plead the excuse of ignorance. Obstacles are also supplied by a want of care in vaccinators, who do not prosecute with sufficient attention the question, whether in each case the vaccine vesicle has duly run its course.

In addition to the many cautions on this and other points previously addressed in our Reports to persons concerned in vaccination, we press upon them a caution suggested by one of our correspondents in the present year, not to excite the fears of the public by apparent indifference to the sources from which the virus is drawn in obtaining it from unhealthy or apparently unhealthy subjects.

There are other considerations of a more general nature not unadverted to in previous Reports, a summary of which may, however, be expedient on the present occasion. The public require to be reminded, that vaccination does not spread variola, that inoculation does; inasmuch that, towards the close of the last century, Baron Dimsdale describes the deaths from small-pox as increased by that cause: that vaccination inflicts a mild disease, inoculated variola a severe and occasionally fatal one; that the occurrence of variola after vaccination is a circumstance in which the latter participates with inoculation. Thus, in the year 1819, when vaccination had been practised long enough to have materially diminished the proportion of the inoculated to the general population, 71 persons are reported by an authentic writer, Dr. Thompson, as incurring variola after inoculation in one epidemic in Edinburgh; that the restriction of the protective power of vaccination to any term of years, as suggested by some, is an hypothesis neither proved by facts nor supported by analogy; while the diminished mortality from small-pox, which commenced with its introduction, and has continued through half a century of its application, effectually negatives any disparaging inference from that hypothesis against vaccination.

(Signed)

JOHN AYRTON PARIS, M.D.,

President of the Royal College of Physicians.

THOMAS MAYO,

Senior Censor of the Royal College of Physicians.

JAMES MONCRIEFF ARNOTT,

President of the Royal College of Surgeons.

Clement Hue, M.D., Registrar.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, August 28:—

GIBSON, JOHN BILLEWELL, Exmouth-street.

WEST, MAURICE THOMAS, Tenby, Pembrokeshire, S. W.

OBITUARY.—On the 18th ult., at his residence, Ivy House, Penkridge, Staffordshire, Thomas James Vickers, Esq., surgeon, in the 87th year of his age. Mr. Vickers formerly practised in Birmingham.—On the 14th of April, in the Camaroons river, on board the ship Abraham Young, of which he was the surgeon, Isaac Parry, Esq. On the 28th ult., at Fishponds, near Bristol, aged 57, Dr. Joseph Cox Cox, formerly of Naples.

CHARITABLE BEQUESTS.—A legacy of 100*l.*, duty free, bequeathed by the late Mrs. Jane Priestley, of Buckingham, to the Bucks Infirmary, has been paid by the executors.

THE friends and pupils of the late Mr. Aston Key have now an opportunity of procuring an excellent portrait of their late much esteemed friend and master, Mr. Hogarth, of the Haymarket, having just published a fine engraving, by Holl, of Mr. Key, from a drawing by Mr. Richmond. We strongly recommend it as a

pleasing and beautifully executed memento of a justly celebrated surgeon.

NAVAL PROMOTIONS.—Assistant-Surgeon Thomas Ayling (1839); at present serving in the Bermuda schooner, on the North America and West India station, to be surgeon. Acting Assistant-Surgeon John Little, to the Grecian, 12, sloop at Devonport. Surgeon Evan Evans (1845), to the Dido. Acting Assistant-Surgeons Jacob E. Dyas, to the Victory flag-ship at Portsmouth, and Owen J. Llewellyn, to the Impregnable flag-ship at Devonport.

MEDICAL APPOINTMENTS AND VACANCIES.—The office of superintendent to the Dorset County Lunatic Asylum is vacant, in consequence of the death of Dr. Buttin. Salary 200*l.* a-year; date of election September 12th.

CLAPHAM GENERAL DISPENSARY.—Mr. Lean, M.R.C.S. Eng., has been elected as a Dispenser at the Clapham General Dispensary.

ELECTRICITY AND THE POTATO BLIGHT.—Dr. Turley, of Worcester, in a letter to the *Worcestershire Chronicle*, remarking on the potato disease, gives the following Table, as showing that in winter terrestrial electricity is far more abundant than in the summer months:—

Monthly Variations of Electricity.

	1845.	1846.	1847.	1848.	MEAN.
January .	471°	562°	957°	487°	605°
February .	548	256	413	294	378
March .	262	95	282	164	200
April .	93	94	221	155	141
May .	163	49	67	59	84
June .	51	39	47	48	47
July .	58	33	45	61	49
August .	89	57	11	64	78
September	95	62	39	63	82
October .	299	98	107	120	188
November	334	274	169	152	282
December	742	799	356	281	669

Dr. Turley adds: "From this Table it appears, that, in June, for four years, the mean electricity was only 47°, while in January, for the same period, the electrometer told 605°. We may here pause for a short reflection. May it not have been wisely ordained by the Almighty Artificer of all, that when in winter the animal functions become torpid through cold, increased electricity—the parent of vitality—should be designed to furnish a greater supply of the agent of life through the hyemal season. Now, the electricity of the air, when the sky is clear, exceeds the electricity in cloudy days as we advance from June either towards January or December, the ratio being as four to one. This effect is very remarkable in winter when the sky is clear, as every one must have observed by the hilarity of his feelings; yet in June and July, the electricity is the same whether the sky be fair or cloudy, and the electricity in January exceeds, by thirteen times, the electrical energy of the month of June. The negative electric indications precede or follow rain and storms. The electric condition has been observed to be negative six times during rain, nine times before rain, and five times after rain. The electricity of the air undergoes a diurnal variation; the first maximum occurs in summer before 8 o'clock a.m., and about 10 a.m. in winter. These observations are full of interest, and to many a sensitive convalescent will speak volumes in explanation of his depressed feelings on certain days when the electrometer is inactive. This explanation, carried to the sick couch, will account to physicians why, on certain days, the progress of disease increases, while, at other times, when the electrometer indicates plus electricity, he finds every case advancing favourably. In a short time, physicians will cease to teach that hypochondriacism is an affection of the brain; they will again look for it, as Hippocrates did, near to the centre of the body—the hypochondrium—the seat of animal life. Your readers will, perhaps, excuse the ambition I feel in desiring to localise these discoveries in my native city (Worcester). Certainly, Dr. Philip Wilson, and others of this place, about the year 1818, first showed that digestion mainly depended on the integrity of the eighth pair of nerves of the brain, and Dr. Stevens, of Wick, showed that their function was chiefly to transmit electricity from the brain to the stomach to conduct digestion. I have shown, that the vitality and power both of animals and vegetables depend on their plus or minus electricity, as instanced in the potato disease, which is *mere gangrene from deficiency of life* in the sap or blood of the plant, owing to diminished terrestrial electricity." [We understand the potato disease is rapidly extending itself in all the Midland counties, but that the deep green-coloured haulms maintain their vitality perfectly; the selection of the sets from this kind of

potato next year, Dr. Turley believes, is the only means to be adopted for future security to the growers.]

THE potato disease has committed extensive ravages in France. It is said that three-fourths of the crop are destroyed in Alsace and French Flanders. Near Paris, the injury as yet is not serious. The disease has also shown itself in the departments of the Marne, the Côte d'Or, and the Vaucluse. It is spreading in the Manche; and fields which eight days since had a healthy appearance, are now quite black.

UNIVERSITY OF EDINBURGH.—The annual graduation of Doctors in Medicine in the University of Edinburgh, took place lately in the Chemistry Class-room of the College, in presence of a numerous and brilliant assemblage, when forty-five gentlemen had the honour of receiving that degree. The Lord Provost was unavoidably absent, but the magistrates and a number of the Town Councillors, in their robes, attended upon the occasion; most of the Professors were also present—Professor Balfour, as Dean, and Professor Kelland, as Secretary, to the Senatus, administered the sponsio to the candidates. The proceedings were opened with prayer by the Rev. Principal Lee, and Professor Christison addressed the candidates in a suitable and impressive manner. The following is the list of the names of the gentlemen who received degrees:—

*** Those who have obtained Prizes for their Dissertations.

** Those selected for Competition for the Dissertation Prizes.

* Those commended for their Dissertations.

From Scotland.

* Thomas Alexander Goldie

Balfour.

David Christison.

James Alexander Cowper.

* James Fairweather.

** Alexander Fisher.

John Guthrie.

* Matthew Forster Heddle.

David Ogilvy Hoile.

William Collingwood How-

atson.

** David Keith.

George Stevenson Knowles.

** James M'Grigor MacLagan.

* John William Sinclair

Meiklejohn.

John Cockburn Messer.

George Easson Stewart.

William Wilkinson.

* George Wyld.

From England.

* James Black.

* Robert Thomas Buckle.

* Benjamin Carrington.

*** Spencer Cobbold.

William Henry Cutts.

Joseph William Eastwood.

Robert Fowler.

*** William Millington.

Thomas Nicolson.

Henry Payne.

William Henry Pearse.

Henry Wilson Reed.

Serjeant Samuel Roden.

*** John Scott Sanderson.

* Edward Simpson.

Reuben Whitchurch.

** Henry Good Wright.

From Wales.

* John Robert Hughes.

Thomas Wynne Williams.

From Ireland.

William Robert Moreton.

From Berlin.

* Edward Liebermann.

From Jamaica.

*** Charles Murchison.

From Barbadoes.

* Theodore Gordon Bone.

From Naples.

* George Scott.

From Cape of Good Hope.

James Abercromby.

* James Macnabb Cuning-

ham.

From East Indies.

George Moncrieff Govan.

Henry Roome.

PROGRESS OF EPIDEMIC DISEASE.—The cholera is reported to have shown itself in Vigo. It has also broken out in a malignant form at Louisville, United States, caused, it was supposed, by heavy rains and great heat. The yellow fever has appeared at Oporto.

CHOLERA AT NOTTINGHAM.—Several cases of cholera, approaching the Asiatic or epidemic form of the disease in severity, have occurred lately in Nottingham, two of which have terminated fatally. In one instance where death occurred, that of Mr. Brewitt, a pork-butcher, residing in Bridlesmith-gate, an inquest was held, when evidence was adduced to show the miserably filthy state of his slaughter-yard, which was very near the dwelling-house. The entrails of animals were often left there in a state of decomposition, and the smell was very offensive. One of the witnesses stated, that, for a length of time past, a quantity of sheep's intestines, in a very offensive state, had been brought to the yard to be used for sausages, black-puddings, etc. Diarrhoea is reported to be prevalent in the town to a very extraordinary extent; and the Committee have instituted a system of house-to-house visitation, and have taken means to cleanse the various filthy places in the town.

INDIA.—The station of Loodhiana has been abandoned, having been found to be very unhealthy. Many valuable lives were first sacrificed in the experiment. Dr. Boyd and Dr. Rooke are to revert to the rank of surgeon. Dr. Don and Dr. Cahill becoming

superintending-surgeons in their room. The two last-mentioned gentlemen were in England when vacancies occurred in the grade of superintending-surgeon, when the two former were appointed. It has been decided by the Court of Directors, that Dr. Don and Dr. Cahill are entitled to the rank of the superintending-surgeon, being seniors in the service to Dr. Boyd and Dr. Rooke. The latter are said to have paid 2000*l.* and 3000*l.* towards purchasing the step they have now lost; but this we can hardly credit, as medical commissions and rank, we believe, are not mercantile commodities. If the fact be true, there would be less reason to regret and denounce the fall in rank of these gentlemen, as it would have been preceded by a fall in reputation. It is not to the credit of an army surgeon to purchase a step, as is practised by his military colleagues. The medical warrant officers number many highly qualified men—men who have acted for months as assistant-surgeons, yet but one of their body has had a commission conferred on him.

WEST DEREY UNION.—The Poor-law Board has sanctioned the increase of salary of the Medical Officer of Health of the township of West Derby to 80*l.* per annum, and the reduction of that of the Medical Officer of Kirkdale from 51*l.* 4*s.* to 50*l.* One of the *Guardians* proposes to reduce the salary of the Medical Officer of Bootle from 40*l.* to 30*l.* a year. Union Medical Officers are so notoriously overpaid, that there cannot be even a momentary objection to the proposal.

SUMBUL IN EPILEPSY.—A clergyman in Essex has written to us to state that he has personally derived great benefit from the use of sunbul, he having been afflicted with epilepsy for many years. Although the fits were not very severe, they were sufficiently so to render his life rather miserable, and to detract from his sphere of usefulness. The disease is not cured, but is much meliorated. The preparation used was the etherial tincture, in the first instance, and subsequently the simple tincture, prepared by Mr. Savory. The case is not altogether satisfactory, inasmuch as zinc was used for a long time simultaneously with the oriental drug. The patient, however, mentions an interesting fact, that he never has an epileptic fit when he has taken a dose (40 minims) of the tincture the day preceding.

SALE OF ARSENIC ACT.—W. Feast and Henry Whitaker were summoned lately before the magistrates at Downham, under the above Act, they having sold to Hannah Neale, two quantities of arsenic, which, it is presumed, she used to poison her husband with. As this was the first time that the provisions of this Act have been put in force, the magistrates, unwisely, in our opinion, allowed the informations to be withdrawn on payment of costs. They expressed their hope that this investigation would act as a caution to other dealers in poisons. The unhappy woman is fully committed for trial for the murder of her husband, while these persons, but for whom she would not have committed the crime, and who broke the law, thereby aiding the loss of one life, and perhaps of another, escape by paying the costs only. Parties who sell poison so carelessly, ought to be severely punished; nor, if capital punishment were done away with, as it ought to be in a Christian land, would it be too much to treat them as accessories before the fact, or at least as guilty receivers are dealt with in cases of robbery.

PRUSSIAN DESPOTISM has just, at Breslau, deprived a physician, Dr. Borchard, of the right to practise his art—has withdrawn from him his medical license, because, in a speech delivered in the year 1848, he is said to have used treasonable language. Being tried for this offence at the time, he was condemned by a law tribunal to twelve years' imprisonment. On an appeal to another Court, this sentence was mitigated to three years; which a third and final court of appeal has reduced to two. The Government, however, not finding this punishment sufficient, has, in order to increase it even beyond the rigour of the first sentence, deprived the doctor for ever of his means of subsistence. The official document proclaiming this monstrous act of injustice and cruelty has been published, in all official formality, in the *Neue Ober Zeitung* under the date of the 28th inst.

MR. PULVERMACHER'S PATENT PORTABLE HYDRO-ELECTRIC CHAIN BATTERIES, one of the most ingenious inventions of the day, are constructed on an entirely new principle, which presents such eminent and novel advantages, that they may be said to open a new era in the history of galvanism and its applications. These portable chain batteries present within the compass of fifteen cubic inches, the whole metallic combination of 120 galvanic elements ready for instantaneous use, without any previous fastening, compilation, or other adjustment whatever; requiring only the immersion for a moment into vinegar, or any other dilute acid, to produce powerful physiological, chemical, thermal, and magnetic effects, for the term of from one to two hours, and, when

exhausted, being instantly re-excited by a new momentary immersion into vinegar. They require no cleansing previous to or after use—the zinc-oxide produced being dissolved in the vinegar by the next immersion. Upon this important subject Dr. Golding Bird writes as follows:—

“48, Russell-square.

“The ingenious modification of Volta's Pile, contrived by Mr. Pulvermacher, of Vienna, was placed by him in my hands several months ago, and I have had the opportunity of testing its value.

“This apparatus is capable of producing all the physiological effects of the well-known galvanic battery, each link of the chain corresponding to a cell of the latter very cumbersome and, for medical purposes, inconvenient machine. It is easily excited, and its power is very persistent; with careful management it is not likely to get out of order. We have, in this ingenious invention, that which has been long a desideratum, viz., an apparatus of the smallest possible bulk, capable of evolving a continuous uninterrupted current of electricity of moderate tension and always in *one direction*, without the excessive bulk and great inconvenience of the Cruikshank trough, or other cell arrangement.

“I can hardly recommend Dr. Pulvermacher's invention too strongly to the notice of my medical brethren.

“GOLDING BIRD, F.R.S., M.D., A.M., &c.

THE INCOME-TAX AND THE MEDICAL PROFESSION.—The *Brighton Gazette*, in a leading article, says:—“At the annual meeting of the Provincial Medical and Surgical Association, which has just been held in Brighton, a strong feeling was expressed against the Income-tax, and a discussion took place which terminated in the appointment of a Committee for the purpose of investigating the subject of taxation as injuriously and oppressively affecting the medical profession. We trust that, at the opening of Parliament next Session, we shall find among the petitions for the suppression of this abominable impost one from the body by which this step has been taken; and we doubt not, that the example of so influential an Association will be followed by all other classes of the industrial community. There is no class, perhaps, on which the Income-tax weighs more heavily or more unjustly than upon members of the medical profession; and some strong proofs of this fact were adduced by various speakers in the course of the discussion.” We have transcribed this passage, because we are glad that our lay brethren are alive to the growing injustice caused by the operation of this tax on the majority of medical Practitioners. We say the majority, because there are some who, as long as income is to be taxed, can and ought to contribute their share to alleviate the necessities of the State; but this unjust tax weighs most heavily and oppressively on those practitioners whose incomes are homœopathic—although their practice be not such,—and who are struggling to keep up a decent, respectable appearance, and to maintain their families on incomes less than those paid by the nobility to secure the services of a good cook.

DEATHS in the Metropolis for the week ending Saturday, August 30, 1851.

CAUSES OF DEATH.	August 30.				Sum of Ten Weeks.
	♂	15	♀♀	All Ages.	
ALL CAUSES	565	319	176	1061	10806
SPECIFIED CAUSES	563	317	176	1157	10731
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	293	63	22	378	4355
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	20	14	40	438
3. Tubercular Diseases.	63	112	5	181	1692
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses, ...	47	23	24	94	1114
5. Diseases of the Heart and Blood-vessels	4	24	10	38	262
6. Diseases of the Lungs, and of the other Organs of Respiration ...	28	20	29	77	722
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	28	25	16	69	674
8. Diseases of the Kidneys, &c. ...	...	...	...	...	80
9. Childbirth, Diseases of the Uterus ...	...	2	2	4	113
10. Rheumatism, Diseases of the Bones, Joints, &c.	2	...	...	...	59
11. Diseases of the Skin, Cellular Tissue, &c.	1	...	...	1	7
12. Malformations	5	...	...	5	13
13. Premature Birth and Debility ...	34	...	...	34	242
14. Atrophy	37	...	3	40	236
15. Age ... ..	...	...	43	43	423
16. Sudden	5	...	1	6	83
17. Violence, Privation, Cold, and Intemperance	10	18	3	31	274
Causes not Specified	2	2	...	4	25

TO CORRESPONDENTS.

A Friend to Free Hospitals.—The Royal Hospitals, with a large income from real property, appoint one day in the week for the admission of patients, excepting cases of accident and acute diseases,—not that the Governors may exert any influence in the selection, but that the more severe cases may be preferred. In hospitals supported by voluntary contributions the influence of Governors is far more powerful, and the beds are often filled by those who might readily be treated at their homes.

A Governor of the New Orthopædic.—Orthopædic is derived from ὀρθός straight, and πᾶς a child. Had the Hospital limited its benefits to the inferior extremity, it would have been called orthopodic—ὀρθός, πούς, πῶδος, a foot. The fête at Vauxhall the other day was not calculated to make young people walk straight, at least in the paths of virtue.

A Student.—We are very far from sure that the best prizeman is likely to become the best practitioner. In a petty school any man can obtain a number of honorary distinctions, whilst in the larger schools the proportion of prizemen must of necessity be small. We think the practice of advertising the success of any student in the country papers highly derogatory; it is one of the evils engrafted on the system.

An Inquirer.—Medical etiquette cannot be too strongly observed among all members of the Profession. But the patient has a right to some little voice in any question arising from difference of opinion between A and B on a matter of practice. If B has behaved fairly and openly, and given his opinion different from A's after consultation, A has no right to be offended at any course which may be subsequently adopted by the patient.

A Constant Reader.—It is customary to run down hospitals for special diseases. Had it not been for Fever and Small-pox Hospitals,—for Ophthalmic and Orthopædic Hospital, neither medicine nor surgery could have advanced in those departments.

Chirurgus.—There is not, at this moment, so far as we know, any medical society for the promotion of political objects. They have all perished. Attempts have been made to form Associations for strictly social and business purposes. These have not succeeded according to expectation: perhaps they may with more experience.

A Student.—1. The Journal is published every fortnight, price ninepence. 2. Medical Journals are found on the library tables of the various hospitals. S. No.

Dr. Snow's request will be attended to.

Dr. Morris, of Spalding.—We shall be glad to receive the communication.

[To the Editor of the Medical Times.]

SIR,—In kindly noticing my apparatus at the Great Exhibition in your last impression, it is stated that I consider that *all* neuralgic affections are occasioned by cold and moisture, and that therefore a current of warm dry air is the natural remedy.

Now there is a slight inaccuracy in this, which I should be sorry to let pass uncorrected, as it might seriously prejudice your readers against my forthcoming Jacksonian Essay. Cold is undoubtedly one of the chief agents in the production of tic-douloureux, but by no means the only one. Various other causes, such as disturbance of the primæ viæ, malaria, and diseased bone, occasionally excite it. I am, &c.

C. T. DOWNING, M.D.

Anti-Humbog, in reference to secret remedies, wishes us to state, that when attached to the army on the coast of Africa, he found in the Tamarisk (*Tamarix*), called "*Tarfa*" by the natives, an excellent substitute for bark. Can any of our readers give us more information about the medicinal qualities of the shrub, or state the species to which our correspondent alludes? *T. gallica* produces the manna of Sinai.

Scrutator writes,—“Is Zeta so little acquainted with the cause of the error in popular belief of hair growing after death as not to know that in the rapid evaporation of serum from the cuticle of the cadaver, the beard, &c. is, or seems to be, pushed forth? or is he credulous enough to believe, that animal action can go on after life is extinct?”

[To the Editor of the Medical Times.]

SIR.—The case of placenta prævia, which your experienced Correspondent, Mr. Butler, has communicated, at p. 229, is very deserving the attention of all who practise midwifery, and especially of young practitioners; it teaches the necessity, or, rather, the momentous duty, of strict and persevering watchfulness in all cases of flooding, whether arising from placenta prævia, or from any other cause.

Permit me to refer Mr. B. to the conclusive aphorism of Plenck, who published his instructive "*Elementa Artis Obstetriciæ*" at Vienna, in the year 1781. His doctrine is, that, in such cases, the moment for operating has arrived "as soon as the orifice of the womb is open, so that two fingers may be passed into it,"—*quam primum uteri orificium adeo hiat, ut duo digiti inferri possint*. In placenta cases, while flooding is going on, we must act as soon as the os uteri is dilatate. We must not wait till it is dilated.

I am, &c.

T. D. P.

C. W. S., Bath.—1st. Yes. 2nd. 5s. each part.

Catharticus, Spalding.—Certainly.

A Lover of Physic.—1. Apply to the Secretary of the Society. 2. Galloway's Elements, reviewed in our present number. 3. We cannot answer. 4. We are over-supplied on the topic.

A Subscriber (Sussex).—Le jeu ne vaut pas la chandelle.

[To the Editor of the Medical Times.]

SIR,—I have generally found since I came to reside here in March last, that three out of four of my midwifery patients have jilted me, after having duly engaged my services; and find, on inquiry, that women in this neighbourhood are in the habit of engaging a medical man to attend them in their confinement; they then engage a midwife, and should she have skill enough, or nature be sufficient, the accoucheur hears no more of the case.

We are in the habit here, (as in most neighbourhoods,) of making a distinction in the fee between those cases for which we have no prior engagement, and those for attendance upon which we are regularly engaged; therefore, the object of the parties is to engage us for the lowest fee,—do without us, if they can,—and, if compelled to apply to us, save a few shillings thereby. This, in principle being dishonourable, if not actually dishonest, loudly calls for a remedy, and, if possible, in my own case at least, I will try to discover one. I have drawn out the annexed form, which is neither an agreement nor promise to pay, but an undertaking to pay. Will you oblige me with your opinion whether the fine may or may not be recovered in the County Court, if duly signed by the husband, or other party undertaking to pay, and witnessed? Should it appear to you that I could not recover upon it, is there any method, or are you acquainted with any plan by which practitioners may secure themselves from such proceedings in future?

A reply in your Notice to Correspondents will suffice, if you will oblige me.

I am, &c.,

Salop.

A SUBSCRIBER OF SOME YEARS' STANDING.

[Form of Undertaking.]

I, _____, residing at _____, in the County of _____, hereby engage the professional services of Mr. _____, of _____, surgeon, in my wife's next confinement, for which I undertake to pay his demand, in accordance with his usual scale of fees, exhibited and explained by him to me this day; but should he not be summoned to attend on the occasion, or, if summoned, should he not arrive in time for any portion of his duties as midwife, or should the order for his attendance be cancelled before he leave home, or whilst on his way to my residence, I hereby undertake to forfeit and pay to him on demand, the sum of ten shillings and sixpence. (Signed) _____

Witness, _____

Date, _____

[As no specific sum is named in the first clause of the undertaking, the amount to be recovered, in case of dispute, would be decided by the Judge. It would be better to name the sum in the document. The second clause of the undertaking respecting forfeiture would be binding. There have been already several decisions entitling a medical man to receive a fee agreed upon with a patient, even although he should not have been able to perform the necessary duties; but it must be shown that his absence was unavoidable, or that he supplied a competent person to officiate. We apprehend that, as a matter of policy, our Correspondent will not find it expedient to propose such a form of undertaking to his patients. As soon as it shall become known, few persons will care to engage him upon such a condition; and if any of the few should break the agreement, it would be nearly as impolitic to have recourse to the law for the recovery of the forfeit. But if our Correspondent could induce the neighbouring practitioners to adopt the same system, it might be an effectual means of repressing the unfair practice it is intended to remedy. We had written the foregoing prior to the receipt of our Correspondent's second letter. He will observe that our expectation of success rests upon the co-operation of his professional brethren; and we are glad to see that such a combination is likely to be effected.]

Censor.—We have heard of a certain homœopath who recently prescribed a compound of aconite, aloes, &c., in doses so powerful as to induce violent diarrhæa, with symptoms of poisoning. We apprehend that it is a very common practice among those gentlemen to administer globules of great potency, and thus, whilst calumniating regular practice, adopt its principles. This is low cheating, and adds the guilt of meanness to fraud.

Students.—Machaon and Podalirius were princes and warriors as well as surgeons, among the Grecian besiegers of Troy. Their surgical skill entitled them to the highest honours in those days, and they were freely paid them. Although surgery does not hold so high a rank of late days as it did among the ancients, it is still looked upon as one of the most noble of all sciences. Physiology and anatomy have occupied the attention of some of the greatest men the world has ever produced. Louis the XIV. of France, regretted that his education had been so conducted as to prevent his acquiring any knowledge of the composition of the human frame; and he directed that the Dauphin should attend an abridged course of these sciences. Bossuet, the Dauphin's tutor, acquired a knowledge of physiology, purposely that he might be enabled to guide his pupil's studies. Corvisart states that Napoleon desired to acquire information on these points; and some members of our own Royal family have manifested an equal desire for this acquirement. Peter the Great of Russia studied anatomy and physiology at Amsterdam, under the celebrated Ruysch, and performed several surgical operations, being desirous, as he said, "before all other sciences, of knowing that of man, to render assistance, with his own hands, to his officers wounded on the field of battle."

COMMUNICATIONS have been received from—

Dr. DOWNING, of Great Russell-street; Mr. MEINIG, of Leadenhall-street; Dr. BURNETT, of Alton; ANTI-HUMBAG; CATHARTICUS; A SUBSCRIBER OF SOME YEARS' STANDING; A STUDENT; T. D. P.; Mr. COWEN, of the Kidderminster Infirmary; Dr. SNOW, of Frith-street, Soho; C. W. S.; A SUBSCRIBER; Dr. MORRIS, of Spalding; A LOVER OF PHYSIC; SCRUTATOR; CENSOR; STUDENS; A FRIEND TO FREE HOSPITALS; A GOVERNOR OF THE NEW ORTHOPÆDIC; AN INQUIRER; A CONSTANT READER; CHIRURGUS.

**Hunterian School of Medicine, 1, Bedford-street,
Bedford-square.**

(Established in 1822 by the late Mr. Dermott).

The Winter Session will commence on

OCT. 1, with an INTRODUCTORY ADDRESS by Dr. ROBERT BARNES, at THREE p.m.

MEDICINE—Dr. Aldis, F.R.C.P.

SURGERY—Mr. Evans Riadore.

ANATOMY and PHYSIOLOGY—Mr. J. Chippendale, F.R.C.S.

PRACTICAL ANATOMY—Mr. E. J. Chance, F.R.C.S.

ASSISTANT DEMONSTRATOR—Mr. Thomas Smith.

CHEMISTRY—Mr. J. M. Ashley.

The SUMMER COURSES will be delivered by the present Lecturers.

For all the Lectures required by the College of Surgeons and Apothecaries'—hall, 33 Guineas; including Hospital Practice, 58 Guineas.

Apply to Dr. Aldis, 1, Chester-terrace, Chester-square; or 28, Bedford-square.

London Hospital Medical School.

The Lectures will Commence on

WEDNESDAY, OCTOBER 1, when an INTRODUCTORY ADDRESS will be delivered by Dr. FRASER, at HALF-PAST TWO P.M.

WINTER SESSION.

MEDICINE—Dr. Little.

SURGERY—Mr. Curling, F.R.S., and Mr. Critchett.

DESCRIPTIVE AND SURGICAL ANATOMY—Mr. Adams.

GENERAL ANATOMY and PHYSIOLOGY—Dr. Carpenter, F.R.S.

PRACTICAL ANATOMY—Mr. N. Ward.

CHEMISTRY—Dr. Letheby.

DENTAL SURGERY—Mr. Barrett.

SUMMER SESSION.

MIDWIFERY—Dr. Ramsbotham.

MATERIA MEDICA—Dr. Davies.

FORENSIC MEDICINE—Dr. Ramsbotham and Dr. Letheby.

BOTANY—Mr. Bentley.

PRACTICAL CHEMISTRY—Dr. Letheby.

General Fee to the Lectures, £50; to the Hospital Practice and Lectures, 84 Guineas, payable in two instalments of 42 Guineas each, at the commencement of the two first Winter Sessions. Applications by post to be made to the Honorary Secretary.

University College, London.

FACULTY OF MEDICINE.

Session 1851-52.

The Classes will Commence on the
1st of OCTOBER.

WINTER TERM.

Classes in the order in which Lectures are delivered during the day:—

ANATOMY—Professor Ellis.

ANATOMY and PHYSIOLOGY—Professor Sharpey, M.D.

CHEMISTRY—Professor Graham.

COMPARATIVE ANATOMY—Professor Grant, M.D.

SURGERY—Professor Erichsen.

MEDICINE—Professor Walshe, M.D.

DENTAL SURGERY—Mr. Durancé George.

PRACTICAL ANATOMY—The pupils will be directed in their studies during several hours daily, by Professor Ellis and Mr. Briggs, Demonstrator.

ANALYTICAL CHEMISTRY—Professor Williamson daily, from 9 to 4.

SUMMER TERM.

BOTANY—Professor Lindley, Ph. D.

MIDWIFERY—Professor Murphy, M.D.

PATHOLOGICAL ANATOMY—Professor Jenner, M.D.

FORENSIC MEDICINE—Professor Carpenter, M.D.

COMPARATIVE ANATOMY and ZOOLOGY—Professor Grant, M.D.

MATERIA MEDICA—Professor Garrod, M.D.

PRACTICAL CHEMISTRY—Professor A. W. Williamson, Ph. D.

ANALYTICAL CHEMISTRY—Professor Williamson, daily from 9 to 4.

NATURAL PHILOSOPHY, GEOLOGY, MINERALOGY, according to the announcement of the Faculty of Arts.

CLINICAL INSTRUCTION.

Hospital Practice daily throughout the Year.

PHYSICIANS—Dr. Walshe, Dr. Parkes, Dr. Garrod.

ASSISTANT PHYSICIANS—Dr. Jenner, Dr. Hare.

OBSTETRIC PHYSICIAN—Dr. Murphy.

SURGEONS—Mr. Quain and Mr. Erichsen.

CONSULTING SURGEON to the EYE INFIRMARY—Mr. Quain.

DENTAL SURGEON—Mr. Durancé George.

OPHTHALMIC SURGEON—Mr. Wharton Jones.

ASSISTANT-SURGEONS—Mr. Marshall, Mr. Cadge.

MEDICAL CLINICAL LECTURES by Dr. Walshe and Dr. Garrod; also by Dr. Parkes, Professor of Clinical Medicine, whose special duty it is to train the pupils in the practical study of disease at the bedside during the visits, and also by a series of lessons and examinations on the physical phenomena and diagnosis of disease to classes consisting of a limited number, and meeting at separate hours.

SURGICAL CLINICAL LECTURES, especially by Mr. Quain and by Mr. Erichsen.

Prospectuses may be obtained at the Office of the College.

RESIDENCE OF STUDENTS.—Several of the Professors receive Students to reside with them; and in the office of the College there is kept a register of parties unconnected with the College who receive boarders into their families: amongst these are several medical gentlemen. The Registrar will afford information as to terms and other particulars.

THOMAS GRAHAM, Dean of the Faculty.

CHAS. C. ATKINSON, Secretary of the Council.

August, 1851.

Westminster Hospital School of Medicine.

SESSION 1851-52.

The Lectures will Commence on

WEDNESDAY, 1st OCTOBER, with an INTRODUCTORY ADDRESS by Mr. Holthouse.

ANATOMY and PHYSIOLOGY—Mr. Hillman and Mr. Brooke, F.R.S.

DESCRIPTIVE and SURGICAL ANATOMY—Mr. Holthouse.

ANATOMICAL DEMONSTRATIONS—Mr. Burford Norman,

CHEMISTRY—Mr. Lewis, M.A.

MEDICINE—Dr. Hamilton Roe and Dr. Basham.

SURGERY—Mr. Phillips, F.R.S., and Mr. Holt.

MIDWIFERY and DISEASES of WOMEN—Dr. Frederic Bird.

MATERIA MEDICA—Dr. Basham.

FORENSIC MEDICINE—Dr. Fincham and Dr. Tanner.

BOTANY—Dr. Radcliffe.

DENTAL SURGERY—Mr. Clendon.

HOSPITAL PRACTICE, Daily, from Half-past Twelve to Two o'Clock.

CLINICAL LECTURES will be delivered regularly twice a-week, by the Physicians and Surgeons; those on Midwifery, by Dr. Merriman and Mr. Greenhalgh.

General Fee to the Lectures required by the College and Hall, Forty Guineas.

A Matriculation Scholarship will be instituted, the holder of which will be admitted, without fee, to the Lectures and Hospital Practice required by the College of Surgeons and the Society of Apothecaries. The Examination for this Scholarship will be held on Friday, October 3rd. A Scholarship, of the annual value of £20, tenable for three years, will be vacant in 1851, and will be awarded to the student who shall most distinguish himself in a general examination.

Further particulars may be obtained on application to the Lecturers, or to

F. J. WILSON,

Secretary to the Westminster Hospital.

York School of Medicine.

Winter Session will Commence on
TUESDAY, OCTOBER 1, 1851.

ANATOMY and PHYSIOLOGY—Mr. Ed. Allen.

PATHOLOGICAL ANATOMY—Dr. Shann.

PRACTICAL and DESCRIPTIVE ANATOMY—Mr. J. Milner.

SURGERY—Mr. Russell and Mr. Keyworth.

PRACTICE of MEDICINE—Dr. Laycock.

CHEMISTRY—Mr. Barker and Mr. Procter.

SUMMER SESSION will commence MAY 1, 1852.

MATERIA MEDICA—Mr. Williams.

MIDWIFERY—Mr. J. Allen and Mr. Anderson.

MEDICAL JURISPRUDENCE—Mr. Procter.

BOTANY—Mr. Moore.

The INTRODUCTORY ADDRESS will be delivered in the Theatre of the Hospital, by Mr. PROCTER, Oct. 1, 1851, at Two p.m.

Dr. Laycock will include Clinical Lectures in his Course, in connexion with the Practice of the York Dispensary.

Mr. Hey will deliver a regular course of CLINICAL LECTURES to the Pupils entering to the Medical and Surgical Practice of the York County Hospital.

An extensive Museum of Anatomy and Pathology is annexed to the School.

Further particulars may be obtained by applying to Mr. James Allen, Secretary to the York School of Medicine; or to any of the Lecturers.

Leeds School of Medicine.

TWENTY-FIRST SESSION, 1851-52.

PLAN OF LECTURES.

The Winter Session will Commence
on WEDNESDAY, OCTOBER 1st, 1851, when Dr. CHADWICK, President for the ensuing Year, will deliver the INTRODUCTORY LECTURE, at Twelve o'Clock.

ANATOMY, PHYSIOLOGY, and PATHOLOGY—Mr. Nunneley, Mr. Ikin, and Mr. S. Hey.

DESCRIPTIVE ANATOMY—Mr. Price, Mr. Wm. Nicholson Price, and Mr. C. G. Wheelhouse.

PRINCIPLES and PRACTICE of SURGERY—Mr. Hey and Mr. Garlick.

CHEMISTRY—Mr. Morley, Mr. Scattergood, and Mr. Edward Joy, jun.

PRINCIPLES and PRACTICE of PHYSIC—Dr. Chadwick and Dr. Heaton.

SUMMER SESSION, 1852, commencing MAY 1st.

MATERIA MEDICA and THERAPEUTICS—Dr. Clarke.

MIDWIFERY, and DISEASES of WOMEN and CHILDREN—Mr. Smith and Mr. Braithwaite.

FORENSIC MEDICINE—Dr. Pyemont Smith.

BOTANY—Dr. Heaton.

PRACTICAL CHEMISTRY—Mr. Scattergood.

OPERATIVE SURGERY.

Perpetual to all the Courses, £12.

*** Application for Tickets may be made to Mr. Garlick, 21, Park-row.

N.B. Attendance to the above Lectures will confer the same Qualification for Examination as is obtained in the Medical Schools of London.

CLINICAL LECTURES will be given at the General Infirmary on MEDICAL CASES, by Dr. Chadwick and Dr. Heaton.

On SURGICAL CASES, at the General Infirmary, by Mr. Smith, Mr. T. P. Teale, and Mr. Samuel Hey.

On OPHTHALMIC and AURAL PRACTICE, at the Eye and Ear Infirmary, by Mr. Nunneley.

MEDICAL LIBRARIES are connected both with the School and the Infirmary.

ORIGINAL LECTURES.

LECTURES

ON

DIGESTION, RESPIRATION, AND
SECRETION.GIVEN AT THE ROYAL INSTITUTION,
TO THE MEMBERS, AND TO THE PUPILS OF
ST. GEORGE'S HOSPITAL.By H. BENCE JONES, M.D., F.R.S.,
Physician to St. George's Hospital.

(Continued from page 222.)

ON RESPIRATION.—ON THE OXIDATION IN THE
BODY OF HYDROGEN, SULPHUR, PHOSPHORUS,
AND SALTS.

I HAVE already mentioned to you, gentlemen, that not only is carbonic acid formed in the body, but that water is also produced; and I have referred to M. Baral's experiments on this subject. (a) This diagram, taken from his paper, shows the quantity of water formed by the combined action of oxygen and hydrogen in twenty-four hours:—

Water going in Daily.

Existing in Food.	Disposed to form in Food from Hydrogen and Oxygen.	Formed by Combustion of Oxygen of the Air with Hydrogen of Food.	Total.
Lbs.	Lbs.	Lbs.	Lbs.
4.409	.. 0.615	.. 0.413	.. 5.437
4.064	.. 0.443	.. 0.289	.. 4.796

Water going out Daily.

In Urine.	In Excrements.	Total.	Hence perspired Water.
Lbs.	Lbs.	Lbs.	Lbs.
2.364	.. 0.234	.. 2.598	.. 2.839
2.158	.. 0.121	.. 2.279	.. 2.517

The total quantity of water which, ready formed or about to form, goes into the body, is 5.437 lbs.; and of this quantity, it may be said, on an average, that about one pound is produced in the body by the combination of the hydrogen of the food with the oxygen of the food and of inspiration. The oxygen goes in through the lungs and through the stomach, while the hydrogen enters through the stomach alone. Not only does oxygen combine with hydrogen and carbon, but it combines also with sulphur and phosphorus, and with the inorganic salts, if they be not already in the highest states of oxidation when they go into the body. The sulphur, the phosphorus, and the salts, are as much constituents of the body as the hydrogen or the carbon of which I have been speaking in my previous lectures. If oxygen is acting in the body, not only will water and carbonic acid be formed, but we shall have the products of the oxidation of the sulphur, the phosphorus, and the salts, if they can be oxidised; and it is my object in this lecture, especially to point out the evidence of these oxidations.

I have shown you that certain quantities of carbon and nitrogen are being removed from the body daily; and the same thing is perfectly true regarding the sulphur, the phosphorus, and the salts. Certain quantities are passing off daily, and the food contains a new supply of these substances, to make up for the quantity removed, just as we saw that it contained a supply of carbon and hydrogen to replace that consumed by the wasting and wearing of the tissues. Sulphur and phosphorus go into the body, as I have told you, combined with carbon, hydrogen, oxygen, and nitrogen, in albumen, for example. You will remember, that in albumen, fibrin, and casein, sulphur is always present, forming nearly 2 per cent. of their constituents. The sulphur does not go in as sulphuric acid, but as sulphur,—as an unoxidised substance,—in a state, therefore, which admits of oxidation, which oxidation actually takes place in the course of its use and passage through the human body. So also, if sulphur be taken as a medicine, an increase in the sulphates in the urine will be found to occur. If an excessive supply

of nitrogenous food, or of substances containing sulphur, phosphorus, or salts, be taken into the body, a portion of the excess will be thrown out directly by the urine without entering into the composition of the tissues. The total quantity of the sulphur and phosphorus met with in the urine does not, therefore, necessarily come from the tissues themselves. The total quantity found in the urine might come from the food, and not directly from the tissues. Thus it is necessary, if you wish to know how much sulphur and phosphorus actually passes out of the body from the tissues, to determine first the influence of the food, and then to determine the quantity that comes from the tissues, by deducting the amount of influence of the food, as far as possible, from the total quantity passing out of the body. We can easily make experiments to determine what the influence of the food actually is,—that is, whether, soon after a meal, the quantity of sulphur and phosphorus in the urine is increased or decreased. If it be distinctly increased after each meal, it is very clear, or at least it is in the highest degree probable, that the increase must come from the food, and not from the tissues. Thus we must separate between the two sources. Regarding the quantity of sulphur and phosphorus passing off from the body, it is necessary to determine the quantity that occurs in health, the quantity that is produced by taking food, and the quantity formed when no food is taken. I can collect the quantity of urine passing off in 24 hours, and can throw down the sulphuric acid present by chloride of barium, and determine its whole amount. This is by no means difficult in healthy persons; but it is difficult, in the case of disease, to collect all the urine secreted in exactly 24 hours. It is in cases of disease, such as those that occur in hospitals, that these experiments are most frequently made, and there only can they be made in sufficient number. In hospitals it is difficult to follow this investigation. In fact, the difficulty of collecting the whole quantity secreted in exactly 24 hours is so great, that it may be said to be almost impossible to be accurate. Thus I have been obliged to take a certain quantity of urine at a fixed hour, as near as possible, to determine its specific gravity, by which some comparison may be made as to the probable quantity of urine that is passed; for the higher the specific gravity, the less water probably will be secreted in 24 hours; and the lower the specific gravity, the more water will be made. By this means the results are not dependent on the accuracy of the patient who is the subject of the experiments. It was not until I found the practical difficulties of collecting the urine in diseases, that I determined, instead of taking the whole quantity in 24 hours, to take a certain quantity at a known period, and then to record the amount of sulphur and phosphorus which was present at that period.

In health, the urine passed soon after food, has the specific gravity of about 1033.9 to 1029.3. This is the case of a healthy man in full diet, and with full exercise. Such urine will, with chloride of barium, give a certain quantity of sulphate of baryta. If I take a 1000 gr. bottle, and fill it with urine, determining its specific gravity; and if I treat it with chloride of barium, sulphate of baryta will be precipitated. [Experiment.] And if I boil it with hydrochloric acid, to insure the solution of the phosphate of baryta, and then throw the precipitate on a filter and burn it, I can accurately determine the quantity and the weight of the sulphuric acid which existed in it. By this means I find, that in 1000 grs. of urine I generally get from 15.23 grs. of sulphate of baryta to 9.49 grs. per 1000 grs. of urine. That is my standard for health soon after food is taken. In the urine which is passed long after food, just previously to a meal being taken, when no food has for some time been in the stomach, and after free exercise has been taken, I find the specific gravity is from 1027.6 to 1025.3; and there is then not so much sulphate of baryta precipitated. It varied long after food from 8.56 grs. per 1000 to 7.07 per 1000 grs. urine; showing that the food distinctly produces an effect in increasing the amount of sulphuric acid in the urine; that it distinctly increases the quantity of sulphate of baryta which can be precipitated from the urine. Similar experiments can be made with regard to the phosphates. If I precipitate the urine simply by the addition of ammonia, I shall throw down only the earthy phosphates, that is, the phosphates of lime and magnesia, on which I shall dwell much more in detail in a future lecture on this subject. But if I add a little lime-salt to this urine, I decompose the alkaline phosphates, and, by converting them into earthy phosphates, cause them also to fall

(a) Annales de Chimie, Vol. C., p. 129.

as a precipitate when pure ammonia is added. I have here two portions of urine, both precipitated by ammonia; but to one of them a little muriate of lime has been added, and you see a very decided difference in the amount of the precipitates; one shows the earthy phosphates alone, and the other the earthy and the alkaline phosphates which have been converted into earthy phosphates by adding chloride of calcium. In the one case, I have only phosphate of lime and phosphate of magnesia; in the other, I have decomposed the phosphate of soda and precipitated the phosphoric acid, by means of its combination with lime. By throwing the two precipitates on filters, and burning them, I can arrive at the quantity of earthy phosphates, and also at the total quantity of earthy and alkaline phosphate in the urine.

By such experiments on the total quantity of phosphates precipitable from 1000 grs. of urine in health, I find that, soon after food, the phosphates vary from 6.42 grs. to 7.96 grs. per 1000 grs. urine, the sp. gr. being 1027.3 to 1025.5. Long after food, when the sp. gr. of the urine was 1022.8 to 1028.0, the phosphates are from 6.82 grs. per 1000 grs. to 8.85 grs. per 1000 grs. urine; indeed, it is doubtful whether they are increased at all, as you will see by referring to the diagram.

Alkaline and Earthy Phosphates in Urine.

Sp. gr.	Phosphate of Lime.
In health soon after food:	
1027.3 to 1025.5	6.42 grs. to 7.96 grs. per 1000 grs. urine.

Long after food:	
1022.8 to 1028.0	6.82 grs. to 8.85 grs. "

In inflammation of the brain:	
12th day .. 1029.7	13.15 grs. "
14th day .. 1033.0	12.11 "
16th day .. 1030.0	9.53 "
18th day .. died.	

Another case.	
13th day .. 1027.3	11.13 "
16th day .. 1027.0	11.04 "
16th night.. died.	

In violent delirium acute mania:	
1029.3	8.90 "

Convalescent:	
1020.0	3.11 "

Delirium with epilepsy:	
2nd day .. 1022.6	9.96 "
3rd morning 1024.8	14.75 "
3rd night .. 1023.7	14.38 "
4th night .. 1022.8	12.10 "
25th night .. died.	

I may mention, that these are averages of a multitude of experiments. Of course, knowing the quantity of sulphates and phosphates present, by an easy calculation you can arrive at the quantity of sulphuric and phosphoric acid in the urine.

Having thus got the quantity of the sulphuric and phosphoric acid in a state of health and at different periods, I can make experiments on the quantity which occurs in different diseases. If there be any diseases in which certain tissues of the body are undergoing more change than others, causing an excess of sulphates and phosphates to be thrown out of the body, I can determine the sulphates and phosphates present in the urine in those diseases, and thus arrive at the knowledge whether an excess of these salts in the urine is peculiar to those diseases. There is one tissue which especially contains phosphorus,—I mean the nervous tissue. We know that the nervous substance contains much phosphatic fat. Every particle of the brain, and every particle of every nerve contains phosphorus uncombined with oxygen. If in the brain an increased action is taking place—an increased destruction of substance—there will be an increased oxidation going on; and thus it is very clear, that the matter thus thrown off, if it passes out of the body, should be found in the state of phosphorus oxygenized, that is, of phosphate. Thus, phosphates should occur in the urine in considerable excess when there is a rapid change taking place in the brain. But the brain not only contains phosphorus in large quantities, but sulphur also, which is present in the albuminous substance of the brain; and the sulphur is nearly equal to the quantity of phosphorus present in the phosphatic fat; and if there is a rapid oxidation of this taking place, there ought to be found the products of the change in the urine. There is another tissue which contains

little phosphorus, but a large quantity of sulphur—and that is the muscular tissue. If the muscular tissue, then, is undergoing excessive change—if there is excessive action taking place in it, it is reasonable to expect, if oxidation takes place in the body, that we should find an excess of sulphates existing in consequence in the urine. Whether these theories be right or not, the results of my experiments are represented here.

Sulphates in Urine.

Sp. gr.	Sulphate of Baryta.
In health soon after food:	
1033.9 to 1025.3	15.23 grs. to 9.49 grs. per 1000 grs. urine.

Long after food:	
1027.6 to 1025.3	8.56 grs. to 7.07 grs. "

In chorea—girl, aged 22:	
3rd day .. 1036.0	19.88 grs. "
5th day .. 1033.8	15.86 "
6th day .. 1028.4	13.80 "
7th day .. 1026.8	9.36 "
8th day .. 1025.4	6.08 "
13th day .. 1016.4	4.72 "

Boy aged 8—chorea:	
6th day .. 1030.6	11.24 "
7th day .. 1031.8	10.66 "
8th day .. 1031.2	11.15 "
10th day .. 1028.4	7.39 "
11th day .. 1018.6	3.92 "
102nd day .. 1030.6	8.01 "

In delirium tremens:	
5th day .. 1037.8	20.77 "
5th night .. 1041.2	{ magn. } 37.07 "
	{ sulphs. }
6th day .. died.	

Another case:	
10th day .. 1024.7	17.31 "

Taking all kinds of diseases, such as they occur in the hospital, where the patients, for the most part, are allowed the same amount of exercise, or where they are almost entirely confined to bed and kept upon a diet of which we know the constituents, and thus we are therefore better able in the hospital than elsewhere to estimate and eliminate the effect of the diet and the exercise,—taking all kinds of disease, I find that, regarding the sulphates, there are two diseases in which there is an inordinate increase of these salts in the urine. These diseases are, first, acute chorea, in which there is an intensely rapid and most continuous action of the muscles; and, secondly, that restless disease which we know as delirium tremens. Cases of these diseases, extreme in intensity, have not yet occurred to me in sufficient number to establish the fact with that positiveness which can satisfy you or me; yet the experiments are sufficiently numerous to show the nature of the conclusions which must be drawn. In both these diseases, and in these alone, do I find the quantity of sulphates in the urine exceedingly increased; while, at the same time, the quantity of phosphates is not increased at all,—the total phosphates in some cases being even considerably lower than in a state of health. It is not in cases of slight chorea that this increase of the sulphates in the urine becomes apparent, but in cases in which the symptoms are most violent and uncontrollable, such as those which endanger life, and which sometimes occur, though but rarely, in our hospitals. In such cases I have never yet failed to find my conclusions established. For example, I found that in a little boy, eight years old, hardly more than one-third grown, and in whom I did not at all expect that the quantity of sulphates would approach to the quantity present in an adult; yet, in this boy, who was subject to most violent muscular action, and who from the spasmodic motions of his body could scarcely take a morsel of food into his mouth, but had to be fed almost by drops and crumbs, the urine, the specific gravity of which was 1030.6, contained an inordinate quantity of sulphates. There were 11 grs. of sulphate of baryta precipitated from every 1000 grs. of urine. As the disease began to abate, less and less of the sulphates were found to be present; and, ultimately, on the 102nd day, when he was on full diet, and was perfectly recovered, eating largely to make up for the exceeding loss he had sustained during his illness, the sulphate did not amount to the quantity present in the urine at the time when the disease was most

violent, and when he was taking scarcely any food at all, but taking most energetic exercise, if I may so express it. The phosphates throughout were not increased at all. Another case is mentioned in the Table, that of a girl, twenty-two years old, who also suffered from an acute attack of this disease. In this case, the sulphates, as you see by the Table, are much increased; higher, indeed, than in any case I have ever met with, except in one instance of delirium tremens, in which there were 37 grs. of sulphate of baryta precipitated from every 1000 grs. of urine. In this case of delirium tremens there was an additional increase of the sulphates in the urine, in consequence of the administration of sulphate of magnesia as a medicine. It is found by experiment, that when a salt containing sulphate ready formed is taken into the system, part of it at least passes off in the urine; this, no doubt, added somewhat to the very large amount of sulphates which I found in the urine. The patient, however, as is usual in such cases, was unable to eat anything, and was on the verge of death, for on the next night after the experiment was made he died. In cases of chorea and delirium tremens I find not only that the quantity of sulphates is increased; but also the quantity of urea is far beyond the amount present in healthy urine. I found, that in every drop of the urine passed by these patients, there was so large an excess of urea, that an immediate crystallisation would take place on the addition of nitric acid, from the formation of nitrate of urea. The same excess of urea which I have mentioned as occurring in these diseases is found also when persons are made to undergo violent exercise, — in the case of those who run for wagers, for instance; their urine, when examined afterwards, is found to contain a great excess of urea. The cases mentioned in my Table are only a few out of very many which I have recorded in the *Philosophical Transactions* for last year, in which I have given a full Table of all the cases I had then examined. From these, you will see that there is only one class of diseases in which the amount of sulphates alone is thus increased; that class is formed of those diseases in which the muscular tissue is continuously kept in most energetic action. It is only when the sulphur of the muscle is undergoing rapid change from oxidation that the sulphates are found in increased quantity in the urine. So also regarding the phosphates. I have said that there is no considerable amount of phosphorus in the muscular tissue, and that the phosphates are not, therefore, increased in those cases in which rapid change is taking place in the muscular tissue. But in the nervous tissue phosphorus exists in as large a quantity as sulphur; and, in cases of inflammation of the brain, excessive delirium, and acute mania, the phosphates, as well as the sulphates, are found in increased quantities in the urine. I have examined hundreds of cases of different kinds of disease, and I find that in no other instances, except those of intense inflammation of the brain, intense delirium, and the like, do the phosphates increase to the amount given in my Table on the phosphates in the urine.

The total amount of phosphates in the urine of a healthy person, on full diet and good exercise, is between 6 and 9 grs. per 1000 grs. of urine, but the Table shows, that the quantity is much greater in the diseases I have mentioned. In a severe case of inflammation of the brain (it is not impossible that even in slight cases, if the total quantity of urine secreted in twenty-four hours could be collected, an increase in the phosphates might be found), the amount was as high as 13·15 grs. in every 1000 grs. of urine, the specific gravity not being higher than in a state of health. In another case mentioned in the Table, the disease was at its height from the 13th to the 16th day; the specific gravity of the urine was about the same as in health, but the quantity of the phosphates was increased to 11 grs. in every 1000 grs. of urine. In a case of acute mania, where the specific gravity of the urine was 1029·3, the phosphates amounted to 8·90 grs. per 1000 grs. of urine; but, when the patient was convalescent, they were as low as 3·11 grs. per 1000 grs. of urine. In a case of delirium, with epilepsy, which I met with in St. George's Hospital, the phosphates were still more increased. In the *post-mortem* examination of this case, there was no positive evidence of inflammation of the brain, but I am not sure that it did not belong to that class of disease; as I cannot say that it was certainly a case of inflammation of the brain, I have named it delirium only. I come, then, to the conclusion, that the sulphates and phosphates in the urine are inordinately increased in cases where the tissues of the body, containing most sulphur and phos-

phorous, are undergoing most rapid and energetic action. These substances, having undergone combustion in the tissues, are thrown off by the urine, and, in passing out of the body, can be detected and weighed. As yet, there is no other method that I know of by which we can arrive at any knowledge regarding the oxidation of the sulphur and phosphorous of the tissues of the body. I am far from thinking, that the experiments which I have made on these subjects are sufficient for a perfectly safe generalisation. I am far from saying, that a sufficient number of cases of each kind of disease have been examined; the experiments cannot be too often repeated. Enough has been done to show most distinctly the vast differences in the amount of sulphates and phosphates in different kinds of diseases, and to indicate the nature of the conclusions at which we shall ultimately arrive. At any rate, as far as we have gone already, we have very strong reason for believing, that where the tissues, which contain sulphur and phosphorus, are undergoing change, there a process of oxidation is taking place. I have shown you distinctly and decidedly, that nitrogen, when it is in combination with hydrogen, can undergo oxidation in the body; and I consider that it is no less certain, that the same oxidizing process takes place in the sulphur and phosphorus of the organic matter of which we are composed.

I pass on now to the mineral matters which exist in the body. If I take two portions of any organised substance, and heat one in a covered crucible, — that is, without free access of oxygen, — till it is charred, whilst I oxidise the other to the fullest degree, and then treat both with water and dilute hydrochloric acid, I get totally different solutions in the two cases. From the charred substance I get much less saline matter dissolved out than from the fully oxidised portion; for, when the substance has been fully oxidised, almost all the alkalies, earths, metals, phosphorus, and sulphur, become soluble in water and acid. Professor H. Rose, of Berlin, the first analytical chemist of our time, has devoted much attention to this subject. He concludes that in animal and vegetable substances, those mineral matters only can be said to pre-exist which can be extracted from the charred substance by water and acid; and, on the contrary, those which can only be separated after perfect combustion (oxidation) belong to the original organic matter, as integral constituents in an unoxidized condition. Those alkalies, earths, metals, phosphorus, and sulphur, which are not soluble, must exist in the organised body in an unoxidized state, and in some peculiar combination. If they were oxidized, they must be dissolved by acid. An extensive investigation was then undertaken, to see whether any great difference could be traced in the quantity of oxidized and unoxidized mineral matters in various animal and vegetable substances. A translation of his papers is given in the *Philosophical Magazine* for July, 1849. I have represented his results sufficiently for my purpose in this Table: —

Oxidation of 100 Parts of the Inorganic Constituents.

	Soluble in Water.	In Acid.	Not Soluble until after Complete Combustion,
	A.	B.	C.
Ox-blood	60·90	6·04	33·06 (A. 30·4 salt.)
Horse-flesh	42·81	17·48	37·71
Cow's-milk	34·17	31·75	34·08
Yolk of eggs . . .	40·95	8·05	51·00
White of eggs . . .	82·19	15·52	2·29
Ox-bile	99·85	4·93	4·22
Urine	90·87	8·54	0·59 (C. silica.)
Solid excrements	18·55	62·30	19·15 (C. 18·1 silica.)

If I take milk, for instance, and char it, without the free admission of oxygen, 34·17 grs. in every 100 grs. of ash will be soluble in water, and 31·75 grs. will be soluble in dilute hydrochloric acid; 34·08 parts will remain insoluble in these re-agents; but, if I oxidize the substance to the greatest degree, if I burn the milk with the freest access of oxygen, the whole of the ash will be soluble in water and hydrochloric acid. Professor Rose finds that the quantity of matter which is soluble in acid and water, after any animal substance has been charred, varies in different substances. In the charred ash of urine, no less than 99½ parts in every 100 are soluble in hydrochloric acid and water. In the charred ash of the yolk of eggs the same re-agents dissolve only 49 per cent. of the ash. What is the reason, he asks, why these substances were not soluble when they were

charred, whilst, when burnt with free access of air, the whole of the ash became soluble in hydrochloric acid? Clearly because the constituents of the ash exist in a different state when charred from that in which they exist when fully oxidized. He finds, then, that in different substances there are different proportions of oxidized and unoxidized ash. If the constituents of the ash are all soluble in water and hydrochloric acid, when only charred, he calls the substances which furnish such an ash, teleoxidic bodies. If the constituents of the ash, after charring, are not all soluble in water and hydrochloric acid, as in the case of milk, the ash of which is partly oxidized to the greatest degree, and partly unoxidized to the greatest degree, he calls substances which have an ash-like milk, meroxidic bodies. Substances which, when charred, yielded nothing to water and hydrochloric acid, (such substances, however, he has not yet met with,) he would call anoxidic bodies. The vegetable creation, you will remember, in my first lecture, was stated to live by giving off oxygen, under the influence of light; Professor Rose, therefore, conjectured, that the ash in all vegetables would be in a state of imperfect oxidation,—that is, in a meroxidic state; possibly also some vegetable substances may be in an anoxidic state. He has found, by experiment, that no vegetable ever contains its mineral constituents in a teleoxidic state. In animal life, the action of oxygen never ceases. The substances which are first formed in the animal body from the nutritive vegetable substances should contain some meroxidic substances; that is, the mineral constituents of the chyle and of the blood, previous to complete combustion, should only be partially soluble in water and acids. Flesh being formed from the blood, should contain more oxidized inorganic salts, and less deoxidized salts, than the blood; whilst the excretions, having been fully exposed to the action of the inspired oxygen, should give perfectly oxidized inorganic constituents. Thus, he finds, in substances like the urine and the bile, that the mineral constituents exist in a state oxidized to the greatest degree,—the ash being, when these substances are charred, almost entirely soluble in water and dilute hydrochloric acid; that is, neither the ash of the urine nor of the bile requires to be further oxidized out of the body to be made perfectly soluble. In the body the constituents of the ash have already undergone the greatest oxidation by the action of the oxygen which has been inspired. These are most interesting analyses, which we owe to this great analytical chemist; they tend still further to show that a process of oxidation is going on in the human body. Thus, in animals who take in oxygen, the food (as wheat, for example) is meroxidic going into the body, whilst the excretions (urine, for example) are teleoxidic coming out of the body. Whilst in vegetables that give off oxygen, their food (manure), as bones, urine, guano, is teleoxidic going in; their full development as grain gives meroxidic or anoxidic substances.

These experiments are a further confirmation of the action of oxygen in the body. Not only does the oxygen act on hydrogen and carbon, but on sulphur, and phosphorus, and even the mineral matters themselves.

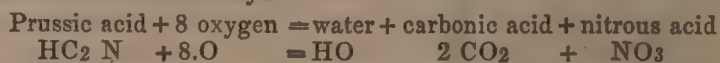
No sooner was oxygen discovered, than the attempt was made to apply it as a medicine. The Pneumatic Institution, as it was called, was founded by Dr. Beddoes, for the purpose of using oxygen as a remedial agent for all kinds of disease; but, though it was supported by the energy and truthfulness of Dr. Beddoes, and by the sense and skill of James Watt, the great engineer, who applied himself with the greatest zeal to the carrying out of the mechanical processes for administering the oxygen to the patients; and though it called forth the talent of that great chemist to whom we are so largely indebted—Sir Humphrey Davy—yet it utterly failed in accomplishing the object for which it was established. No satisfactory conclusions were arrived at; no power was obtained of using the oxygen as a remedy; and the undertaking came to naught, not because the oxygen was impotent, (for it is the most powerful agent in nature,) but because the means of applying it advantageously were unknown; and they remain equally unknown now. By the inhalation of oxygen, it is beyond our power as yet to interfere in the chemical processes which are taking place in the body; we know no more now respecting the means of applying it as a remedy than was known in the time of Dr. Beddoes and Sir Humphrey Davy. It is only by carefully determining how far the means which promote oxidation out of the body affect the oxidising processes in the body, that we can arrive at any certain knowledge as to the re-

medial use of this most potent agent. At present, all direct attempts to employ it as a remedy must be described as having altogether failed.

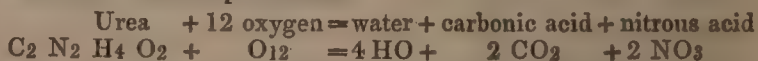
I shall, in concluding this lecture, endeavour to point out the object which is obtained in the body by this action of oxygen—by the process, in fact, of respiration. The first great object of the action of the oxygen is, without doubt, the removal of injurious substances; and the second, which is closely related to this, is the production of animal heat, whereby chemical changes are promoted; the nervous and muscular forces are enabled to act more readily; and nutrition is more perfectly performed.

The injurious substances which have to be removed, or must be counteracted in the body, are the products of the changes in the old tissues of the body, or they are poisonous substances taken by accident or as medicines. It is the property of the inspired oxygen to act upon these in such a manner as either to render them harmless, or to promote their removal from the body. Let me suppose that a dose of prussic acid is taken as a medicine, and not in sufficient quantity, therefore, to cause death; ultimately, what becomes of it?

See in this diagram what happens when prussic acid is burnt out of the body.



It can be oxidised, and be converted thereby into the comparatively harmless bodies—water, carbonic acid, and nitrous acid. Precisely the same change occurs when prussic acid is taken into the body, there also it is oxidised and destroyed. Or let me suppose, that a substance arising from the changing tissues is taken into the body. Let me take urea as an example. If I dissolve it in a little alcohol, and burn it, the urea will be oxidised, and I shall have water, carbonic acid, and nitrous acid produced.



By the simplest experiment, I can show you the nitrous acid. This glass jar, the sides of which are moistened with starch, iodide of potassium, and dilute hydrochloric acid, is held over this alcoholic solution of urea which is burning in a watch-glass, and in a few moments the well-known re-action, as you see, appears. If the urea is taken into the body, and I have taken it in large doses, the same oxidising action occurs,—the nitrous acid can be detected in the urine. The inspired oxygen acts on the urea, and it is decomposed.

The action of oxygen in the human body is not at all times and in all states uniform. This may be concluded from experiments on the variations in the temperature of the human body. Some accurate results from experiments on himself have been given us by Dr. Davy in a paper in the *Philosophical Transactions* for 1845, p. 325.

Variations of Animal Heat.

	Pulse.	Internal Temperature	External.
8 a.m.	.. 58	98° 7'	54° 6'
12 night	.. 55	97° 9'	62° 4'
Walking	.. 84	highest 99° 5'	
Riding	.. 52	97° 7'	

Mental excitement raised the temperature; a full meal depressed it.

At 8 a.m. he found the pulse 58; the internal temperature of the body, 98° 7'; and the external temperature, that is, the temperature of the room, 54° 6'. At 12 at night he found the pulse slower; this has also been observed by others to be the rule; and the internal temperature was lower, though the external temperature was higher. By active exercise the pulse rose to 84; and the highest internal temperature which he then gives (showing the more rapid oxidation produced by exercise) is 99° 5'. In passive exercise, when he was drawn through the air in a carriage, whereby a considerable loss of heat occurred, the pulse and the temperature both fell.

The following equation, which we owe to M. Baral, though in great measure conjectural as to the amounts stated, yet well shows the different ways in which the animal heat is consumed. He supposes the heat produced in the body by the action of oxygen to be represented by 100. How, then, is that heat lost? By evaporation of water and by the breath, 24° 1'; by expired air, the heated carbonic acid passing off 7° 3'; by heating food, that is, by raising

cold food to the temperature of the body, 2·2, (and you remember that a full meal depresses the temperature of the body;) by evacuations, 1·8; by radiation and contact, that loss which we endeavour to prevent by clothing ourselves warmly, 64·6.

Comparison of Heat Gained and Lost.

Heat produced by Oxygen, 100	Heat Lost				
	By evaporation of Water, 24·1	By expired Air, 7·3	By heating Food, 2·2	By evacuations, Urine, &c., 1·8	By radiation & contact, 64·6

Here, then, I must conclude these lectures on respiration. I shall in my next lecture commence the subject of excretion, and I shall take first the different kinds of calculi, because I shall by that means be able to show you many totally different substances, and I shall fix their names most permanently in your minds.

ORIGINAL COMMUNICATIONS.

ON THE PATHOLOGY OF THE UTERUS
ITS ANATOMY AND PHYSIOLOGY.

By T. SNOW BECK, M.D. Lond., F.R.S.,

Fellow of the Royal College of Surgeons of England.

Physician to the Farringdon General Dispensary and Lying-in Charity.

[Continued from page 252.]

ON THE EXISTENCE OF ULCERATION OF THE
UTERUS AS A COMMON DISEASE.—(Continued.)

As the term ulceration will frequently occur in the subsequent examination of the subject, it may be convenient to inquire in what sense this word is employed. When discussing the subject, Dr. Bennet quotes the definitions of Samuel Cooper, Petit, and Boyer, the latter of whom "states, that 'an ulceration is a solution of continuity of the soft parts, more or less ancient, accompanied by a purulent secretion, and kept up by some local or internal cause.'"—*The Lancet*, May 18, 1850. In his work, "On Inflammation of the Uterus," Dr. Bennet gives the following description under the head of "Inflammatory Ulceration":—

"When an abrasion or excoriation only is present, the cervix is generally of a livid red, and the granulations are often so minute, that it is at first difficult to ascertain whether the mucous membrane is abraded or merely congested, or to perceive the limit of the ulceration when once it has been ascertained to exist. The doubt, however, may be solved by lightly touching the suspected surface with the nitrate of silver. The abrasion immediately assumes a much whiter hue than the region which is merely congested, and its margin becomes well defined and evident. An abraded or excoriated condition of the mucous surface is generally the form under which ulceration presents itself in the cavity of the cervix. In virgins, also, ulceration often presents this character."—P. 102.

He subsequently states, "that instead of describing abrasions, excoriations, and luxuriant ulcerations as distinct morbid conditions, (which they are not), I have embodied them all in the general term ulceration, adding, by way of explanation, 'that ulceration occupying the cervix uteri may present all the various modifications which suppurating surfaces offer in any other parts of the body, from the minute granulations of a slight abrasion, to the livid vegetations of an unhealthy sore.'" He considers himself "warranted in applying the term ulceration, even to a mere abrasion, the result, not of mere physical violence, but of inflammation and of morbid vital action inasmuch as the definitions of the authors already quoted apply quite as truly to a mere abrasion or excoriation, secreting pus or sanies, as to the chronic excoriated cutaneous ulcer."—*The Lancet*, May 18, 1850. He further explains: the cases in "the appendix of his work certainly contain a very few cases in which the granulations of the pus-secreting surface were so small as to merit the appellation of excoriation, were it once understood that by excoriation is meant, not the result of an accidental physical lesion, its ordinary significance, but of chronic inflammatory action. These cases are designated in the tables as slight ulcerations. I must, how-

ever, repeat, that I object to the term abrasion or excoriation, as applied to the former conditions, because the words merely imply a temporary lesion, the result of some physical cause, whereas, in the cervix uteri they are nearly always the result of confirmed and chronic inflammation."—*The Lancet*, June 8, 1850.

These explanations ought to have been given in the work referred to, for, when an author uses a term in common use, in a manner very different to its ordinary signification, it appears imperative for him to state the sense in which he employs it. However, the question now is, "Are these lesions to be considered forms of ulceration, or are they not?" Dr. Bennet considers they are forms of ulceration,— "I have no hesitation in saying, that these lesions are either *bonâ fide* ulcerations, or that all I have written on the subject is false, and only fit to be thrown into the fire,"—and believes himself warranted in coming to this conclusion, because the definitions of classical authors "apply quite as freely to a mere abrasion or excoriation, secreting pus or sanies, as to the chronic excavated cutaneous ulcer." To this conclusion, however, I must demur. In the definition quoted, an ulceration is said to be "a solution of continuity of the soft parts," whilst, in an abrasion or excoriation, this fundamental character is wanting; there is no solution of continuity, properly so called. The separation of a few epithelial scales from the surface of an inflamed mucous membrane, does not constitute a solution in the continuity of this membrane; and, however strong the endeavour may be to stretch the definition quoted, in order to make it apply to an abrasion or excoriation, it will remain evident to all unprejudiced minds, that it does not include this latter lesion. This extended use of the term "ulceration," is, moreover, not warranted by the pathology of the lesions.

When speaking of the pathology, Dr. Bennet says: "Instead of describing abrasions, excoriations, and luxuriant ulcerations as distinct morbid conditions, (which they are not), I have embodied them all in the general term ulceration." In thus expressing himself, he appears to be unaware that the morbid process by which a portion of epithelium is separated from an inflamed mucous membrane, and an abrasion produced, is essentially different from that which causes a solution of continuity of the same part, or an ulceration. In the former, the epithelium is first raised by the effusion of a portion of serum beneath it, and afterwards separated; whilst in the latter, it is a process of molecular gangrene, which induces a destruction of part of the membrane. To include these two distinct processes under one denomination, appears irrational; and, certainly, such a method of procedure is contrary to every principle of pathology, as at present established. To carry out this principle, simple catarrhal inflammation must be considered the same morbid process as gangrene; which cannot be admitted. Moreover, the pathological condition of the organ which is present, and induces abrasion or excoriation, is essentially different from that which exists when ulceration is produced. Abrasion or excoriation usually accompanies inflammation of an active character, and requires to be treated by antiphlogistic means, in order to cure it; or it may form part of the morbid changes produced by a blood-disease, as in some of the exanthemata, and passes away when this constitutional condition is removed. It is far otherwise, however, with ulceration, which, when present, indicates a serious alteration in the circulation and nutrition of the part. It may be that the veins are enlarged and obstructed, that stagnation of the blood occurs, and ulceration is finally induced by molecular gangrene, similar, in point of fact, to that which occurs in the leg from varicose veins; or, it may be the result of frequent attacks of inflammation occurring in an organ, which remains enlarged, and consequent profound modification of the nutrition of the part. But, whatever way it is caused, the treatment is essentially different from that of the former lesion; for here, antiphlogistic measures are of little or no avail, whilst the local application of stimulants, and of escharotics, as adjunct to the general treatment, are the means of cure. Thus, whether the question be regarded in relation to the pathological process going on in the part, or, with regard to the pathological condition of the organ which accompanies these processes, or, in regard to the absolute alteration induced in the part, we arrive at the same conclusion, that abrasions or excoriations are not forms of ulceration, and ought not to be classed with it under the same denomination. If this be true pathologically, it is equally true practically, seeing that

the treatment which these lesions require are essentially different, and that whilst abrasion or excoriation may occur at any period of life, ulcerations, as will be hereafter shown, are only met with after child-bearing. Of course syphilitic, tuberculous, and other specific ulcerations are not included in this statement.

Before quitting the subject, I would advert to a distinction drawn by Dr. Bennet, wherein he says that the words "abrasion or excoriation" "merely imply a temporary lesion, the result of some physical cause," whereas the term "ulceration" is applied to the same lesion, when "the result of confirmed and chronic inflammation." I know of no circumstances which would warrant this distinction, and the statement, that by the ordinary signification of "excoriation" is meant an accidental physical lesion, is, assuredly, contrary to fact.

Intimately connected with the present subject is the importance which Dr. Bennet attributes to the presence of ulceration, and the morbid changes which he considers are induced by it. He says: "It has been asserted by several French writers, that the inflammatory hypertrophy of the cervix, so frequently observed in women who have had children, and who are suffering from inflammation of the cervix, is the principal cause of the ulcerations which nearly invariably accompany it; or, in other words, *that the ulceration is generally a secondary affection. This assertion, however, is evidently an error.* I have very often been able to follow the extension of the inflammation accompanying ulcerative disease to the deeper seated tissues, and to watch the gradual manifestation, under its influence, of deep-seated induration. Thus, I have frequently seen cases in which a slight ulceration was at first the only lesion, and in which the general induration which subsequently made its appearance, gradually became more and more marked as the ulceration increased in extent. I am also continually meeting with ulceration confined to one lip, accompanied by induration and hypertrophy of that lip only. Indeed, there is generally, in recent cases, a very evident conformity between the degree of the general induration and the extent and duration of the ulceration."

When an author states, that it is evidently an error to assert that ulceration is caused by the inflammatory hypertrophy; that he has frequently seen cases in which a slight ulceration was at first the only lesion; and that he has very often followed the extension of the inflammation accompanying ulceration, to the deeper seated tissues, and watched the gradual manifestation of deep-seated induration, under its influence; that it is an error to consider ulceration a secondary affection,—we can only conclude that ulceration is considered as a primary phenomenon, and as the cause of the subsequent hypertrophy and induration. If this opinion depended upon an isolated passage, it might be supposed an error which had occurred in the hurry of composition. But when the same principle is repeated, "If chronic metritis is occasioned or kept up by ulceration,"—p. 474, and ulceration spoken of as a "thorn in the flesh," inducing other morbid changes, and, moreover, when the whole context of the work bears the impress of these doctrines, the only conclusion that can be drawn is, that it is the deliberate opinion of the author. Fortunately, it does not require any laboured refutation; the statements are too opposed to all known principles of pathology to receive any credence. Yet I would, for a moment, compare these statements with the definition of ulceration adopted, in the former part from Boyer, "a solution of continuity of the soft parts, more or less ancient, accompanied by a purulent discharge, and *kept up by some local or internal cause.*" Surely this does not agree with the principle which says, that ulceration is a primary disease *which produces and keeps up* inflammation, inflammatory hypertrophy, and induration.

Now, although it is evident that the antients were unacquainted with the diseases of the uterus as we now understand the word; that the "novel and important facts" in the anatomy are only serious anatomical errors, and that including the terms "abrasion" or "excoriation," and "ulceration," under the one denomination of "ulceration," is improper, whether considered pathologically, or practically; still it may be argued that ulceration may exist in practice, and require the treatment recommended; and hence it becomes necessary to consider it in this light.

9A, Langham-place.

[To be continued.]

THE MARCH OF DEATH IN ST. GILES'S.

BY DR. KING, M.D.

Medical Superintendent of Bilston and Darlaston, in Staffordshire, in 1832, and
Superintending Medical Inspector of Lambeth, Newington,
Camberwell, St. Giles', St. Martin's, and the
Strand and Holborn Unions in 1849.

[Continued from page 150.]

SCARLET FEVER.

THE geographical distribution of Death in scarlet fever is as follows:—

No. 1.

Street.	No. of House.	Deaths.	Houses.
Alfred mews...	12 ²	2	1
Alfred street...	33	1	1
Barley court...	1	1	1
Bedford place...	37	1	1
Bloomsbury market...	6	1	1
Bloomsbury street...	24, 17 ² , 16, 3	4	4
Bloomsbury square...	38	1	1
Bowl yard...	5, 3	2	2
Brewer street...	3	1	1
Broad street...	54, 47, 41, 14, 12	5	5
Brownlow street...	32, 22, 19, 17, 6, 5	6	6
Brunswick mews...	17, 13	2	2
Bury street...	15, 2	2	2
Carrier street...	11	1	1
Caroline mews...	48	2	1
Caroline street...	8	1	1
Chapel place...	6	1	1
Charles street...	37, 32	2	2
Charlotte street...	14, 1	2	2
Church lane...	3	1	1
Chenies street...	43, 3	2	2
Clark's buildings...	9 ² , 7 ² , 5 ²	7	8
Coal yard...	11, 2, 3 ²	4	3
Colonnade...	30, 25, 6	3	3
Coram street...	7 ²	1	1
Cottage place...	8 ²	2	1
Cross lane...	11	1	1
Crown place...	2 ²	1	1
Denmark street...	28, 17 ² , 7	6	3
Dudley court...	41, 13, 12, 11	4	4
Dudley street...	{ 88, 84 ² , 74 ² , 72, 67, 66, 65, 64, 62, 61, } 49, 44 ² , 41, 38, 34 ² , 32, 26, 24, 22, } 21, 18, 6	26	22
Everett street...	25	1	1
Gate street...	11	1	5
Gilbert street...	15, 14 ² , 10, 9, 6	6	5
Gower street...	76	1	1
Green Dragon yard...	7	1	1
Great Coram street...	24	1	1
Great Earl street...	21 ² , 17 ² , 10	3	3
Great Queen street...	79 ² , 66, 49, 41, 30, 2	7	11
Great Russell street...	117, 8, 6	3	3
Gt. St. Andrew street...	{ 45, 44, 42, 38 ² , 37 ² , 35 ² , 30, 28, 27, } 25, 24 ² , 20, 19	19	13
Gt. White Lion street...	16, 6 ² , 4	4	1
Great Wild street...	52 ² , 51, 43 ² , 37 ² , 36, 18, 15 ² , 13, 6	13	9
Hart street...	24	1	1
Henrietta street...	15, 12	1	2
High street...	59, 49 ² , 27, 26, 19, 14	7	6
Hyde street...	29, 20 ² , 15 ² , 5	6	4
Hunter street...	50 ²	1	1
Kendrick-place...	2 ²	2	1
Kennedy court...	1	1	1
Kenton street...	36 ² , 35	3	2
Keppel street...	34, 14 ²	3	2
Keppel mews...	42	1	1
King st., Drury lane...	37, 29 ² , 6	4	3
King st., Seven Dials...	49 ² , 39, 34, 33, 19 ² , 18, 17, 7	11	8
King st., Long acre...	14	1	1
Lascelles place...	11 ²	3	1
Lawrence street...	6	1	1
Lincoln court...	6	1	1
Lincoln's inn Fields...	55 ² , 22, 14, C. of S.	5	4
Lloyd's court...	4, 2 ²	6	1
Little Coram st.	30, 7, 6	3	1
Little Denmark street...	7	1	1
Little Earl street.....	31, 19 ² , 17 ² , 16, 9	7	5
Little Guildford st....	32	1	1
Little Queen st.	25 ² , 24, 20, 17, 2 ²	11	5
Little Russell st.	34 ² , 22, 27, 14, 12 ² , 6, 2 ²	11	6
Little St. Andrew st.	22 ² , 18, 4, 2	5	4
Little Torrington st.	4	1	1
Little White Lion st.	2	1	1
Little Wild st.	22 ² , 19, 10, 9, 13	6	5
Lumbar court...	10, 2	2	1
Marchmont place...	19, 8, 7 ²	4	3
Market street...	1	1	1
Montague mews...	30, 12, 4	3	3
Montague place...	20, 4	1	2
Museum street...	41, 30, 8	3	3
Neal's yard...	4	1	1

Street.	No. of House.	Deaths.	Houses.
New Turnstile ...	6	1	1
New Compton street	{ 72, 69, 67 ^a , 66, 64, 58, 49, 46, 47 ^a , 33, } 27, 26 ^a , 25 ^a , 22, 17, 12, 11 ^a , 3 }	25	18
Nottingham court ...	17, 15 ^a , 10, 11, 2	8	5
Parker street ...	41, 34, 25, 16, 8	5	5
Phoenix street ...	17, 7	2	2
Pitt place ...	2	1	1
Princes street ...	25, 23, 19, 17 ^a , 10, 9, 3	10	7
Queen court ...	7	1	1
Queen place ...	7	1	1
Queen street...	8, 4, 3	3	3
Red Lion yard ...	0	1	1
Regent place ...	7	1	1
Russell mews ...	52	1	1
Russell place ...	12	1	1
Russell square ...	41	1	1
Short's gardens ...	23, 15, 14, 5	4	4
Silver street ...	2	1	1
Smart's buildings ...	6, 5, 4 ^a	4	3
Southampton row ...	53, 53, 2	3	3
South crescent ...	6	1	1
Stacy street ...	17 ^a , 8, 6 ^a , 2	9	4
Star court ...	1	1	1
Store street ...	28, 2	2	2
Tavistock mews ...	5	1	1
Thorney street ...	1	1	1
Titchbourn court ...	6, 2 ^a	2	2
Torrington mews E.	11 ^a	3	1
Torrington mews W.	12	1	1
Torrington square ...	61, 31	2	2
Tower street...	30, 28 ^a , 24, 22, 7, 4 ^a , 3, 1	12	8
Upper Bedford place	30	1	1
Upper King st. ...	11	1	1
Up. Montague mews	1	1	1
Whetstone park ...	38, 27, 19	8	8
White Lion court ...	4	1	2
Wild court ...	13, 12 ^a	3	1
Wilnot street ...	25, 21, 9	3	3
114		402	314

Of 4959 houses, (Census 1841), 314 furnished one or more cases of scarlet fever in the following proportions:—

No. 2.			
249 Houses	1 case	...	249
49 "	2 "	...	98
10 "	3 "	...	80
5 "	4 "	...	20
1 "	5 "	...	5
314			365

The 402 deaths were thus distributed in the four quarters of each year :—

No. 3.					
Year.	March.	June.	Sept.	Dec.	Total.
1838	5	2	...	8	15
1839	11	22	30	18	81
1840	8	9	18	17	47
1841	1	...	8	...	9
1842	1	1	6	15	29
1843	9	4	4	7	24
1844	12	5	8	9	34
1845	1	1	1	6	12
1846	1	1	1	8	14
1847	4	1	7	14	26
1848	10	15	16	31	72
1849	16	11	6	5	38
<hr/> 12	<hr/> 86	<hr/> 74	<hr/> 109	<hr/> 133	<hr/> 402

I fully expect to establish that several diseases, more particularly the fevers, follow cycles; if so, the epidemic cycle of scarlet fever is nine years, the years before and after the epidemic cycles of 1839 and 1848 showing alternately a laxity and an intensity of epidemic force.

The march of death in scarlet fever, showing the epidemic force of each year, from 1838 to 1849, inclusive, and the local intensity attached to it through the subsequent years, is recorded in Tables 4-15.

[illegible]

No. 5.																								
						6	30																	
						8, 117	41	35	23	16														
																					</			

No. 6.

[illegible]

No. 7.

	Keppel-street.					14 ^a
1841	1842	1843	1844	1845	1846	1847

No. 8.

[illegible]

No. 9.

Alfred-mews.	12 ^a	76	24	2	1849	2 ^a , 24		
Gower-street.				...	1848	...		
				...	1847	...	4½	
Hart-street.				...	1846	...	...
				...	1845	17, 20	...	
Bury-street.				...	1844	...	...
				15	1843	25 ^a	3	2, 10
								6
YEARS.								
Little Queen-street.								
Chenies-street.								
Lumbar-court.								
South Crescent.								

No. 10.

[illegible]

No. 11.

Tavistock- mews.	YEARS.	Torrington- square.
5	1848	81
	1847	...
	1846	...
	1845	61

No. 12.

Crown- place.	Lloyd's-ct.	YEARS.	Hampshire Hog-yard.	Queen- place.
2 ^a	2 ^a , 4	1848	■	7
	...	1847		
	■	1846		

No. 13.

Upper Montague- news.	1	4, 12, 30	1849	80		
Montague-news.			1848	25		
			1847	■	42	4
Colonnade.						
Keppel-news, North.						
Little Torrington- news.						

No. 14.

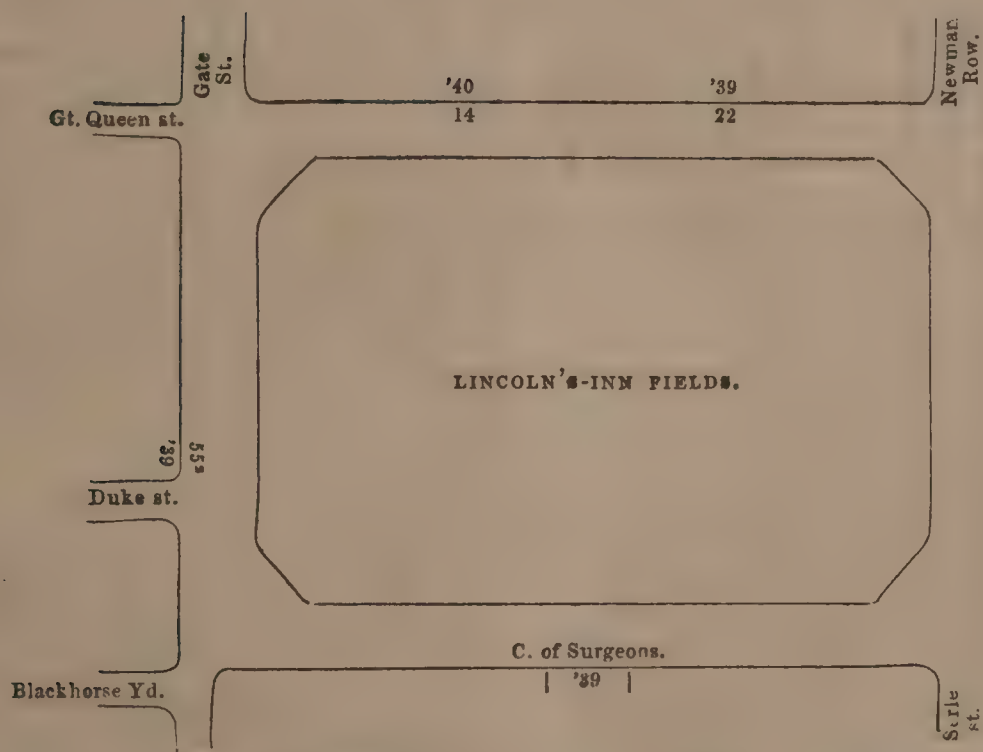
[illegible]

No. 15.

16	11	4	33	1849	11	3	5
Lincoln-court.	Russell-place.	White Lion court.	Alfred-street.	YEAR.	Carrier-street.	Church-lane.	Kennedy-court.

This series of Tables proves that scarlet fever harps back upon its locality year after year, as strictly as cholera. (a) After a long absence, it attacks again the same house, as at 74 and 84, Dudley-street, or the next house, or the opposite house, or within a house or two of one or the other. Further: I am prepared to prove that old age, cholera, and scarlet fever are antagonist to each other in regard to locality; each form of death having, not only a separate locality in the same street, but a separate locality altogether. For instance, New Compton-street is rich in scarlet fever, and Church-lane, New-street, and Lascelles-court rich in cholera; yet New Compton-street has never had cholera, and the other streets have never had scarlet fever. Table 15 records one death of scarlet fever, in Church-lane, in 1849, when the cholera was raging, but that does not alter the case.

(a) See *Medical Times*, 10th. August, 1850.



The illustrations, Lincoln's Inn Fields and Dudley-street, demonstrate that scarlet fever falls in isolated groups, and thus follows the law of cholera.(a) This fact, together with the strict adherence of scarlet fever to

its own locality—a locality totally different from that of cholera—seems to strengthen the gaseous, and to weaken, if not to destroy the contagious theory of both these forms of death.

THE PSEUDO-SCIENCES.

By JAMES J. ROBERTSON, Esq., Surgeon.

(Continued from page 227.)

WE may leave Hahnemann a moment, however, while we advert to an instance to which the homœopath and isopath

(a) See *Medical Times*, 24th August 1850.

seem to have about equal claim. Suppose that some delicate, azure-eyed creature, some *θεῖα γλαυκῶπις*, should complain that habitual coldness of the feet had become to her, even in the height of summer, a continual source of discomfort. Suppose also, that some one, with a view to remedy this evil—adopting for the moment the homœopath's notion—should persuade the sufferer, and some eloquence would

probably be necessary to persuade her—to immerse the two offenders,—

Thetidi, quales vix rear esse, pedes,—

in a pail of snow, enveloping the whole in her thickest cashmere, to concentrate the cold,—what, on the principle of the homœopath, should the result be? We leave the homœopath to settle the question as he pleases. They who do not shut one eye that the other may have a distant glimmering of light, know well the grave consequences that have followed minor transgressions of this kind; and should the homœopath plead, that in this instance, the dose is not infinitesimal, must we remind him, that that has nothing whatever to do with his alleged principle of like curing like.

As in difficult and abstruse questions the most satisfactory method is to proceed from things that are familiar and well known to others that are less so, *et proxima quæque victoria instrumentum sequentis esset*, so shall we do in this inquiry; and, in order to illustrate plainly the infinitesimal efficacy of homœopathic specifics, we shall first of all advert to an ailment with which every one is familiar—to toothach, for which—as well as for every phase of disease, the homœopath says there is a specific remedy. We need not allude to the causes of toothach: everybody knows they are numerous; so consequently should be the specific remedies. And so they are—in manuals and repertories. And, so far, Hahnemann and his disciples may be rigid homœopaths; and, thus far too, consistent. But, in practice, such a thing as a homœopathic remedy—a specific remedy—and in homœopathy all remedies are declared to be specific—is unknown; and we have, again and again, seen the baffled homœopath snatch, in despair, the tooth-key, or forceps, and, with his own allopathic hands—*novus homo, eoque ferocior*—apply the old iron-hearted remedy, much in the same manner, we believe, that gentlemen in St. Martin's-lane do; though, it may plainly be supposed, with a very different sort of consciousness.

How is this? Can it be that in toothache there is no room for deception; and that the excellent advice of Baglivi, regarding the uses of eloquence in the practice of medicine, becomes, in the hands of the homœopath, a dead letter when but opposed to the contemptible aching of a decaying tooth? Or are the specifics for toothach among those remedies that require "sixty days" for their operation,—sixty days to produce their effect, during which time the patient is to be subjected to a regimen as strict as was ever put in force by any of that famous sect who professed to cure all diseases by diet alone?

Portal(a) says, that *opium*, rubbed for some time over the salivary glands, diminishes the secretion of saliva. The application of opium to plants is followed by analogous effects—it diminishes or destroys their irritability. When opium is taken into the stomach, similar effects are produced on the parts with which it more immediately comes into contact. Hence its use is followed by diminution of the intestinal secretion, as well as by diminution of the peristaltic motion; and one of the almost invariable results of this is constipation. When such a state as we describe—such a topical condition as is producible by the internal use of opium—takes place, but not actually produced by opium itself, then does opium become the veritable homœopathic remedy, be the dose what it may,—a few grains or the decillionth part of a drop of the tincture. Can the homœopath, then, in such a case, or in any similar case, be at a loss for a "drug" to obviate the state we mention? No, certainly, not for a moment, *in theory*; but, in practice, what circumstance has yet given the homœopath such annoyance? In such instances, after one, two, or three weeks of ineffectual *specification*, and when to all solicitations and remonstrances hypercatharsis still turns, maliciously, an insensate ear, the augmenting and irrepressible solicitude of the patient and his friends usually drives the discomfitted homœopath to recommend the old *ibis* remedy, (b) famous at least since the time of Molière; prudently advising, also, as an adjuvant, the no less persuasive black draught,—all of which might have been avoided by the timely assumption, on the part of the homœopath himself, of the decillionth part of a grain of common sense.

Again we ask, How is this? Can it be that eloquence here cannot throw a veil over a fact so stubborn,—that her aid

has again been found as ineffectual in quieting the apprehensions of the patient and his friends, as the specifics have been found ineffectual in extorting a forced answer from hypercatharsis?

Though Professor Playfair has said, (a) (what all thinking people will allow,) that a single fact inconsistent with a theory may be sufficient to overturn that theory; yet are we desirous of continuing, through a few more paragraphs, to hold up to view the theory of a man who could complacently tell those who would listen to him, that, before "his time," people knew nothing. And as we do not wish that there should be left a possibility of mistaking it, we shall continue, through another column or two, our proposed plan of demonstration by example.

Intermittent fever, formerly so common in England, is now, in most parts of our island, a disease but rarely met with. The few cases that have occurred in our practice have so soon and so completely been subdued by quinine, that in no case have we observed the shadow even of a subsequent paroxysm. The same results have, so far as we know, been very generally, if not universally, obtained by others. In various parts of France, the disease, however, is still common, and is occasionally so severe as at certain times, and in certain localities, to be considered epidemic. Yet in these instances, unless we are to disbelieve the accounts we have read in a well-known foreign Journal,—and we have never heard them called in question,—quinine has everywhere produced results no less satisfactory, a few complicated cases alone excepted; and in these, when the organic lesions had been removed, the ague, too, disappeared. Let us now turn to homœopathy, and see what triumphs it has to proclaim of its treatment in ague. "It surprises us," says Doctor Irvine, "to find cases of intermittent fever among those experimented on," (by Andral,) "for these affections are, without exception, the most difficult of any to treat on homœopathic principles; requiring, in the first place, that the symptoms be detailed with extraordinary minuteness; and, in the next, that the physician have the most thorough acquaintance with the intimate character of the numerous medicines. (Böninghausen enumerates nearly sixty which are required in their treatment.)" And how many days, we may ask, are necessary for the operation of each? SIXTY specifics for ague, and yet the treatment so difficult! And cannot eloquence and sixty specifics beguile the patient into a belief that the cold fit of his ague is nothing but a prelude to robust health? Or can it be, that in every instance his "pharmacopolist," instead of "power without matter," has ignorantly substituted the decillionth of a grain of "matter without power"? A rigid diet may be excellent, when prolonged through "sixty days," with those whose every ailment, according to Abernethy, is connected with excess in eating and drinking. (b) But in persons of a different class—persons already too much macerated—for such usually are the sufferers from intermittent fever, the sixty specifics, deserted in this instance by their allopathic ally, may be supposed to be left alone to work their own wonders. And

(a) Outlines of Nat. Philos. Vol. I.

(b) Montesquieu said, that of the Parisians of his time, one half were killed by their suppers, the other half by their dinners. And to this Lessing has added a piquant commentary in his fable, "Der Fuchs und der Storch;" while more lately M. Broussais, *semper in visceribus meditantis incendia*, has endeavoured to trace all the diseases of his countrymen to inflammation of their stomachs. M. de Balzac, too, says, "the Parisians eat immoderately;" and to that excess he ascribes that cadaverous aspect, or, as he elsewhere says, that "teinte presque infernale, des figures Parisiennes." Who is ignorant of the saying, "Gula plus quam gladio occidit?" And who that has read Petrarch is not reminded of the affecting words:—

"La gola, e l' sonno, e l' oziose piume

Anno del mondo ogni virtù standita," etc.

It is as impossible to doubt the efficacy of a rigid diet in a great majority of the ailments to which such persons are subject, as it would be to doubt the prophylactic efficacy of a more generous diet in the greater number of those who become the subjects of intermittent fever. At Aigues Mortes (Aque mortuæ), for example, in the south of France (see "Nouvelles Impressions de Voyage," etc.), they that fare liberally every day are said to possess perfect immunity from the attacks of ague; while another part of the population, not inaptly represented by Pharaoh's lean kine, are perpetually harassed therewith. The sheep that luxuriate in the rich pastures of the Pontine Marshes, like the rich inhabitants of Aigues Mortes, suffer nothing from the malaria; while the shepherds, the fac-similes of the lean part of the population of Aigues Mortes, do not possess any such immunity. And we cannot but think that the late Dr. Combe, in this instance as in some others, did not go much beyond the surface when he ascribed the immunity of the former, as others had done, to some protecting but unknown influence residing in their fleeces. With such observers it was but a step to the conclusion, that, as the unhappy shepherds were not, like their sheep, gifted by nature with a woolly covering, it only remained to give them a similar covering to insure them the same immunity,—a conclusion to which the result, so far as we know, has given no countenance.

(a) Anatomie Médicale, t. iv.

(b) Polydore Virgil. L. I., c. xxi.

hence, again, we come to the inevitable result, that for ague there is as yet no homœopathic remedy.

Böninghausen never read in our language an essay on the Evils of Popular Ignorance, at least we may presume so; and if he had, the following passage would not have made, perhaps, even an infinitesimal impression on his sensorium: "Anything wrong in the mind will be the most wrong where it comes the nearest to its ultimate practical effect." Hence the sixty specifics for ague, each one as violently inert as another. And had Böninghausen's attention been directed to this passage, would he not have had dexterity enough to retort and say, "Anything *right* in the mind will be the most so where it comes the nearest to its ultimate practical effect"? and hence we, in place of having no remedy, like those whom we nick-name allopaths, have sixty potent specifics for ague, and each one of them, too, as much a great giant as his fellow. (a)

We have already adverted to the action of opium on the alimentary canal, and the certain diminution of the peristaltic motion and intestinal secretion which follows its use, —effects which can scarcely be better illustrated than in the autumnal diarrhoea of England, in which a grain or two of opium—sometimes a much smaller quantity—finely powdered, and diffused in cold water, will generally suffice at once to arrest the entire symptoms. And to this effect of opium is no doubt due the confidence that has been placed in this remedy in the treatment of cholera and diarrhoea, by some Practitioners at least, through a period of some centuries. Much of the usual want of success in the treatment of cholera has its source, we are persuaded, in inadvertence to the demonstrable fact, that by far the greater number of symptoms are purely *secondary*, and which, so far as their treatment is concerned, do not deserve a moment's consideration. We have elsewhere said, that "not only the diminution or failure of the heart's action—which gives rise to the asphyxia, the cyanosis, loss of animal heat, and the venous congestion of cholera,—but also the spasms of the trunk and extremities, the aphonia, suppression of urine, etc., are mere secondary symptoms that have their source in a primary affection of the alimentary canal." We have also said, that in cholera, the rational object of treatment must then be, neither "to stimulate the system," nor "to excite the heart's action," nor "to restore the animal heat," nor "to remove venous congestion;" for all these "indications" may not only be safely, but most advantageously neglected. But, if all the phenomena of this disease can be traced to a primary affection of the alimentary canal, be that affection what it may, the rational object of treatment must be, promptly and effectually to obviate that state on which all the more prominent phenomena of the disease depend; and, this once obviated,—and nothing can be more simple or more efficacious than the means by which this may be accomplished,—all the symptoms of the disease, as we have invariably, or all but invariably witnessed, and in many hundred examples, necessarily and almost immediately disappear, leaving behind none of those causes of tedious convalescence that are observable after some other modes of treatment.

Notwithstanding modern innovations,—many of which we must consider as departures from sound principles of practice,—we are still disposed to consider, with Sydenham, that, in the treatment of these diseases, opium, *when rightly administered*, will be found a sheet-anchor. We are not ignorant of much that has been said against its use. Nor do we think that any great sagacity is required to discover the reasons of it. If, to take but one instance, opium be given in the form of pill, in a disease which so often runs its course in a shorter time than would be required for such pill to dissolve, and become diffused in the stomach—in the mucus of which pills of opium, undissolved, have often been found imbedded after death—is the failure in such cases to be ascribed to the *opium*? If fifty drops of the tincture be given in half a dozen hours, where 150 should have been given in half an hour, is the failure due to the opium? Of 132 cases of diarrhoea and cholera occurring in the author's

practice in a single autumn, not so much as one patient died, although the mortality from these diseases was stated to have been 1 in 7 or 8 in the cases that occurred the same season in Glasgow, Dublin, and some of the larger towns in England. In the epidemic cholera of 1832, opium, given in impalpable powder, and in every instance according to the effect produced, aided by the free use of cold water, was the chief means to which we ascribe the recovery of 40 out of 43 cholera patients, as well as the recovery of a similar number in the epidemic of 1833. Again, in that of 1849, of more, by computation, than 400 cases, all but 8 recovered; and we are greatly mistaken if we have not somewhere read,—we believe in one or other of his own works,—that in the practice of the late Dr. James Johnson, in India, the mortality was not greater than 1 per cent. (a) In the treatment of cholera, then, we propose to keep one definite object in view,—to suppress the vomiting and diarrhoea, by annihilating that *orgazic* state of the primæ viæ on which they depend; and when we accomplish this, what remains to be done? The whole formidable train of secondary symptoms, which so often occupy the whole attention of the unwary practitioner, and of which he gives such picturesque descriptions, rapidly disappear without a single remedy being prescribed for *them*.

[To be continued.]

ON HYPOCHONDRIASIS,

AND OTHER FORMS OF NERVOUS DISEASE.

By H. HUNT, M.D.

(Continued from page 255.)

MEDICAL TREATMENT.

In accordance with my view of the disease, the attention of the medical adviser will naturally be directed, in the selection of his remedies, to those which will either remove the contaminating matter from the blood, as deobstruents and purgatives, or correct them, as alteratives.

It is necessary, however, that I should advert, in the first place, to the necessity of inquiring into the state of the bowels *in every case*; as in hypochondriasis, they are usually much constipated. They must be thoroughly unloaded before we commence any regular plan of treatment.

In the treatment of a malady presenting such varieties in its origin, nature, and progress, it is obvious that much discrimination will be required, even when consulted during its earlier stages, in deciding on the course to be adopted or pursued. Remedies, the best adapted for the relief of patients in whom hypochondriasis has arisen from moral causes, while in the vigour of health, may be wholly unsuitable for those who have been reduced to the same morbid condition by depressing causes of a physical nature, and whose systems are already in an impoverished or debilitated state. Deobstruents and aperients may be necessary for both, but while the former class will require to be freely unloaded, and placed on a reduced scale of diet, the latter must be allowed generous and nutritious food, the nervous system, at the same time, being stimulated by wine and medical cordials. We must, therefore, endeavour to ascertain, as clearly as we can, the causes and exact nature of the disordered action in each case.

If, on examination, we find *that the malady has only existed a short time*, and there is no evidence of congestion of any of the viscera, we may, after having unloaded the bowels, immediately apply our remedies to excite an increased action in the several secreting organs; taking care, that, in endeavouring to unload and cleanse the system, we

(a) The gratifying result of Dr. Stevens' method of treatment, as practised at the Coldbath-fields Prison, is thus stated by Dr. Bushnan, in his "Historical Sketch of Cholera and its Cures," a work that deserves, from every one, and will amply repay, an attentive perusal.

"From the above facts," says Dr. Bushnan, "we feel ourselves entitled to draw the following conclusions:—

"1st. The mortality from Asiatic cholera during the first outbreak at Coldbath-fields Prison, was reduced, under Dr. Stevens' and Mr. Wakefield's care, to 3 per cent. of those attacked. Strictly speaking, we might affirm, to less than 1 per cent.,—one only having died out of 179 patients that were treated on his plan; for two of the three deaths are to be attributed to imprudent exposure after convalescence had set in.

"2nd. The mortality, during the second outbreak, chiefly under Mr. Wakefield's and Dr. Stevens' care, under the Saline treatment, was reduced to less than 3 per cent. of those attacked." (P. 164.)

(a) Some homœopaths, the German and American more especially, have great aptitude for the use of big words; and many examples (some of them such that they would not be greatly gainsayed were they to be characterised as most impious) might be brought to support the surmise, that, in writing, such persons have, wittingly or unwittingly, adopted for their guide Lady M. W. Montague's travestie of the three rules of Demosthenes. The first rule, said Her Ladyship, is impudence, the second is impudence, and the third—still impudence.

avoid the irritating effects of the more powerful and drastic medicines. *Those medicines should, therefore, be selected which permit a sufficiently long and steady persistence in their use, and which may be exhibited in a form likely to facilitate their absorption into the system; where, by altering the state of the blood, at the same time that they act upon the bowels, they will exercise a direct and simultaneous influence over the secretions of the skin, the kidneys, and the mucous membrane, and bring about the desired object, the improvement in the quality of the circulating fluids, by removing the noxious matters from them.*

Such a remedy we have in the saline aperients combined with other salts, which, when given in conjunction with mild mercurials, prove very effective remedies in some forms of hypochondriasis. They unload and cleanse without inducing that extreme debility and irritation of the intestines which it is so desirable to avoid.

I have given various combinations of saline aperients, and have found, as a general rule, the sulphates the most efficacious, either the sulphate of magnesia, soda, or potash, and on the whole, the sulphate of magnesia, combined with the bicarbonate of soda, the most certain and effectual in its operation.

It is manifest that they are not applicable to every case, but there are certain indications which especially point to their use, and, "when rightly employed, they will be found, in the strictest sense, aperient, diuretic, as well as laxative; indeed, they will promote all the secretions." We shall find one of the clearest indications for their use in the state of the urine; when that secretion is high coloured and loaded with lateritious sediment; when the skin is dry, and especially if it be, at the same time, hot, with a white or furred tongue, these salts operate very beneficially in every way. Their beneficial action is much increased by the previous exhibition over night of some mild mercurial, care being taken that it should not enter the system so as to affect the gums. It should be administered with the sole object of exciting action in the secreting organs. When given with this intention, it rarely fails to accelerate the cure very materially.

When the bowels are obstinate, it is often necessary to combine the mercurial, in whatever form we may employ it, with the ext. colocynth co., ext. aloes aquosi, or pil. rhei comp., but it is advisable to give the mercurial alone if possible. Nothing will, however, so well illustrate points of practice as examples; I will, therefore, narrate two or three cases which have been treated by these medicines. They are examples of hypochondriasis in its most simple form, in which the whole system was suffering from a retention of effete matter, without alteration of structure or manifest congestion of any of the important viscera, and occurred in persons whose stamina had not been undermined by previous disease or intemperate habits of any kind.

Case 1.—Miss S. M., a lady about forty years of age, of strong mind and robust body, passed several months of 1849 in anxiously nursing her mother, her only relative, in an illness which terminated in her death. Her rest was greatly disturbed during the latter part of this period. She was subsequently left alone in a large, gloomy house, and restricted from entering into society. A well-regulated mind enabled her to sustain the loss of her parent as she ought, yet in spite of every effort she became anxious and nervous about trifles, looking always on the dark side of the picture, a habit quite foreign to her previous character. Her health soon began to fail; she lost her energy and strength; she became restless at night; she loathed her food; her bowels, previously regular, became obstinately costive: her legs, which were always a little puffed at night, became greatly swollen from varicose veins. To restore her health she took for some time calomel and very strong aperient medicine, which operated powerfully, and weakened her without affording relief. She consulted me early in June, 1850. I found, in addition to the symptoms I have described, her tongue foul and swollen, showing the impressions of the teeth; her pulse feeble and slow; her countenance dingy, with a dark areola round her eyes; the conjunctiva dull, with a tinge of yellow, with large tortuous vessels ramifying over it; her bowels were never relieved without medicine; her urine, when feeling nervous and depressed, was pale and plentiful, at other times high-coloured and scanty, and occasionally turbid. I prescribed for her pil. hydrarg. gr. v.; pil. rhæi. comp., gr. v.; Ft. pil. ij. quaque nocte ad tres vices sumend.; magnesiæ sulpha. ʒi.; potassæ nitræ., gr. v.; potassæ bicarbonatis, ʒj. Ft. pulv.

to be taken every morning dissolved in a large tumbler of tepid water. These medicines operated once or twice freely, without pain or inconvenience, and brought away depraved secretions, but the stools were not of the watery character usually resulting from salts. At the end of a week she wrote me that she was much relieved in every respect. But she continued the same plan for a month, omitting the pil. rhei comp.; her bowels continued to be acted on quite as freely as when she took it. At the expiration of three weeks she felt so well in mind and body that it was with difficulty I could persuade her to persevere with her remedies, which certain indications showed me was advisable, if not absolutely necessary. This case is a good example both of the uselessness of the usual mode of administering remedies as aperients, and the beneficial result of using them as deobstruents. She remarked, that mild as the medicines I had prescribed were, their effect was even more powerful than the calomel and black doses she had previously taken.

Case 2.—Mr. H. H., aged 69, came to London in the autumn of 1849, in a very wretched state of spirits, and with his bodily health considerably disordered, which he attributed to disappointments, pecuniary losses, low rents, &c. He had been ill for three months, and as the disorder of his health increased from week to week, his prospects, though not really worse, appeared to be more and more gloomy. When in health his character had been always an active and energetic one; but, since this attack, he has spent his time brooding over his difficulties, hopeless and miserable, and fully persuaded that his health was irretrievably disordered, and his end approaching. He complained of slight headache, that his head was confused, and his intellects stupified; his complexion was dark and dingy, with a slight tinge of yellow on the conjunctiva; his tongue was covered with a brownish fur; his pulse beat slowly and rather irregularly; his bowels were irregular, with a tendency to occasional diarrhœa. The evacuations from the bowels were very acrid, and occasioned considerable distress in their passage through the intestines, and great soreness, almost amounting to excoriation at the lower extremity of the bowel; but he remarked that he always felt relieved in every way after three or four evacuations. There was considerable uneasiness in the stomach and bowels from flatulence, and he suffered considerable pain in the course of the sciatic nerve. The urine was high-coloured and deposited much lithate of ammonia. I prescribed for him the following medicine:—

℞ Pil. hydrargyri, gr. iv.; extract. lactucæ, gr. ij. Ft. pil., quaque nocte sumend. c. 4ta parte misturæ sequent.

℞ Liquor calcis., ʒij.; syr. simplicis, ʒj.; Tinct. zinziberis, ʒij.; aqua pimento, ʒiv. Ft. mist.

℞ Magnesiæ sulphas., ʒiij.; magnesiæ carb., ʒj.; infus. caryophyllorum, ʒij.; Ft. haustus, quaque mane sumend.; superbibendo aquæ tepidæ, lb. ss.

I was induced to prescribe the alkaline earths from the acrid nature of the intestinal secretions.

This medicine briskly purged him, removing much dark, offensive matter, and so quickly relieved him, that at the expiration of a week I could not avoid smiling at the sudden and complete change which had taken place in the view he took of his affairs and health, everything began to look bright and prosperous. He pursued this plan of treatment for a fortnight, by which time the secretions had become natural and healthy. The mercurial was from that period taken twice a week, and the following mixture was substituted for the saline aperient:—

℞ Decoct. aloes comp., ʒiij.; liq. calcis, ʒij.; aqua pimento, ʒij. Ft. mist. capt. 4tem partem quaque nocte.

His health and spirits steadily improved, and at the end of a month he had quite recovered.

Case 3.—Mr. G. H., aged 43, had been an active and successful merchant, and having realised a fortune early in life, had been enabled to retire from business. He had been occasionally subject to attacks of hypochondriasis, brought on by over-fatigue and anxiety, but had generally enjoyed good health while he was engaged in business. Soon after his retirement from active life, he perceived his health decline, he lost much of his energy and activity, and became more subject to depression of spirits; he also suffered from slight attacks of gout, and severely from neuralgia in the second and third branches of the fifth pair of nerves supplying the right cheek. He consulted me in the spring of 1849, having been suffering severely from the neuralgic pain in the cheek and lip for several months, which almost prevented

mastication and articulation. He had some slight sensations of gout in his toe, but his principal complaint was a dreadful depression of spirits; he declared he was so wretched and miserable from this cause, that he would gladly bear the acute pain in the cheek for ever, if he could only be relieved of his mental malady.

His tongue was much furred; his skin dry and harsh; his bowels rather confined; and his urine high-coloured, and loaded with the lithate of ammonia. He had little appetite, and was unable to masticate from the pain in the lip and cheek, which was much increased towards night; his pulse beat slowly and feebly. His complexion exhibited the dirty, dingy appearance I have attempted to depict, but without any tinge of yellow in the conjunctiva. He had been treated for the neuralgia by steel, quinine, and arsenic, (persevering in the last medicine for a very considerable time,) his medical attendant believing that all his ailments arose from debility.

I directed him to take the following medicine:

R Pil. hydrarg., gr. iv.; ext. acet. colchici, gr. ij.; ext. colocynth. comp., gr. iv. Ft. pil. ij., quaque nocte sumend.

R Magnesiae sulphatis, ʒij.; inf. caryophyllorum, ʒvi.; potassae bicarb., ʒss.; vin. sem. colchici ʒss. Ft. mist. capt. dimid. quaque mane et meridie superbibendo. Aquae tepidae. lbss.

The use of wine, sugar, potatoes, and food containing starch, was forbidden; but I allowed him a generous diet in other respects, and gave him permission to drink a limited quantity of weak brandy-and-water, and strictly enjoined the necessity of active exercise.

The medicine acted briskly on his bowels, and soon freed his urine from the sediment. In three days all sensations of gout had disappeared; the neuralgic affection of the lip had so far diminished as to allow of his speaking and masticating his food carefully without any increase of pain, and the complexion had become much more clear; but the most striking change, was the disappearance of his mental depression—he was now as full of hope as he had previously been desponding.

I now slightly altered the medicinal part of his treatment, directing him to take the pills every week for three nights in succession, and the following powder every morning, dissolved in a large tumbler of tepid or cold water:

R Magnesiae sulphatis, ʒij.; potassae nitratis, gr. v.; potassae bicarb., ʒi. Ft. pulv.

still urging upon him the necessity of active walking exercise in the open air for an hour before breakfast, immediately after taking the medicine.

He steadily persevered in this plan of treatment, with some trifling modification, for six weeks; at the expiration of that time he was perfectly recovered. He has since, by my advice, gone to Australia, the scene of his former labours, as I consider it a matter of much importance, that, in every case, after the system has been thoroughly freed from all morbid matter, the individual should pass a considerable time in the purest air, and, if possible, in the pursuit of some object of interest, which may call into active exercise the powers both of mind and body.

It is necessary, however, to remark, that although, as a general rule, the use of saline aperients is indicated by certain appearances in the urine, the presence of the lateritious sediment, &c., and that it is contra-indicated by the opposite condition of that secretion,—i. e., a plentiful discharge of pale, limpid, watery urine,—exceptions to it are sometimes met with in practice. The cases to which I allude, notwithstanding that the system is greatly contaminated by the presence of morbid matter, and the liver and other chylipoietic viscera are much congested, the urine may exhibit this watery character; and (what especially deserves notice) it will continue to be secreted of this quality until the hepatic and general systems have been, to a certain extent, unloaded by appropriate remedies, and not until that has been accomplished will the lateritious sediment appear in the urine. In such cases, it may be advisable to defer prescribing these salts until the various viscera have been somewhat relieved by other measures, or until the lateritious sediment has appeared in the urine, when they may be prescribed with more certainty that their action will prove beneficial. However, their administration, under these circumstances, will be better considered when the treatment of abdominal congestion is discussed.

It not unfrequently occurs, that the bowels participate in the general torpor of the system, and are acted on with great

difficulty. In such cases I have found that no advantage is gained by increasing the dose or strength of the purgative medicines. On the contrary, they appear to worry and irritate in proportion as their strength is increased without operating more effectually. Our object can be better accomplished by diminishing and combining with it some warm stimulating remedy. For this purpose the infus. armoraciae comp. added to the aperient will often render it more effective. Again, when the large intestine is greatly distended by wind, the operation of purgative medicines is much impeded. Under these circumstances the pil. galbani comp., combined with the mercurial, or with extract. colocynth, or turpentine, used as an enema, will prove efficacious auxiliaries.

I need not dwell longer on this part of the subject, excepting to remark, that it must always be remembered, that the object to be attained by the use of the stronger purgatives is only preparatory and not simply to unload the bowels, but principally to relieve the torpid viscera, and to fit them for the DEOBSTRUENT action of the saline aperients, on which our chief reliance is to be placed for exciting an increased action in all the secretions of the body, by which the system is to be relieved and the blood cleansed from all deleterious matter.

Therefore, when these stronger remedies have succeeded in rousing the torpid viscera to increased activity, they should be discontinued and the salines substituted for them, in moderate doses largely diluted, from one drachm to two of the sulphate of magnesia, and a scruple of the bicarbonate of soda, dissolved in ten or twelve ounces of tepid water; half of this should be taken daily as soon as the patient is out of bed, and the remainder when dressed; he should then take an active walk before his breakfast. If it produce very liquid, or watery stools, the quantity of the sulphate should be diminished. These medicines will, by this mode of administration, be absorbed into the blood, and will be carried to every part of the body, and permeate the most minute structures, and in passing through them will remove the elements of disease, and thus restore the patient's body to health and relieve his mind of the load that oppressed it.

The usual effect of this treatment is, to remove from the system large quantities of dark-coloured offensive matter; but it occasionally happens that the evacuations from the bowels do not, for the first few days, greatly deviate in quality from health, and it is not until after several successive doses have been taken, that the secreting organs begin to separate the unhealthy matter to which I have alluded. It is very important to bear this in mind; otherwise, both patient and medical adviser may be prematurely discouraged at the nonappearance of unhealthy secretions, and lose all confidence in the treatment. We must be guided in our management by the quality rather than by the number of the evacuations, and must persevere steadily, though cautiously, with the treatment, until we observe that the various secretions have become natural and healthy.

It may not be amiss, likewise, to advert to the possibility, nay, the great probability, that exists of a temporary increase in all the unpleasant symptoms of the disease at the commencement of the treatment, when the remedies are exciting and stimulating the different organs, but have not yet attained their full influence over them. According to my experience, there are no cases in which the relief ultimately afforded by the treatment is more complete and satisfactory. An occasional dose of the pil. hydrarg., and sometimes of a grain or two of calomel are, under these circumstances, required; they will greatly assist the operation of the salines, and in relieving the general feelings they have tended to create. There are many cases of hypochondriasis, however, even its most simple form, in which they are inadmissible.

In persons who are in that condition which the late Dr Prout termed the oxalic acid diathesis, the propriety of their use may be doubtful. In connexion with this habit of body, hypochondriasis assumes a more serious character, often approaching limits which only just separate it from insanity, indeed not very uncommonly terminating in it; I shall therefore reserve my observations on the treatment of this aggravated form of the malady for a future chapter. (a) The use

(a) Indeed, until lately, I have considered that saline aperients were inadmissible in the treatment of dyspepsia in persons of the oxalic acid diathesis; but some remarkable cases have occurred to me since this part of my paper was written, which have tended to alter my opinion on this point; but I require further experience to satisfy myself on this point of practice.

of saline aperients is to be avoided in the treatment of hypochondriasis, in subjects whose powers of life are naturally feeble or have been exhausted by disease. In cases which require the assistance of purgative medicines, but in which the saline aperients are not applicable, we must select those which, whilst they will operate effectually, will not distress or irritate. A combination of active purgatives with mild aperients will often answer our purpose well, when either of the two separately would fail together; the first by irritating, and the second being deficient in strength. The mercurial may be combined with the ext. col. comp. or some other preparation and given at night, and a mild aperient in the morning, or the morning aperient may be added to some bitter infusion. It is unnecessary that I should specify the formulæ to be employed more minutely. They must be selected and modified according to the judgment of the practitioner to suit the peculiarities of each case, and in almost every case they should be well diluted.

On the other hand, persons of naturally delicate or feeble constitutions, will require to be managed with proportionate care and delicacy. To those who have not had experience in the management of such cases, the mildness of the treatment necessary may appear trifling and inefficient; yet any other would prove injurious and often dangerous.

If such persons need a course of mercurials and purgatives, the mildest kinds must be selected, such as small doses of the hyd. c. cretâ, guarded with some mild sedative, as the ext. lactucæ, or hyoscyami, and given one, two, or three nights in succession, or every alternate night, or less often, as circumstances may require, and to be carried off by the mildest aperients. I may be allowed to remark, that the operation of purgatives, as the infusion of senna with a bitter infusion, is rendered more certain and mild, also more effective, if largely diluted, by the draught being added to a tumbler-full of tepid water.

(To be continued.)

TÆNIA.—EFFICACY OF THE MALE FERN.

By W. COWEN, Esq.,

Much has been said of late, and justly so, in praise of the new remedy for tænia, called koussou. Its efficacy in such cases is certainly undeniable, as the reports in the *Medical Times* testify, and as my own experience proves; but, while giving koussou its due, we must not forget the claims of the older, equally efficacious, and much cheaper remedy, the oil of male fern. My connexion with a public Institution has enabled me to give this oil a fair trial, and, out of numerous cases so treated, in no one instance has it failed to expel the worm, and afford relief. As all such cases are much alike, I will merely, in proof of what I adduce, bring forward the following case:—

John Pearsall, age 46, weaver, states that sixteen years ago, he first discovered that he was subject to worms. From that period to the present time, this affliction has gradually increased, until he has become, from their constant irritation and annoyance, emaciated, nervous, and care-worn. He says that he has been treated by numerous medical men with more or less benefit, and has taken so much turpentine that he had rather remain as he is than take any more, although the worms often come from him as he walks.

April 7th.—Ordered him to abstain from supper that night, and take primo mane olei filicis maris ʒj., to be followed in an hour afterwards by olei ricini, ʒj.

8th.—Brought with him a large tape-worm, perfectly entire, and of great length, which he says he passed in about an hour after taking the castor oil.

15th.—To ascertain if more worms existed, I gave him another dose as before, but, although it acted briskly on his bowels, no trace of any worm could be perceived.

29th.—Called on him to day to know if he had passed any more worms since last I saw him, and he assures me he has not; neither has he been troubled with those uneasy sensations which formerly so plagued him. He has improved in looks, and is gaining flesh.

Kidderminster Infirmary.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

By HENRY SMITH, Esq., F.R.C.S.

(Formerly House Surgeon to the Hospital.)

SEVERE LACERATION OF THE LEG.— AMPUTATION.

A compound fracture of an extremity, a gun-shot wound, or a severe laceration of the same by other means, is one of those accidents, the proper treatment of which demands very often a more than usual amount of judgment and energy on the part of the surgeon. And this is especially the case when it becomes a question as to whether the injured part is to be removed, or an attempt is to be made to save it. In some such cases great difficulty is necessarily experienced by the surgeon in coming to a satisfactory or correct conclusion; for, on the one hand, he is loth to cut off a limb where there is not an absolute necessity for so doing, feeling that it is inconsistent with sound surgery to resort hastily to the knife without first giving nature and other remedial measures a prior chance of bringing about recovery; and, again, he knows that the first and paramount duty is to save the life of a patient, even at the expense of an important member, if that part of the body is so severely injured that there is not much prospect of his patient recovering with it on; moreover, he is anxious to avoid having the reflection, that death has occurred in an instance where, in all probability, had the injured part been amputated, life would have been saved. Thus, in fact, the great difficulty there is in dealing with these cases is knowing when to act with promptitude, and when to refrain from resorting to the use of the knife. It has often occurred, that in cases of some very serious injury to one of the extremities, amputation has been strongly advised by the medical attendant; nevertheless, the patient or his friends would not yield to the surgeon's wish, and recovery has taken place without the use of the knife. And this has happened, too, in some very extraordinary instances of injury. One of the most remarkable cases we ever saw has lately been under our observation; it was that of a fine young man who had his leg terribly injured by a railway-wagon. The wheel of it had traversed the limb from the foot up to the hip. There was not much injury done to the integuments, beyond some laceration in the popliteal spaces; but the parts beneath were violently contused. Curiously enough, there was no bone broken. The result of this violence showed itself shortly in severe inflammation in the deeper tissues; matter formed in large quantities under the deep fascia of the thigh and down the leg, and life was immediately preserved only by timely and free incisions. But the mischief had gone still further; the knee-joint became involved; suppuration and destruction of the cartilages ensued; and the general system was so shattered, that amputation was considered to be the only resource left, and was strenuously urged; the patient as obstinately refused, and, during the delay which necessarily ensued prior to any definite conclusion being come to, matters took a more favourable turn. The system began to rally; amendment slowly went on; and, although a profuse discharge kept up, which kept the man very low, his strength of constitution ultimately prevailed, and he completely recovered, with an ankylosed limb. Such cases as these, then, are sufficient to make the surgeon extremely cautious in hastily, at least, condemning an injured limb to amputation. Cases, however, are of constant occurrence where too much has been allowed to Nature's efforts, and where it would have been best to have extirpated the injured part at once without delay. Some striking instances we could relate, but we will shortly mention the particulars of a case which has been lately under Mr. Partridge's care, and which has drawn forth these remarks.

A little beggar-boy, eight years of age, was brought into the hospital at mid-day, on February 19, with a severe laceration of his left leg. It appears that, whilst in the street, he was pushed down, and a cart-wheel went over the limb, tearing off the skin from the posterior part of the thigh above the popliteal space, as low down as the lower third of the leg; the posterior saphenous vein and nerve were torn; the ham was laid bare, the popliteal artery and nerve being

exposed, but not injured. Some portion of the skin was entirely lost, and there was not sufficient left to cover one-half of the wound. Both bones of the leg were broken, and the tibia, which was comminuted low down, communicated indirectly with the wound in the integuments. In addition to this, the left gastrocnemius muscle was torn across and separated from its bony attachment, and hanging down. The patient was somewhat collapsed, but not to the extent which is sometimes observable in such a severe kind of injury. Mr. Partridge saw him about an hour after admission, and, with his colleague, Mr. Henry Lee, carefully examined the case, and consulted as to the question of amputation. Mr. Partridge was anxious to preserve the limb, if a chance could be seen for the child's recovery. However, after mature deliberation, it was determined, that it would be best to remove the limb, which was done the same afternoon by Mr. Lee, the circular method being used, in consequence of there being so little integument to form a posterior flap. The child made a rapid and remarkable recovery, the stump healing, to a great extent, by the first intention.

In this instance, it is impossible to doubt the propriety of having removed the limb, even though there is such difficulty and uncertainty in coming to a right judgment in such cases. An analysis of the injury will show how few grounds of hope there were that the boy's life or limb could be preserved if the operation were not done. There was an immense detachment and loss of integument, which would prevent the wound from being half covered. There was a comminuted fracture of the tibia, a severe laceration and contusion of muscles; and although the popliteal vessels were not wounded, they were laid bare: these circumstances were such as to give the patient but a poor chance; but it was more particularly the latter condition which led Mr. Partridge to remove the limb; for, as he stated to the pupils, the after effects of such an injury would be severe inflammation and sloughing of the wound; and this would probably involve the exposed vessels, and lead to a hæmorrhage which could not be checked. Should the patient escape this danger, he very justly observed that, if cicatrization of the wound should ultimately take place, the limb would necessarily be contracted, and would be of little use to the patient. The only argument in favour of attempting the preservation of the limb was the age of the youth; but, although this should always be considered in such instances, matters were so serious here, that it was thought wrong to trust to that.

MIDDLESEX HOSPITAL.

By W. SIBLEY.

CEREBRO-SPINAL HÆMORRHAGE.

ELIZA A., a milliner, aged 28, was admitted into the hospital March 15th, 1851, under the care of Dr. Thompson. She was a woman of moderate stature, somewhat muscularly made, of the nervous temperament, the countenance pale and rather anæmic. At the time of her admission, she had paralysis of the porta dura on the left side; there was hemiplegia of the extremities on the opposite side; the paralysis, however, was far from being complete. She then complained of severe pain in the head, seated chiefly over the left eye; the intellect was quite unaffected; her manner intelligent; there was some dimness of vision; the pulse quiet. The history she gave was, that sixteen months before she had a similar attack, *i.e.*, pains in the head followed by hemiplegia; at the outset of this attack, she had suffered from a severe toothache. The hemiplegia, which affected the same side of the body as at present, continued for three or four months, and never entirely left her. The cephalalgia returned fourteen days since, and has become more violent during the last six days, since which date the paralysis, both of the face and of the limbs, has made its appearance. Her health previous to the first attack was good. The head was ordered to be shaven, counter-irritants were applied, she was placed under a mild mercurial and salines.

On the 17th, the catamenia came on; the supra orbital pain was much relieved, and had shifted from the left to the right side; the pulse remained quiet; the paralysed parts were somewhat cold. The next day she complained of pains in her arms, chiefly in the right; the cephalalgia much diminished.

On the 19th, the left pupil was noticed to be much larger

than the right, and scarcely sensible to light. The sight of this eye was almost wanting; she was unable to see objects even when held close. There was inward strabismus on the same side, and she could not perform any of those movements of this eye that involve the use of the external rectus. The function of the fifth nerve was also interfered with; sensation on this side of the face being dull; the buccinator did not act. The motions of the tongue were not affected; but the paralysis of the muscles supplied by the porta dura was more manifest than on her admission. She had only imperfect power of motion over the right arm and leg, the arm being less affected than the leg. The same plan of treatment was continued.

Till the 22nd there was but little alteration; the pain in the head remaining, though varying as to site; the countenance still pallid. On the evening of this date (at 9 p.m.) she was seized with what was apparently an epileptic fit, there being complete loss of consciousness, struggling of the extremities, and foaming at the mouth. In the afternoon previous to the occurrence of this fit, she was noticed to be somewhat odd in her manner, laughing, whistling, etc.; she complained of much pain over the eyes, and, shortly before the attack, complained of tooth-ache and of pain in the back. The fit lasted but a short time, and three-quarters of an hour after the first, she was seized with a second of similar character; during this fit, the head was drawn forcibly backwards, the muscles of the back of the trunk and of the neck firmly contracted. Pulse 80, full, intermitting at regular intervals; the respiration excessively slow, there being an interval of many seconds between the inspirations. In this, the second fit, she remained insensible for about half an hour, and, in fact, never fairly recovered herself. The opisthotonos continued until her death, being greatly increased when she moved herself. The motor paralysis was not increased; sensation good on the extremities. She was then leeches on the temples. During the whole night she was delirious, occasionally screaming out and groaning; towards morning she became more quiet. She remained much in the same state, the opisthotonos constantly present, but subject to exacerbations, till she died the next day at six, p.m., twenty-one hours after the first fit.

The body was examined twenty hours after death. On removing the skull-cap, and exposing the spinal canal, the sinuses were found full of blood, the veins generally much engorged. The pacchionian glands large and numerous. There was a small amount of serosity in the arachnoid. Blood was found extravasated beneath the arachnoid, extending as far forwards as the line of the optic tracts, and filling up all depressions in this part of the encephalon; thus the notch between the hemispheres of the cerebellum was quite obliterated by the blood in the subarachnoid space. The blood, in the same position as regards the membranes, extended down to the bottom of the spinal cord, and even for some distance along the nerves which come off from it; in this manner the spinal cord was surrounded by one large clot, as if within a tube. A clot was also found in the fourth ventricle. In the lateral ventricles there was about six ounces of bloody serum, and in the right ventricle there was a clot. By injecting water carefully through the vessels, a branch of the posterior cerebellar artery, on the left side, was found to be ruptured. All the arteries within the skull were affected with a certain amount of atheromatous disease. The upper part of the hemispheres of the brain exhibited numerous red punctæ, but the tissue was otherwise healthy. The corpus callosum, the fornix, and the optic thalami, were all much softened, and presented a pale yellow colour. The heart firm, of rather large size; the right cavities filled with grumous and fibrinous coagula; the walls healthy; the cavity and walls of their natural dimensions. On the left side the walls were much hypertrophied, measuring an inch in thickness; the cavity of natural size; the muscular tissue healthy. There was some atheromatous disease of the aorta and great vessels. The lungs and liver healthy. In the kidneys there was some granular deposit.

The above case is a striking instance of the ordinary course and most typical symptoms of a case of spinal hæmorrhage. In a considerable number of cases of hæmorrhage affecting the spinal canal, symptoms referable to interference with the function of the spinal cord have been met with, whilst in a large portion such symptoms would seem to have been entirely absent. In the majority, however, of the latter class of cases, the lesion in the cord was not the primary affection, and the injury inflicted on the encephalon

was so great, that the symptoms of the latter lesion were alone present; the symptoms of the spinal hæmorrhage being masked and overpowered by the greater force of those of the cranial hæmorrhage. In the present instance, although there was hæmorrhage about the posterior part of the encephalon and in the ventricles, yet the symptoms arising from this lesion were not so marked as to obliterate those of the lesion in the spinal canal.

The symptoms that were exhibited previously to the fatal hæmorrhage into the membranes are worthy of notice, as they strongly point to the existence of a tumour within the skull. The *post-mortem* appearances, however, show that this was not the case, there being nothing but softening discoverable, so that, in this instance, the symptoms of tumour in the brain were most closely simulated by those of softening. The manner in which the hæmorrhage commenced, and the direction which the effused blood took, is also most curious. A considerable vessel gave way, blood was poured into the subarachnoid space, and the course of the blood then depended alone on the anatomical construction of the parts around it; it took precisely that direction in which its passage would be most easy, or that in which the subarachnoid space is largest, viz., towards the base of the brain, over the cerebellum, and in the spinal canal. In this manner, not only is the cord itself surrounded by a clot of blood (as is seen in the preparation in the museum of the Middlesex Hospital), but many of the nerves given off from it are for a short distance enveloped in a clot, demonstrating that investment which the nerves derive from the arachnoid. The passage of the blood into the ventricles also depended on the mechanical arrangement of the membranes; the blood from the subarachnoid space at once entered the posterior extremity of the fourth ventricle, showing that in the present case there was either no partition at all, or a very slight one, at this point. From the fourth ventricle, the blood traversed the aqueduct of Sylvius to the third ventricle, and thence through the foramen of Munro to the lateral ventricles.

STUDENT'S NUMBER.

The STUDENT'S NUMBER for September 27, will contain a complete view of the Curricula of Study prescribed by the Universities, Colleges of Surgeons, and Apothecaries' Hall; also a List of the different Courses of Lectures which will be delivered at the Medical Schools; together with the hours of attendance at the various Hospitals and Lecture-rooms; and a variety of important information to guide the Student in making his arrangements for the ensuing Session. It will also contain an Editorial Address to Medical Students on subjects of great interest to the Profession.

The extended Circulation of this Number renders it imperatively necessary to go to Press earlier than usual; the Secretaries of learned Societies and public Institutions will therefore be pleased to favour us with their Communications as early as possible. Advertisers will observe the advantage of availing themselves of this Number, and the earlier they forward their Advertisements the better;—we cannot promise their insertion after Wednesday, September 24.

THE MEDICAL TIMES.

SATURDAY, SEPTEMBER 13.

CRIMINAL LAW OF LUNACY.

FATAL ASSAULT AT THE KENT COUNTY LUNATIC ASYLUM.

Our attention has been again called to the defective administration of the Law of Lunacy, by a catastrophe which has just happened at the Kent County Lunatic Asylum. An inquest has been there held upon the body of an aged and inoffensive man, who was killed by a fellow-patient under

the following circumstances. William Fawcett, a keeper of the Asylum, deposed. [We give his evidence in his own words.]

"The deceased John Hubble was under my charge in No. 11 Ward, on the middle floor. He was quiet and harmless. At a few minutes before six o'clock on the morning of Saturday, the 9th of August, just after I had come on duty, as I was in the act of changing my clothes in my own room, I heard an unusual noise and call for the keepers. I ran immediately and unlocked the door of No. 13, the room in which deceased and nine others, were, and when I opened the door I saw Henry Hills, a patient, beating the deceased, who was lying in bed, in a murderous way, with the tin chamber utensil, on the head. I saw only one blow struck, as I immediately interfered, and, upon my going towards them, Hills threatened me with the utensil; but, upon my remonstrating with him, he threw it down, and came into the middle of the room very quietly, and did not speak or offer to strike any of the others. The deceased was lying in the bed, apparently suffering from the blow that he had received. The blow that I saw struck was a very violent one, so much so that the handle flew off by the concussion. I ran for assistance, when three keepers arrived, and Hills was locked up. Hills and the deceased had been sleeping in the same room for the last two or three months, and I had seen them daily during the time, and I saw no quarrel between them."

Dr. Huxley, the Medical Superintendent of the Asylum, then gave the following evidence:—

"I had seen both Hills and the deceased on the day previous to the outrage, and saw no change in the condition of either. I had conversed with Hills, who had been quiet for many months, but when first admitted he was treated in the noisy ward for a violent attack of mania, from which he had recovered, and since that time had been quiet. Had I seen any change the day before in his habitual condition he would have been removed to a single room, as is customary, and have slept by himself. The deceased was quite inoffensive. He was 76 years old, and was in a very depressed state of mind, being fearful as to the salvation of his soul. On being called in soon after six o'clock on Saturday morning, I found the scalp of the deceased greatly lacerated. He was bleeding freely, and under great exhaustion. He had received severe bruises on his right wrist and across his fingers. I applied the usual remedies, and he was removed to a room by himself. He went on well for some time, and seemed to suffer less in constitution than could have been expected. There were no signs of the injury proving fatal to him until the seventeenth day, when he gradually became insensible, and died on the 25th instant. I have made a *post-mortem* examination, and discovered that the immediate cause of death was from inflammation of the membranes covering the brain on the side where the scalp was injured, which, I have no doubt, was caused by the violence inflicted by Hills. On the day of the occurrence, I asked the deceased who had struck him, and he said that it was Hills. He stated that he had given Hills no provocation, and that he commenced the blows while he (deceased) was asleep, and he should think that he must have struck him forty times. When I saw Hills, immediately after quitting the diseased, he seemed very much depressed. I asked him how he came to do it, and he answered, 'It was the work of God.' I consider it to have been an act of pure insanity, and, judging from his condition, I did not consider him to be in a responsible state of mind at the time." Verdict: "*Died from inflammation of the membranes of the brain, caused by blows inflicted on the head by Henry Hills, a lunatic.*"

We cannot pass over without censure the circumstance of a ward—and that in a country asylum—being left without any keeper, more especially if these ten lunatics, as the report would seem to imply, slept in a room without a keeper all night. Our principal object is to direct attention to the verdict; and we would fain ask whether the case is to end here, or whether it is to be carried before a higher tribunal. Already a notion prevails among reasoning lunatics, that they may commit any act of violence—even murder—in an asylum, without incurring the least risk of punishment. They argue, that the medical certificates of their insanity exempt them from all responsibility, and although capable of distinguishing right from wrong, many, flattering themselves that they are not amenable to the laws of their country, will foster the most malignant feelings. That many

lunatics are able to reason, and yet are fit subjects for confinement, is quite certain, and we therefore entertain a strong conviction, that whenever a lunatic has been guilty of murder, the case ought to be sent for trial in the usual way, before a criminal court. Take the example of this man Hills. We will suppose, as Dr. Huxley affirms, that it was an "act of pure insanity;" still we maintain, that all the circumstances connected with it ought to be thoroughly sifted, and the lunatic pronounced criminal by the verdict of a jury. The verdict of a coroner's inquest is not sufficient to sentence a man to confinement for life. "Died from inflammation of the membranes of the brain, caused by blows inflicted on the head by Henry Hills, a lunatic," conveys no sentence whatever for the disposal of the lunatic; and should he so far recover that no medical superintendent can certify he continues to be "dangerous to others," he may legally enough demand his liberty. We submit, therefore, that the Coroner's inquest ought by its verdict to have sent this case for trial at the assizes. Sane or insane, no man should be permitted to take away the life of another without being tried for the offence. An insane person—that is to say, a person under certificate and confined in an asylum—may be capable of making a will, which, after his decease, will be held valid; his evidence also may, as in a recent case, be received in a court of justice. Is it not, therefore, reasonable to hold such persons liable, at all events, to take their trial when they have committed an assault attended with death? How, otherwise, are the facts of the case to be arrived at? How, without the verdict of a jury, is the lunatic to be pronounced criminal? Human life would not be safe in a lunatic asylum, if the doctrine went forth, that lunatics might kill whom they pleased with impunity, and without the risk of a trial in the usual courts of justice.

THE EDINBURGH MONTHLY JOURNAL AND MR. SYME.

THE conductors of the *Edinburgh Monthly Journal* are men of more valour than discretion. They have seized the first opportunity of informing their readers that they have removed the London agency of their Journal from Mr. Churchill, because the Editor of a periodical published by Mr. Churchill has thought it his duty to oppose an operation of Mr. Syme's, and to censure the manner in which it pleases Mr. Syme to speak of those who differ from him in opinion. This attempt to make Mr. Churchill responsible for the opinions which we publish, and which he in no way influences, cannot but eventually lower the estimation in which the conductors of the *Edinburgh Monthly Journal* are now held. All the world knows that Mr. Syme resents as a deadly affront the least difference of opinion; but no one could have supposed that such men as Christison, Robertson, or Bennett, would have allowed themselves to become the tools and agents of his overbearing vanity. By what influences are they brought to be the puppets of this little demi-god? Is Mr. Syme the dispenser of Edinburgh practice, or the mouthpiece of Edinburgh opinion, that all men thus truckle to him?

It is not a little singular, that the really able men with whom Mr. Syme is associated, and who are not remarkable for any peculiar pliancy and gentleness in ordinary cases, should be the ready slaves of one man's irritable and captious will. But enough of the miserable and petty species of revenge in which Mr. Syme indulges; we leave the case to the appreciation of the Profession.

We must, however, note, that there are in the present Number, several examples of that spirit we have so much blamed in Mr. Syme,—viz., a system of depreciation of others in which no gentleman should indulge. Thus, at page 224, is a review of Mr. Acton's book on "Syphilis." The Reviewer is probably identical with the writer of a paper "On the Treatment of Stricture," in the same number, which is signed "James Syme." At least, we find Mr. Syme there makes a furious onslaught on Mr. Acton for disputing his opinion on the value of the perineal section, and the Review is characterised by the same spirit of rabid criticism. The northern Critic performs his duty in these courteous terms: "We were sorry to find Mr. Acton's publication was chiefly devoted to an exposition of the opinions and practice of M. Ricord, of Paris. We say sorry, because we believe the system of treatment pursued by this gentleman, *however beneficial to the pockets of Practitioners*, is eminently injurious to the constitutions of patients." Subsequently we find, that "the simple treatment *taught and practised in this part of the world*, if adopted elsewhere, *would reduce many practitioners from comfort to starvation*;" and the Review finishes with the intimation, that "the good people of a certain Metropolis are already reaping the fruits that might be expected from the scientific profession of arts suitable for the most unscrupulous empiricism."

The *Monthly Journal* is very angry with us for a mild reproach we made it on the obscurity of its style. The last sentence quoted is darkness visible; but we see enough of it to know, that a more unjustifiable attack on the honest Practitioners of this city was never made. All who do not agree with Syme rob the public! It is a happy circumstance, that Mr. Syme has not to fix the standing and estimation of his brother practitioners. If he had, we might parody the answers given the other day at Cowes. "Who's first?" "The America." "Who's second?" "Nothing."—Who's first? Syme. Who's second? Nobody.

THE INFLUENCE OF THE LITERATURE OF THE GREEKS AND ROMANS ON SCIENCE AND MEDICINE.

Antiquitate tamen defenduntur.

The slaves of custom and established modes,
With pack-horse constancy we keep the roads;
Crooked or straight, through quags or thorny dells,
True to the jingling of our leader's bells:
To follow foolish precedents, and wink
With both our eyes, is easier than to think.

FAMILIAR though the observation be, and mouthed by every schoolboy, "*Tempora mutantur et nos mutamur in illis*," they are not few who, with such theoretical saws incessantly on their lips, act in all the duties of life, and even in the prosecution of their own particular calling, as if the apophthegm were nominally a dead letter, suited only to the vacuous and pompous display of the drawing-room, or to the more glowing field of public debate, where sophistical and sophisticated views of the perfectibility of man and his systems are lauded to the echo. And, as if to confirm further the unsubstantial and almost illusive character of this axiom, the gentlemen of the long robe lend additional support to the mockery of its meaning, by an incessant appeal, in all their difficulties and dubious cases, to the law of precedent, as if their only security were, when they put on the spectacles of their grandsires,—their great apprehension of confusion and error, when they had recourse to the use of their

own senses. Unsurpassing modesty of the "*progenies vitiosior!*" unequalled diffidence of a most deferential posterity! Solomon might well be proud of such an offspring.

Whatever then of truth, whatever then of error, be in the axiom which we have just adverted to, it must be, withal, allowed that it rests on a tolerably broad basis, supported by the experience of all ages and of all climes. Broad and comprehensive, however, as it is in its practical application and bearing, and perhaps related with a prurient desire for novelty, it is, nevertheless, maintained in a comparative condition of equilibrium, by the reluctant disposition of man to embrace new ideas or forms of action, and rather desirous to confine himself to the prescribed walks in the path of life which have been chalked out and defined for him by the sagacity and staid prudence of his ancestors. There is, and must be, notwithstanding, a limit to the range of ancestral deference, otherwise the world must still have been unmerged from its state of primæval barbarism.

The history of the past, indeed, is insensibly related to, and immediately connected with, the grand march of the progress of the human mind; and, however independent the individual may seem and boast himself, he is undoubtedly moulded and fashioned into the mental character which he displays as his own, and which constitutes *himself*, through the long-continued agency of the successive advances which each generation proclaims and appropriates as unequivocally its own. What has been so exquisitely said as regards the physical world—

"All are but parts of one stupendous whole,
Whose body Nature is, and God the soul;"

may, with equal truth, encompass the vast circle of man in his moral and intellectual relations, from his first appearance on this arena of existence progressively to the present moment, and from the present hour to the fulfilment of time.

Contemplated in this point of view, the philosophy of man, and all his relations with his fellowmen, and with the physical world around him, rises in dignity and importance: all that was imperfect in his constitution betrays the evidence of perfection; all that was obscure tends to declare the light that is to be revealed; and every addition made to his knowledge, while it is declaratory of the innate powers with which he is gifted, confirms the grand proposition which the lines of the moral poet so truly and yet simply define. Our present state of society, then, is the result of our previous social and political relations; and our future modifications have a distinct connexion with our present position. The past has impressed its type on the present; the future will receive its impress from *that* present. As with the individual his early life typifies the future, so with society (which is the mere representation of the aggregate individuals), the early habits predicate the future character, with this one difference, however (and it is a fortunate difference in favour of the masses), it can improve always on the errors of its predecessors. It would, perhaps, be premature to push the *simile*, the "age and body of the time" being far from the comprehension (though, perhaps, a little too Calvinistic) of the force of the illustration; that, as science has, in her recent brilliant researches, displayed the peculiar fitness and exact harmonious relations of the several elementary (and, inferentially, the compound) particles of matter in the whole range of the inorganic world, and has equally discovered the uniform harmony of the planetary system, it would be but a miserable aspect of the economy of nature to view the *feeling, thinking* kingdom of organized life, were it not bound down in all its relations, physical, moral, and

intellectual, by a harmony as complete, and by the symmetry of laws as undisturbed as they are eternal and unerring.

As, then, there is an undoubted *commune vinculum* between the *past* and the *present*, so each division of the present has its relation more or less distinctly connected with the past. The historical records of the great dynasties of kings, empires, and republics, exhibit this in its most simple form and most obvious conception. The progressive development of the arts connected with daily life typifies it in another; and, to descend to our own professional details, which may be fearlessly pronounced as second to none in importance to mankind, the insensible development of it, from the rudeness of the embryo state to the present refinements of modern medicine and surgery, in a no less beautiful and instructive manner displays a third illustration of our general proposition.

We then consider medicine with the ancients as part and parcel of the great field of general knowledge; and, therefore, affected by, and affecting in its turn, proportionally, all the other sciences.

BRITISH GUIANA AND SANITARY REFORM.

WE beg to draw particular attention to the subjoined abstract of the very able and instructive Report of Dr. Hector Gavin, Medical Inspector of the West Indies, to His Excellency the Governor, on the Sanitary State of the Colony. The British Guiana *Royal Gazette*, which we may take as an authority as to the requirements of the locality, says, "that the changes recommended by Dr. Gavin are, upon the whole, admirable;" and hopes that they "may prove the first step taken in this colony to such a revolution in sanitary matters as may ere long communicate to British Guiana some of the social benefits which Great Britain is at present reaping from the explorations made in that new and vast field of modern medical inquiry." The late period at which we received this document must be our excuse for not further alluding to it in the present Number. The Writer says:—

"Having satisfied myself as to the actual condition of the colony in relation to its sanitary wants, without further dwelling upon the distress which would be entailed on it in its present struggling position, through loss of life and labour, and the great general and individual expense which would be an unavoidable result, the panic, and the diminished confidence of the home capitalists, and deferring entering into details of the various sanitary defects which I have either myself observed, or which have been brought under my notice in the replies to the queries issued, at my suggestion, by the Board of Health, or in the reports of the Local Commissioners, I would give a brief outline of that general plan of the arrangements which I have been led to believe will best tend to secure the object in view, namely, comparative safety through efficient sanitary regulations against the danger of an impending destructive epidemic, and of such measures as have a necessary connexion with the foregoing, and which cannot fail to prove most beneficial to the colony.

"The primary object of the Colonial Government should be to provide a responsible, efficient, and economical arrangement by which security may be given, that all the measures of prevention which recent experience and knowledge have made known to us, and which the necessities of the occasion demand, and the circumstances in which the colony is placed permit, should be forthwith applied."

After noticing the inefficiency of the present Board of Health, Dr. Gavin says:—

"The Public Health Act, of England, and the Nuisances Removal, and Contagious Diseases Prevention Act, and the Amended Act, and the Suggestions of the Metropolitan Sanitary Association presented to the Right Hon. Lord Seymour, offer the types upon which the new law should be modelled.

"The Board of Health would thus have, in the one case, under ordinary circumstances, to proceed in execution of the law; in the

other case it would be armed with extraordinary powers to meet extraordinary emergencies. * * *

"It appears to me absolutely essential that a change should take place in the present local sanitary arrangements of Georgetown. Those who have not actually visited the crowded, filthy, and putrescent localities, can scarcely believe it possible that in this colony, at least, such a painful state of things should exist. * * *

"The prominent point to which attention should be directed is the securing efficient provision for affording medical aid to the inhabitants of villages and of estates, and for the expenses thus incurred being defrayed by the parties directly benefited. In numerous instances the present estate hospitals might readily serve as dispensaries; but in certain villages it would be necessary to establish new dispensaries. Connected with the establishment of such dispensaries would be the inspection, and, as a necessary result, a great improvement in the condition of the habitations of the peasantry, and probably the institution of model dwelling-houses, still further to promote so desirable a result."

Dr. Gavin here enters into some details as to the means of defraying the expenses incurred in the institution of Self-supporting Dispensaries, and proceeds:—

"The estate hospitals at the present time are scarcely ever used as hospitals—they are in reality merely dispensaries. The immigrants preferring greatly to be treated for the respective diseases, which confine them to the house, in their own dwellings. The estate hospitals, in many instances unoccupied, scarcely ever containing patients, frequently greatly dilapidated, and sometimes the abodes of residents on the estates, have therefore been rendered, by the peculiar necessities of the population, to all practical purposes 'dispensaries,' and there is no reason to doubt but that their use might easily be largely extended, and that the population of adjoining neighbourhoods would most readily apply at these estate dispensaries for that medical aid and relief of which they so greatly stand in need.

"The inspection of the habitations and of the sanitary condition of the peasantry, by being brought into connexion with the administration of medical aid, would prove highly serviceable in rendering this inspection satisfactory to the people, and would greatly facilitate its being efficiently carried out. An improvement in the social and moral condition of the peasantry is not, in fact, to be looked for, as long as there is no attempt made to improve their physical condition; and the first successful attempt at the improvement of the physical condition of the African must consist in implanting in him a desire to live, and, as far as practicable, compelling him to adopt the custom of living, in a dwelling not characteristic of degradation and the meanest condition of existence, surrounded with and often even imbedded in filth. * * *

"It has been proved, that the police force has been most usefully employed in the city of London in bringing nuisances under notice. This mode of inspection, under the supervision of competent persons, it would be wise to employ in this colony.

"In relation to the details of these and the allied measures for the improvement of the public health and promotion of the general welfare, it would be desirable to proceed on the basis of the laws in relation to the public health which have already been successfully applied to the public exigencies in Great Britain, with such amendments as experience has rendered advisable, and such alterations as the peculiar circumstances of the colony render necessary.

"It must be evident, that in this plan there is much which will tend permanently to improve the condition of British Guiana; that its operation will introduce a new link binding together the social community, and tending to strengthen the position of the owners and managers of Plantations, by inducing the peasantry, in numerous instances, to seek medical aid at the Estate Dispensaries.

"The measure which I now propose is, in fact, the reduction to practice of an economical and political principle most desirable for the advancement of the general interests of the community, and of large political importance, but most unfortunately neglected to be applied at the time of transition from slavery to freedom, when it could easily have been accomplished, and since then impracticable to apply in consequence of the inherent difficulties besetting the question. * * *

"If regard be had to the small number of medical men in the colony,—to the great distances from one another at which they are situated,—to the enormous comparative population some have to attend,—to the state of the roads,—and to the impossibility of undergoing in this climate, without great danger to health, (more especially in an epidemic period,) the excessive personal labour and exposure which medical men, at such a time, would be called on to endure,—the impracticability of the present medical staff of

the colony affording medical aid to more than a few of the cases of actual cholera which may occur, must be painfully obvious. Many villages are entirely destitute of medical aid, or can only receive it with great difficulty, not only for the reasons set forth, but also from the fact that, as but few or none of the inhabitants contribute towards the obtaining of medical aid, the sick, in individual cases, require to pay for advice in lengthened illnesses sums which, though sufficiently small to be unremunerative to the medical practitioner, are altogether out of their power; and it is scarcely necessary to observe, that the credit given by medical men to the peasantry of many of the countries of Europe, could not possibly be applied as a system in this colony.

"The great mass of those in British Guiana, more particularly in the country districts and villages, who may be attacked by epidemic cholera, will unquestionably die without receiving any medical aid at all, or will only be seen at the last extremity when medical aid is of almost no avail.

"The organization of a system, therefore, of local dispensary relief, by which information may be distributed among the people as to the best means of averting danger, and by which adequate aid may be secured to the great mass of the population at the time when medical treatment in cholera is almost alone valuable, becomes a subject of the utmost importance. This system alone, combined with such house-to-house visitation as may be practicable, it appears to me gives any assurance to the population of this colony of comparative immunity from the ravages of cholera.

"If this system be not recognised in the colonial law, and established as a principle of the government of the country, the members of the present Board of Health would probably feel themselves compelled to avail themselves of the powers conferred on them under Clause 2, of the Health Ordinance, in which case, while the expense and difficulty of practically applying the unsuccessful measure of prevention therein propounded would be very great, the saving of human life, which would be effected by the dispensary system, would be largely diminished, and the advent of an important political measure would be greatly deferred, if not hopelessly postponed.

"That such would be the case is the more clear, even from the wording of the clause in the Ordinance, in which, while a prominent place is given to the establishment of 'Cholera Hospitals,'—a system which has signally failed and proved destructive in a large percentage to the unfortunate patients who have been removed to such hospitals, as well as most expensive,—the system of Dispensaries and Medicine Depôts can only be guessed at as being contemplated.

"To secure British Guiana against the ravages of cholera, I submit it would appear eminently advisable to institute the system of Self-supporting Dispensaries at an early period. It will not be sufficient to give power to institute these only when the disease has actually broken out in the country, seeing that the difficulty of effecting the necessary preliminary arrangements, of securing concentration of purpose and unity of design, as also of informing the people as to the means of aid prepared for them, could not, by any possibility, be overcome until an excessive mortality had prevailed. With the institution of these Dispensaries, other advantageous measures would be conjoined;—a regular system of vaccination would be introduced; a registration of deaths, and, as far as practicable, of the cause of death, would be facilitated; and the excessive infantine mortality which prevails among the black population would, in some measure, receive a check, partly by the recognition of criminal neglect, and partly by the bringing to light criminal abortion, which I am led to believe prevails now to a considerable extent.

"An improvement in the physical condition of the population, but especially in their social position, and in their perception of moral obligations, could not fail to be a necessary result of the measure.

"In the towns, at least, and probably in the villages also, provision should be made for the seizing and condemning of putrid articles of food offered for sale."

The condition and necessities of particular localities are next set forth; and then Dr. Gavin proceeds to notice the objection which may be made to his recommendations on the score of expense. He justly says:—

"The reply which I would make to such oppositionists is, that every well devised and efficiently executed work of sanitary improvement has, in the long run, been 'a great economy;' that the principle of the Public Health Act takes the largest guarantee against any inefficient works being executed, and provides for the expenses, principal and interest being distributed over a term of years commensurate (in some measure) with the duration of the

works. I would then urge the fact, that each epidemic yellow fever (the probability of being freed from which no one can reasonably calculate upon until the town shall have been placed on a sound sanitary condition) costs infinitely more in money loss, in life, labour, and traffic, than would suffice to execute all the sanitary works required; moreover, it is worthy of notice, that epidemic yellow fever has lately travelled towards British Guiana, and that the period popularly assigned for its return is not very far distant, and may, indeed, be very much nearer than is anticipated.

"Surely, however, the sad warning in Jamaica cannot be disregarded. Surely the melancholy experience obtained from its misfortune, of hurried, and ill-devised, ill-digested, and ill-concerted, as well as expensive and inefficient measures of relief under the pressure of a panic, will not prove valueless, but will induce the Government and people of this colony to neglect no efficient precautionary and preventive measures."

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF
MEDICINE AND SURGERY.

[SIXTEENTH NOTICE.]

MR. MATHEWS exhibits a small case, containing, in addition to the ordinary bistouries, etc., Snow's and Robinson's chloroform inhalers, and some exceedingly gracile and, we should say, fragile stethoscopes, the stems of which hardly exceed in diameter a common black-lead pencil. We really cannot discover the advantage of having such small stems to the instrument. We have for some years employed Dr. Williams's form of stethoscope, which is, in all conscience, sufficiently portable, and at the same time most efficient.

Mr. Spratt exhibits a spinal chair, designed by Mr. Druitt, the well-known surgical author. The improvement consists in the crutches being both fixed to one bar, which, passing through two sockets placed in the seat of the chair, prevents the crutches from working independently of each other, or any lateral motion, but permits perfect freedom of motion from back to front. The previous plan for attaching crutches to a seat, was by a ball-and-socket joint, which allowed the crutches to move freely in any direction, and the patient could place himself in any injurious position. The crutches are made with elastic cross bars, and are capable of extension if desirable.



Mr. Greenhow, of Newcastle, exhibits a sling fracture-bed, by which he states that the following advantages are obtained: facility of reduction of fractures of the thigh and compound fractures of the leg; ease and permanence of position; necessary, though, of course, limited movement of the pelvis sufficient to relieve local pressure, and promote comfort and cleanliness, and perfect facility for dressing wounds; opening abscesses; in cases of compound fracture of the leg, without moving or in any way altering the position of the limb. The apparatus consists of a support, with four uprights, which rest upon the bed. From these uprights, what may be termed a proper splint is suspended, and the knee or foot can be raised, either positively or relatively at will, by means of screws in the uprights, so as to adjust the height and position of these parts to the nature of the case and the feelings of the patient. The thigh is supported and protected by back and side splints, which can be

lengthened or shortened to the proper extent by screws, and secured by groin and waist straps affixed to a strong steel loop, which projects upwards from the outside splint, the straps being movable, so as to be adapted to either leg, while the knee can be flexed at any convenient angle, by turning screws which raise or lower the uprights. Extension of the leg is made in a gradual and certain manner by a screw affixed to the foot-pieces. The leg rests on a support of Mackintosh cloth, which is easily removed and replaced for the purpose of dressing wounds, etc. When used, pillows must be placed in the fracture-bed, the author recommending one long pillow in fractures of the thigh, and two pillows, one extending from the pelvis to the knee, the other from the knee to the foot, in fracture of the leg; the latter to be replaced when soiled by discharges. The inventor reports that he has found this apparatus of great value in treating compound fractures; and we are of opinion that it is both an ingenious and useful invention.

Mr. Fergusson has also a large case of surgical instruments, the chief of which are of the ordinary description,—scalpels, bistouries, those ordinarily used for amputating, trephining, lithotomy, etc. Among the novelties, is Skey's tourniquet, already described. Fergusson's modifications of the speculum vaginae, almost all of which are of white metal with double handles, or the ordinary screw movements, three or four inches in length, to which Coxeter's is far preferable in use; a glass tube through which a caustic holder slides for applying potassa fusa to the neck of the uterus, and convenient holders for the application of nitrate of silver to the same part; also a porte caustique, made of a piece of glass tube seven or eight inches in length, closed at one end, while the other has a ground mouth, which receives a smaller piece of tube holding the nitrate of silver. When not in use, the position of the smaller tube is reversed, and the caustic is then enclosed in the larger tube. He has also a neat series of silver caustic-cases of a variety of forms. Among the ear specula there is nothing remarkable. There are some obstetric instruments in this case, but nothing demanding special notice beyond some models of old Chamberlayne's original forceps, which are, as every one knows, clumsy enough; and one almost wonders, with their common hinge joint, how he managed to introduce them. There is also Simpson's tractor, which has been already noticed, or something very much like it. But it is in orthopaedic and spinal appliances that Mr. Fergusson prides himself; and certainly, so far as he is concerned, he may do so, as those in the Exhibition are finished with great neatness. But, when we look upon the latter with the eye of the surgeon, we arrive at a very different conclusion. We have often had occasion to see patients who have been subjected to all kinds of mechanical treatment,—the varieties of stays and other artificial supports, the system of total recumbency, either in a prone or supine position, accompanied or not by extension and friction; and we do not hesitate to affirm, that, in old standing cases, no good whatever has been effected, and that in recent ones, much greater good may be produced by the system of calisthenic exercises, shown by models in the same gallery, or still better by the correction of the position in which the patient habitually places him or herself,—a plan which has had the test of ample experience, which is founded in reason, whose author is about to lay it before the Profession. It appears, indeed, from this gentleman's researches, that neither the bones nor the ligaments are originally in fault; but we feel that we are poaching on another man's manor, and we shall, therefore, refrain from further description of his very original ideas, which, as we have said, will shortly appear in an independent work, when an opportunity will be afforded of discussing his doctrines and practice more at large in the pages of this Journal. Almost all the spinal apparatus exhibited has been designed by Mr. Tamplin, except one specimen for lateral curvature by Mr. Lonsdale. A shoe, invented by Mr. Tamplin, for cases of varus, is also shown. We all know that the use of irons, as the apparatus is termed, was, until the operation of tenotomy came into practice, the only means of remedying those horrid deformities; and they are still useful in correcting minor deviations; or for application after tenotomy has been performed, until the foot has acquired its normal condition. The foot is placed under totally different circumstances to the spine; we can absolutely fix it, if necessary; we have the firm support of the tibia as a fulcrum from which to act; but the spine is necessarily varying in position with every, even the slightest,

movement of the body, with the movements of respiration and defecation. How, then, can we expect the same results from any mechanical appliances? The only other instruments demanding notice in this case are Dr. Arnott's very ingenious truss, and Dr. Sibson's chest-measurer. We have not had an opportunity of testing the former by experience; but the well-known originality of mind, and mechanical ingenuity of its inventor, would lead to the expectation of a great improvement in the construction of these invaluable means of preventing severe or fatal results. The chest measurer of Dr. Sibson has been extensively applied, and fully described by that gentleman in the *Medical Gazette*, the *Medico-Chirurgical Transactions*, and on other occasions, that we do not deem it necessary to repeat the description. In Dr. Sibson's hands the instrument has been apparently very efficient; but other observers have found it somewhat complicated and difficult of application. We are informed, however, that Dr. Sibson has recently introduced some improvements, by which these objections are removed. These improvements are not, however, visible, so far as we were able to observe, in the instrument in the Exhibition; but they will doubtless be found to answer the desired object. It is interesting to record the great attention paid by these different observers, Dr. Sibson, Dr. Quain, and Dr. Hutchinson, in devising means for insuring greater accuracy in diagnosis. Their instruments, in fact, lead to the substitution of exact measurement for blind guess-work, and the value of these means of observation, when they do not induce forgetfulness of other aids to diagnosis, is just in proportion to the difference between truth and error.

The instruments of Messrs. Phelps and Whicker, a continuation of the old and universally-known firm of Savigny, next demand attention. The first thing that strikes the eye on looking into the case, is a series of gorgets and knives employed in lithotomy by the most eminent modern surgeons of the Metropolis; and it is rather amusing to observe how each prefers a different form of instrument for making the section of the membranous part of the urethra and prostate until we arrive at the simple scalpel employed by Liston. As a general rule we are of opinion, that the best operators prefer the most simple instruments, depending more on the facility of the practised hand, than the cumbrous and complex means employed by less skilful men.

We have heard and read a great deal on the treatment of stricture of late, and much discussion and recrimination have taken place among the advocates of the different methods of removing this at all times very disagreeable, and sometimes dangerous affection of the urinary passage; some, adhering to the old method of dilatation by bougies and other instruments; others advocating the employment of caustics; a third party destroying the stricture by cutting through it by means of lancets concealed in catheters; and a fourth cutting down to the stricture by incisions in the perinæum. All these plans of procedure have the warm and sometimes fiery advocacy of their respective partizans; each affirming that his mode of treatment is the best; and, when doctors disagree, who is to decide? We confess we cannot. Here, however, are two instruments: Mr. Stafford's, which consists of a lancet, poised on a spring, attached to the stilette of a catheter tube, which is passed down to the stricture, and, when there, the lancet is protruded and the stricture divided; after which, it is again withdrawn, and the catheter passed onward to the bladder. We know not whether an instrument of Mr. Guthrie's is an improvement upon Mr. Stafford's, or was devised by that gentleman before that of Mr. Stafford; but, at all events, it appears to be a preferable instrument. It consists of a straight catheter tube, with a grooved button-head, so divided that a cutting-blade is made to spring out of the groove and to return into its sheath on pressing a spring. The tube is divided into inches, and a little steel guard slides along it, by which the distance of the stricture from the orifice is accurately measured. Mr. Guthrie, we are informed, proceeds in a very cautious manner with this instrument, dividing but a small portion of the stricture at each sitting, and gradually making his way through it.

Mr. Lane's transfusion syringe, exhibited among Messrs. Phelps and Whicker's instruments, consists of a syringe formed on the principle of the ordinary enema pump, with the stop-cock, valves, and a straight pipe for introduction into the vein; immediately above the stop-cock is another opening, to which a funnel is attached, through which the

blood flows into the syringe when the stop-cock is in a proper position. The funnel is graduated, and made of glass instead of metal,—an improvement, the result of which is, that the blood cools more slowly, and has less tendency to coagulate.

Another valuable, but by no means new instrument, is Ruspini's ball-extractor. It consists of a long tubular stem, to one end of which three forceps-lobes are attached by hinges, within which slides a rod, to which the three forceps-lobes are also attached by hinges. At the other end of the rod is a screw, by which the movements of the forceps are effected. This instrument would probably be of great use where balls are deeply seated.

One of the numerous contrivances for assisting in applying ligatures to deep-seated arteries, designed by Mr. Trant, consists of an ordinary aneurism-needle, with a broad handle, in which a very fine pair of hook forceps slides to the eye of the needle, grasps the ligature, and, being drawn back, brings with it the ligature, which is then detached, and the artery tied. The arrangement is very ingenious, but, whether it or other forms of the instrument are the preferable, we are unable to decide.

Three instruments of Mr. Beaumont are exhibited. One of these is a sort of forceps, of very peculiar shape, for assisting in cutting away sloughs. The other is an extremely ingenious instrument for applying ligatures to cleft palate, of which a mere description would be almost unintelligible. Tried on a piece of paper, it appeared to us to effect its object admirably. The third is an instrument for ligaturing aural or uterine polypi, so arranged that the ligature can be progressively tightened as it cuts through the pedicle of the polypus. The smaller one for aural polypi is decidedly useless; it is too large, and as the instrument must of course be worn until the division is completed, it would be extremely inconvenient, if not inadmissible in practice; besides, these polypi are easily torn away by the forceps or destroyed by repeated applications of nitrate of silver. For uterine polypi we should prefer the old double canula, to which it is easy to attach a rack and pinion if desirable.

A beautiful and complete series of the instruments for operations on the eye, now employed by surgeons, is seen in this case with the names of the operators engraved on them. Here are all the varieties of knives for extraction and needles for depression and reclinatio of the opaque lens with specula, curettes, &c., for facilitating the operations. They are all highly finished and of exquisite workmanship. A very neat and complete case of instruments for minor operations is also exhibited.

While on the subject of eye instruments, we must notice Dr. Lewis's instiller for collyria. In many cases it is desirable to use only a drop or two of some of the more energetic applications, say a solution of nitrate of silver, for which this contrivance is admirably adapted. It consists of a small dropping tube, such as is used by chemists, drawn out at one end so as to allow only a drop to pass at a time, while the other is closed by a stopper, and the dropping tube is itself adapted as a stopper to the bottle containing the solution, into which it dips. When the stopper is removed, the upper end of the tube closed by the finger and withdrawn from the bottle, the tube remains partially filled with the fluid, from which, when the finger is removed, it falls guttatim, but ceases to drop when the upper end is again closed by the finger. Several of these bottles, containing different liquids, may be employed, which are always ready for use, an object of importance in hospitals where many patients present themselves in rapid succession.

Another instrument exhibited by Mr. Phelps, is his improvement on the artificial leech of M. Savigny. It consists of a triangular, or rather a three-branched blade, which suddenly springs from a tube, in shape somewhat like a syringe, and makes a superficial puncture, resembling the ordinary leech bite, and a syringe with a small glass cup, resembling the glasses attached to breast-pumps in form. The puncture being made, the cup is applied and exhausted by the syringe, and the flow of blood thereby promoted. This instrument is intended for use in situations where the natural leech, which it will never supersede, cannot be obtained.

Savigny's dilator for the prepuce in congenital phymosis, may sometimes prove useful. The three arms of the dilator are expanded by means of a screw, contained in a case very much resembling a syringe in appearance. There are also

two fistula knives constructed by M. Savigny, one of which is a strong probe-pointed bistoury of the ordinary shape, having at its side a slide by which a lancet-point is protruded beyond the blunt end of the bistoury, so that the same instrument may be employed for blind or ordinary fistulæ which communicate with the gut. He has also a guarded bistoury for the same purpose. Sir B. Brodie's director and curved knife-edge scissors are also exhibited among Messrs. Phelps and Whicker's instruments.

One of the most delicate instruments we saw in this collection, was an exploring trocar and canula, almost, if not quite as fine as the ordinary exploring needle and intended to be used for the same purpose. The canula, when not in use, is placed in a hole in the handle destined for it, and the whole is scarcely larger than the needle.

There is also a very neat little apparatus for hydrocele, with a very fine trocar and canula, and a metal syringe for injecting solution of iodine.

A new form of apparatus, devised by Mr. Henry Lee, for fractured clavicle, is exhibited by Mr. Phelps, the advantages of which are said to be, that its parts are so connected and adjusted as not to be influenced by the movements of the ribs, the motion on one side being counteracted by the equal movement on the opposite side in a normal thorax,—that no re-adjustment is required, and that the parts may be loosened or tightened without disturbance of the limb; while the third, and perhaps the most agreeable, advantage to the patient, is, that the opposite limb is completely free, and that he may move about freely after the instrument has been properly adjusted. Now, the apparatus, to quote Mr. Lee's description, (a) "consists of a back board, retained in its position by two broad straps crossing over the shoulders, and by a perpendicular plate reaching to the loins, and connected with a band round the waist; a firm cushion is adapted to each axilla, and extends to the front of the shoulder-joint. To the anterior extremities of these, the straps which go over the shoulders are buckled. Each cushion is directly connected with the back-board by means of a steel bar, slightly concave forwards, and capable of being extended laterally, and fixed in position by means of a screw. When applied, the two cushions are separated to a convenient distance and fitted to the axilla. The straps are drawn moderately tight over the shoulders, and the elbow of the affected side is connected with the body by means of a handkerchief or bandages. It is advisable, also, to support the arm in a sling; and this may be conveniently done by passing a broad band from the elbow in front and behind the arm to the opposite shoulder, below which the cushion in the axilla affords a fixed point for its attachment." Great credit is due to Mr. Henry Lee for this very considerable improvement in our means of retaining one of the most troublesome of all fractures in position, with the least practicable inconvenience to the patient.

The other invention of Mr. Lee is the rectum plug for preventing descent of the gut in prolapsus ani. Most of the plugs, or as they may be well termed, rectum pessaries, have the bulb by which the gut is sought to be retained either sessile or placed on a very short stem. The consequence is, that the sphincter is continually irritated, and succeeds by repeated involuntary efforts in expelling the offending substance. Mr. Lee's instrument avoids this inconvenience, by having a somewhat curved stem of about an inch and a half in length, terminating in a bulb at one end, for introduction into the gut, and a cross-bar at the other, for facility of withdrawal, and to prevent any inverted action of the parts from causing it to penetrate too far. The length of stem allows the bulb to pass beyond the influence of the sphincter which grasps the stem, and thus prevents the instrument from being expelled by the action of that muscle.

Mr. Lonsdale's splint, we presume it must be termed, for fractures of the lower jaw, demands our notice, for the complete support and fixity it is calculated to give to the bone. It consists of a frame adapted in shape to the base of the jaw, having a grooved plate of ivory fitted to the teeth of the fractured side, which, by means of a screw, can be made to exert a moderate pressure on them, and thus fix the jaw between the ivory plate and the frame. In addition to this are two pads, also moved by screws, by which some pressure and support can be given to the external surface of the bone.

We must not omit to notice a very simple contrivance for

holding the trachea tube or canula in a fixed position after the operation of tracheotomy, by Mr. Sampson. It consists merely of a strip of vulcanized India rubber, into a hole in which the canula is adapted, while the band itself surrounds the neck. The canula is held in a fixed position, and little pressure is made on the neck in consequence of the elasticity of the band.

Mr. Keate's tongue-forceps, for holding the tongue during operations on that or adjacent organs, consists of two broad oblong blades, fixed nearly at right angles to the scissor-handles, and so arranged, that each is moveable on a pivot; consequently, when in use, the blades are always parallel, whatever may be their position with relation to the handles, and the tongue is firmly grasped without any undue pressure on any particular part.

Mr. Wardrop's instrument for completing the section of the bone in trephining, where the inner table is of unequal thickness, is deserving of attention. It has very much the appearance of a pair of compasses, attached to the ordinary handle of the trephine. One of the branches is pointed and fixed at right angles to the handle, the other is connected with the straight branch by a hinge, and can be fixed at a certain distance by a screw. At the distal extremity of the moveable branch is a small segment of the circular saw of the trephine, by which the still uncut portion of the bone is divided without the danger of injuring the dura mater in the remaining portion of the circle cut completely through by the ordinary trephine.

Finally, among the more novel instruments, are two concealed bistouries, for the operation of enlarging the os uteri by incision, made after the design of Dr. Simpson, of Edinburgh. Dr. Simpson is a very enterprising man, who, having devoted considerable attention to the female generative organs and their diseases, is inclined to employ manual and operative interference with these parts to an extent hitherto unprecedented, and, we believe, unwarranted. We presume that the theory on which the instruments to which we are now adverting are used is, that sterility depends, in a great number of cases, on constriction of the os uteri, and that this part is to be enlarged by incision, and the opening made permanent by the subsequent use of uterine bougies. Against this theory, and its consequences, we must enter our protest, our opinion being founded on the physiological fact, that the *quantity* of semen necessary for fecundation is extremely minute, and that an os of very small diameter, short of absolute occlusion, would suffice to permit the passage of the fecundating fluid. Dr. Simpson's stem pessaries are also exhibited, concerning which so much discussion has taken place, their opponents affirming that the impaling of the uterus not unfrequently excites metritis and peritonitis, of a dangerous or even deadly character. We can easily conceive such mischief to have followed their use. Of late years, it seems to have been expected, that the uterus should be suspended exactly in the centre of the pelvis, neither veering to the back, front, or either side, and even trivial changes of position have been dignified with the sonorous titles of anteversion, retroversion, (not that old retroversion occurring during early pregnancy) and we suppose dextro or sinistroversion; and many and sad have been the consequences deduced from this change of position. There can be no doubt that such changes of position may exist, in a few rare cases, to such an extent as to cause discomfort to the patient; but the number of cases reported of late has been so great, and the amount of displacement in many of them so small, that we cannot admit that the serious general symptoms recited by the reporters of these cases are in any way connected with the trivial local affection, nor do these deviations of position warrant the officious and sometimes dangerous means employed for the replacement of the uterus. Among the midwifery instruments are forceps of the ordinary construction, and the usual instruments employed for embryotomy; but here the only novelty is Simpson's tractor, or some modification of it, which a short time since attracted so much attention and caused so much discussion among obstetricians. This instrument, introduced as a substitute for the forceps, consists, as every one knows, of a syringe, to the open end of which is attached an expanded cup-like disc of india rubber, which acts precisely on the principle of the sucker, used as a plaything by boys. The expanded cup-like part of the instrument is introduced into the vagina, brought into contact with the foetal head, and the air being exhausted by the syringe, a strong adhesion is produced by atmospheric

(a) *London Journal of Medicine*, Sept., 1851.

pressure, equal to fifteen pounds on each square inch, provided the exhaustion be complete. We have not heard much of the application of this instrument in practice, nor do we think that it will ever supersede the forceps, since many and grave *à priori* objections may be raised to its use. In the first place, although it adheres firmly to the scalp, it does not follow that it should produce an equal adhesion and traction on the cranial bones; and if so, there would be considerable danger of tearing up the cellular tissue by which the scalp is attached to the cranium; and, secondly, it appears to us to be incapable of giving the wriggling movement to the head, which the forceps, when properly used, is made to produce, instead of direct traction. It is not probable that we shall hear much more of Dr. Simpson's invention. We also noticed some vaginal specula, but they did not show any novelty or improvement of form. We conclude our notice of Messrs. Phelps and Whicker's instruments, with the statement of our opinion, that they sustain the ancient reputation of the house of which these gentlemen are the present representatives.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Principles of Physiology, General and Comparative. With Three Hundred and Twenty-one Wood Engravings. By WM. CARPENTER, M.D., F.R.S., F.G.S., &c. Third Edition. London. 1851.

This work stands without its fellow. It is one few men in Europe could have undertaken; it is one, no man, we believe, could have brought to so successful an issue as Dr. Carpenter. It required for its production a physiologist at once deeply read in the labours of others, capable of taking a general, critical, and unprejudiced view of those labours, and of combining the varied heterogeneous materials at his disposal so as to form an harmonious whole.

A glance at the contents will render this more apparent. The 1098 pages which the work contains are divided into two books; the first comprises 590 pages, and is entitled *General Physiology*; and in it are treated, the Nature and Objects of the Science of Physiology; the General Characters of Organised Structures; the Nature and Conditions of Vital Phenomena; the Component Structures of Organised Fabrics; the Distinctive Characteristics of the Vegetable and Animal Kingdoms; a General View of the Vegetable Kingdom; a General View of the Animal Kingdom; and the General Plan of Organic Structure and Development. These chapters do not admit of analysis; they must be read entire, and in connexion with each other.

The second book is entitled *Special and Comparative Physiology*; it contains chapters on the following subjects: General View of the Functions of Animated Beings, and their Mutual Relations; Aliment, its Ingestion and Preparation; the Absorption of Nutrition, and other Matters; the Circulation of Nutritive Fluid; Respiration; the Exhalation of Aqueous Vapour; Nutrition; Secretion; the Evolution of Light, Heat, and Electricity; the Reproduction of Organised Beings; the Sensible Motion of Living Beings; the Function of the Nervous System; Sensation and the Organs of the Senses; and the Production of Sound in Animals. Each of the subjects in the second book is treated of in a separate chapter, under three heads: first, a few general remarks are made on the particular function; its definition is given, its importance considered, its nature and its essential characters are explained; its especial object considered, and its relative importance in the vegetable and animal kingdom glanced at; the peculiarities and modifications of the same function are then considered as manifested in plants generally, and in particular tribes and species of plants, and at different localities. While, under the third head of each chapter, the same function is considered in animals, and the various forms of the organ by which it is performed in the various sections of the animal kingdom briefly described.

To illustrate the way in which each function is treated, we will pass in review the 13th Chapter,—of Respiration. 1st. General considerations.—The function of respiration Dr. Carpenter defines to be the evolution of carbonic acid from the fluids of organised beings, and the absorption of oxygen from the surrounding medium. This definition, it will be observed, excludes the function plants possess under the influence of light, viz., of decomposing carbonic acid, appro-

priating the carbon, and setting free the oxygen. This function, Dr. Carpenter says, is not respiratory, but nutritive; so that the respiration of plants is not to be considered antagonistic to that of animals, as it is generally stated to be. The pressing need for the continuance of this function in plants and animals appears to be twofold,—one arising out of the disintegrating changes going on in their bodies, the other out of the constructive processes. The changes effected in the circulating fluid by exposure to air, Dr. Carpenter says, is, like absorption, dependent on physical agencies. The disintegrating changes are common to the animal and vegetable kingdom; the action of respiration in aiding the constructive function is more marked in plants. The continuance of the disintegrating change effected by respiration is essential for the existence of the higher animals; the continuance of the constructive function is by no means so important for the existence of plants.

Besides the evolution of carbonic acid, and the absorption of oxygen, it would appear that the exposure of the circulating fluid to the air is the means of keeping the nitrogen of the system at its proper standard.

Respiration in Plants.—The power of fixing carbon by decomposition of the carbonic acid of the atmosphere, is possessed by the green parts of plants, and only under the stimulus of light. Dr. Carpenter says this is a process of alimentation. The other parts of a plant, and all parts when in the dark, absorb oxygen and give off carbonic acid. This is true respiration.

Having separated these two processes from each other, Dr. Carpenter proceeds to consider, with reference to the former, the sources from whence plants draw their carbon, the influence of various proportions of carbonic acid in the atmosphere on their growth in feeble and strong sun-light, and M. Brogniart's hypothesis of the enormous size of certain fossil ferns, and Dr. Daubeny's experiments, which lend support to that hypothesis. He then passes to a consideration of the process of true respiration in plants, its importance to the individual, and its effects when plants are etiolated.

The question of the relative amount of carbon absorbed and excreted by the leaves is then considered, and especially the bearing of Mr. Pepys' and Dr. Daubeny's experiments on it.

A few lines suffice to dispose of the relation between the nitrogen of the atmosphere and vegetation, because little is known on the subject. A summary of the results of the observation of Mercet on Fungi, and of the recent experiments of Lory upon the respiration of the *Orobanche*, are given, and the conclusion drawn, that, in the fungi and the phanerogamic leafless parasites, we have examples of the true respiratory process, without the antagonising action of the alimentative.

A similar manifestation of the function of respiration, not concealed by the converse operation, is pointed out as taking place in germination and during flowering. In both germination and flowering a large quantity of oxygen is converted into carbonic acid at the expense of the carbon of the plant; and in both, starch is converted into saccharine matter. The relation of the stomata, the spiral vessels, and the intercellular passages to the respiratory process is next considered; and finally, the progressive evolution of the respiratory system in plants briefly adverted to.

Respiration in Animals.—The sources of the production of carbonic acid and of the demand for oxygen in the animal body are first stated. They are, Dr. Carpenter says, fourfold: 1st. The continual waste of the tissues; 2ndly. The various changes in composition that take place in the tissues in the progress of their organic construction; 3rdly. The metamorphosis that is peculiar to the nervous and muscular tissues; 4thly. The direct conversion of the carbonaceous materials of the food into carbonic acid. Subsequently, the organs appropriated to the performance of the function of respiration in the various classes of the animal kingdom are described. "A little reflection will show that all their forms are reducible," observes our author, "to the simple element of which the respiratory organs are constructed in the vegetable kingdom, an extension of the external surface peculiarly adapted by its permeability to gases, for the interchange of ingredients between the circulating fluid brought in contact with one side of it, and the atmosphere which it touches on the other. Considered, therefore," he continues, "under this instrumental character, there is a complete 'unity' among them all; but, when considered with

reference to the general plan of structure, we find them to be 'homologically' diverse." Diagrams are given to illustrate forms of respiratory apparatus "homologically diverse," *e. g.*, the simple leaf-like gill, the simple respiratory sac, the divided gill, the divided sac, and the pulmonary branchia of the spider.

"Putting aside such modifications, however, as are destined to suit the particular conditions under which the function is to be performed, and looking simply at the essential characters of the respiratory organs, we shall observe, on tracing them upwards through the principal classes of animals, the same gradual specialisation which has been noticed in the other systems; for, beginning with the lowest, it will be seen, that the general surface is the organ of respiration as well as of other functions; whilst, in the highest, the aëration of the blood is almost entirely effected in one central apparatus adapted to it alone, although the general surface is not altogether destitute of participation in it."

Having thus treated of the breathing apparatus and its modifications generally, Dr. Carpenter proceeds to describe the organs provided for effecting the process of respiration in the different classes of animals.

"The first indication of a special provision for the aëration of the fluids presents itself among the Radiata, in animals which have no proper circulating apparatus."

This statement is illustrated by reference to the respiratory organs of the palinograde, acalephæ, and the cilio-grade members of the same class; the more special provision for the performance of the respiratory function in the echinodermata, the echinida, and the holothuriada are then described. With reference to the latter, Dr. Carpenter says:—

"The nearest approach to this curious form of respiratory apparatus, that is presented by any other class of animals, is that which we meet with in the tracheal system of insects; but, although there is an obvious relation of *analogy*, yet they are not really *homologous*, for the respiratory tree of the holothuriada is an offset from the cloacal termination of the intestinal tube, and might thus perhaps be likened to the *allantois* more correctly than to any other organ of higher animals."

The general character of the respiratory organs of the molluscous sub-kingdom is then given, as well as the modification of the same organs in the several aquatic groups of that sub-kingdom. Next, the breathing organs of the articulata (equatic) are described, and here we find a brief but lucid epitome of Milne Edwards' observations on the stages in the development of the branchial apparatus of the *astacus fluviatilis*. The respiratory apparatus of fishes is succinctly given, as well as the mechanism of their respiration.

"Having thus traced the organs of aquatic respiration, from their simplest and most general, to their most elaborate and most specialised forms, we have to follow the same course with those which are provided for atmospheric respiration."

The pulmonated gasteropods are the only mollusca adapted for breathing air. All the radiated animals are aquatic. The pulmonic cavity of these animals is sketched. The apparatus for atmospheric respiration of the articulata is described at length, and then a most excellent *resumé* of the same, and its modifications in vertebrated animals.

Having thus described the pulmonary organs in their state of perfect development in the different classes of animals, Dr. Carpenter briefly traces "the evolution of the respiratory apparatus in the embryo of the higher vertebrata." After having done this, he remarks:—

"In the flowering plant we have seen a temporary respiratory organ, the *cotyledon*, first develop, like the branchiæ of a tadpole, and disappearing altogether, when the evolution of the permanent aërating apparatus renders it unnecessary. And just as the system which is the permanent one of the lower tribes of animals, is transiently indicated in the early development of the higher, so will it hereafter be shown, that the foliaceous expansions of the inferior stemless cryptogamia are to be regarded as the homologues of the cotyledons of flowering plants, which continue, in the inferior tribes, to perform their functions during the whole of life, like the gills of aquatic animals."

An inquiry into the changes effected on the respired air during the act of breathing by the different classes of animals concludes this Chapter. The results of the labours of Edwards, Müller, Magnus, Newport, Letellier, Regnault, Reiset, etc., are here admirably analysed and combined.

We feel that this abstract can give the reader but a very imperfect idea of the fulness of this work, and no idea of its unity, of the admirable manner in which material has been brought from the most various sources to conduce to its completeness, of the lucidity of the reasoning it contains, or of the clearness of language in which the whole is clothed. Not the Profession only, but the scientific world at large, must feel deeply indebted to Dr. Carpenter for this great work. It must, indeed, add largely even to his high reputation.

We ought not to conclude without observing, that Dr. Carpenter has been fortunate in finding a publisher spirited enough to bring the work out in so splendid a style,—paper, type, and wood-cuts are unexceptionable. An enormous sale can alone afford even a return of the capital sunk, but that sale, we are confident, it will find. It seems hard to ask for more, when a book contains more than 1000 pages; but we do hope that, in the next edition, Dr. Carpenter will add the only thing needed to render his work complete,—viz., a full reference to the books, papers, &c., in which the original statements of the different authors whose materials he uses are contained. For men less learned than himself, we assure him this addition is really needed; we have ourselves already heard many lamentations on this head from others, as well as felt its want ourselves.

Lectures on the Eruptive Fevers. By GEORGE GREGORY, M.D., F.R.C.P. Physician to the Small-pox and Vaccination Hospital at Highgate, etc. American Edition. With Notes and an Appendix, by H. D. BULKLEY, M.D., Physician to the New York Hospital, etc. New York. 1851.

WE are glad to see that these Lectures are as highly appreciated abroad as at home. This edition is not simply a reprint, because much valuable matter is added in the form of Notes, and between forty and fifty pages in the shape of an Appendix. Dr. Gregory's Lectures are too well known, and too highly appreciated, for us to offer our readers any abstract from them. The Appendix contains Tables, showing the number of deaths in the cities of New York, Philadelphia, and Boston, by the four epidemic diseases, small-pox, measles, scarlet-fever, and hooping-cough, from 1806 to 1845 inclusive; and also the average of the mortality by these diseases to the whole mortality. Tables showing the number of deaths by the four epidemic diseases, small-pox, measles, scarlet-fever, and hooping-cough, in the cities of New York, Philadelphia, Boston, Providence, Lowell, Baltimore, and Charleston (S. C.), and in the State of Massachusetts during different series of years in the different places, from 1805 to 1850 inclusive. Both these sets of Tables contain much highly interesting matter,—sections on the co-existence of two exanthematic diseases in the same individual; the recurrence of small-pox; the communication by the mother of small-pox to the fœtus; the means of preventing pitting; the value of inoculation; scarlatina; dropsy; epidemic erysipelas co-existing with epidemic puerperal peritonitis; the value of vaccination; and re-vaccination. The chapters or sections on these subjects are composed of abstracts from the writings of the principal writers on them, Dr. Bulkley himself not having added, so far as we can see, a single fact; at the same time, we ought to add, he has shown much judgment in his selections.

Braithwaite's Retrospect of Medicine. Vol. XXIII. Jan. to June, 1851.

Half-yearly Abstract of the Medical Sciences. By Dr. RANKING. Vol. XIII. Jan. to June, 1851.

No one can read all the foreign and English medical journals, and yet there is hardly one which does not contain, from time to time, amid a mass of rubbish, some really valuable papers. A book, then, published once or twice a-year, containing abstracts of all the original papers that have appeared in the weekly, monthly, and quarterly periodicals during the preceding six or twelve months, cannot fail to be acceptable to the members of so practical a Profession as our own.

Although exceedingly useful works, we cannot but feel that those at the head of this notice are very far inferior to the continental productions purporting to supply the same wants. In the German year-books, we find an excellent summary, not only of the labours of their own countrymen,

but of every paper on medical science worthy of notice published in foreign lands. The English journals are most ably analysed in them. Now, the "Retrospect" and the "Abstract" are both exceedingly deficient in references to the labours of foreign writers. In the latter of the two works before us, there appear only the names of some seven or eight French and German writers. This is not as it ought to be. We suspect there is hardly room for two books of this kind, and that one conducted with spirit would be much more extensively circulated than the two before us put together.

On the Causes, Symptoms, and Treatment of Spermatorrhœa.

By M. LALLEMAND, formerly Professor of Clinical Surgery at the University of Montpellier, etc. Translated and Edited by HENRY J. M'DOUGALL, formerly House-surgeon to the University College Hospital, etc. Second Edition. London. 1851.

By condensing and translating Lallemand's celebrated work, M'Dougall conferred a real benefit on the Profession. The subject of which it treats had fallen into the hands of harpies, and no man ventured to touch the pitch lest he should seem to be defiled. Lallemand's book was classical on the continent when known here only by name. Thanks to Mr. M'Dougall, all here are now familiar with it. Although perhaps some may think that he rides his hobby a little too far, few men will be disposed to deny that they have gained much practical knowledge from the perusal of M. Lallemand's treatise on Spermatorrhœa. That the Profession really required the translation is proved by the fact, that a second edition has so soon become necessary; a very rare honour to fall to the lot of a translation.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 4:—

BRERETON, JOHN LE GAY, Doncaster.
HULME, CHARLES DENTON, Leicester.
ROLSTON, JOHN, Devonport.
SOMERVILLE, THOMAS HENDERSON, Sedbergh, York.

OBITUARY.—Suddenly, on the 21st instant, at his residence, 4, Bentinck-terrace, Regent's-park, William Milligan, M.D., late surgeon of the 6th or Enniskillen Dragoons, and formerly of the 75th Regiment. Dr. Milligan was a lecturer on the theory and practice of medicine and on materia medica, twenty-four years ago, at a Dispensary in Great Pulteney-street, and continued to lecture on those departments of medical science, until he was ordered to New South Wales with his regiment. He had a very fair class, the students attending his perorations often amounting to thirty in number, and he imparted the information he professed to furnish in a pleasing, easy manner. His conduct to his pupils was such as to make him a great favourite with them. Dr. Sigmond was his successor in the School of Medicine. At Edgbaston-hall, on Thursday, the 4th instant, in the 94th year of his age, Edward Johnstone, M.D. Dr. Johnstone was for many years connected with Queen's College, Birmingham, of which he was at one time the Principal. He delivered lectures on materia medica at the College, and long held the appointment of Physician to Queen's Hospital. On the 6th instant, at Hoxton New-town, George F. Roe, Esq., surgeon, aged 24. On the 7th instant, John Mackinlay, Esq., surgeon, of Merrow, near Guildford, aged 40.

NAVAL APPOINTMENTS.—Surgeon Francis B. Pritchard (1847), to the Rattler, steam-sloop, at Woolwich.

ASSISTANT-SURGEONS IN THE NAVY.—It is reported that when the Lords of the Admiralty were at Devonport lately, they visited the Virago steam-sloop, and selected a cabin for the assistant-surgeon, thus setting at rest for ever the question as to the possibility of finding a cabin for these officers, even in a steam-sloops. It is said that the assistant-surgeon of the Virago has one of the best cabins in the sloop.

MILITARY APPOINTMENTS.—To be Assistant-Surgeon, James Davys, gent. Hospital Staff: to be Assistant-Surgeons to the Forces: Assistant-Surgeon Thomas Waller Burrow, from the 19th Foot; Assistant-Surgeon, James Richard Fennell, from the

79th Foot; Assistant-Surgeon George William Peake, from the 1st Foot. Acting Assistant-Surgeon, Lawrence Mackenzie.

BRANDING IN THE BRITISH ARMY.—MILITARY BARBARISM.—We read in a weekly contemporary, that "by an order from the Horse Guards, deserters from the army are in future to be branded by the medical officer of the regiment with the letter D." We apprehend the medical officers of the British army will not thank the authorities at the Horse Guards for imposing upon them an extra-professional duty so disgusting. We believe surgeons practise shaving in some parts of Spain; but the operation of branding has not hitherto been a branch of military surgery. The deserter already incurs the torture of the lash, and the further punishment of imprisonment with hard labour. Branding the body carries us back to an age of barbarism; and it is no slight indignity cast upon the Profession, when the surgeons of the British army are required to execute such a sentence.

MEDICAL APPOINTMENTS AND VACANCIES.—The office of Coroner for Taunton, Somersetshire, is vacant. We do not know whether any medical man is a candidate. The office should be contested by a member of the Profession. Mr. Jordan, late House-Physician to King's College Hospital, and one of the reporters connected with this Journal, has been elected by the Council Medical Tutor to Queen's College, Birmingham. A resident House-Surgeon and Apothecary is wanted at the Peterborough Dispensary and Infirmary: candidates must be M.R.C.S and L.S.A. Salary 80*l.* a-year, with furnished apartments, coals, candles, and attendance. The Physician, Dr. Paley, appoints to the office. The managers of the Righteous Path Friendly Society, in Aldgate, want a Physician in the room of Dr. Algernon Frampton. Applicants must reside within half a mile of Aldgate Church. Salary, 26*l.* annually.

BLenheim-STREET DISPENSARY.—At a meeting of the Committee of the above Institution, held on the 4th inst., Mr. Ashton, of Cavendish-square, was appointed to the office of surgeon, vacant by the resignation of Dr. Carlill, of Berners-street.

The funds of the Westminster Hospital have lately been increased by the anonymous donation of one hundred pounds.

DEVON AND EXETER HOSPITAL.—The 110th anniversary of this Hospital was held lately at Exeter. The authorities of the City and of the Hospital walked in procession from the building to the cathedral, where a sermon was preached on behalf of its funds, after which a collection was made to the amount of 72*l.* 4*s.* 10*d.*; the anniversary dinner took place at the Clarence Hotel, the Rev. A. Atherly presiding.

METEOROLOGICAL EXPERIMENTS.—Some Belgian *savans* have been performing meteorological experiments on the heights of St. Caumont, by raising a kind of kite, with magnets attached, to a certain height in the air. Although the weather was calm, they attracted from the clouds flashes of electricity ten or twelve feet in extent, so much resembling the lightnings of a storm as to astonish the spectators. Success having thus far attended their proceedings, they propose repeating them at Montmartre.

THE REGISTRAR-GENERAL, in his return for the week ending Sept. 6, says:—"Summer cholera prevails all over Europe in the hot season of the year. Its symptoms often resemble those of Asiatic cholera, from which, however, it differs in this respect, that the course of the fatal cases is much less rapid. This is the anniversary of the most fatal week of the great cholera epidemic of 1849, when 3183 of the inhabitants of London died; and the contrast between the health of the great city then and at the present time is gratifying, particularly as it is now the abode of so many thousands of strangers. It would be still more gratifying if the danger of the recurrence of cholera was, as it might be, diminished by the removal of the following and a thousand similar nuisances still existing, and laying the population open to the invasion of every epidemic. The Holborn Registrar, speaking of a death at 53, Eagle-street, Red-lion-square, says:—"This is the third case of death registered in the house since the 27th August, of fever and diarrhœa, besides two others sent to the hospital. The back of the house looks into Yorkshire-Grey yard, on the north side of Eagle-street, Red-lion-square, where there are two slaughter-houses, and generally a large dung-heap. The drainage in the yard is in a bad state. The stench arising from the slaughter-houses and dung into this house is beyond endurance."

DEATH FROM SWALLOWING A CHERRY-STONE.—We lately recorded an extraordinary case, where a man's life was saved by the operation of cesophagotomy, after a large bung had been lodged in the gullet. The papers have since published the case of a little boy, who died in consequence of a cherry-stone lodging in his throat, which the surgeon in attendance was unable to extract until after death. The newspaper record is necessarily very meagre, and

leaves it doubtful whether the stone were in the windpipe or oesophagus. From its not having been removed, and from the speedy death which followed its ingestion, we are inclined to believe that the foreign body had passed into the trachea, perhaps even into one of the bronchia. In either case, the particulars of the accident would be of a certain interest to the Profession. The case happened in Liverpool.

FLY POISON.—The death of a little girl at Nottingham, caused by drinking some fly poison, is recorded in the local papers. This dangerous fluid is usually a solution of arsenic, but some amount of risk to children would be avoided, if those who are anxious to escape the annoyance of the insect tribe would use an infusion of quassia instead. It is equally effectual, and has the advantage of being free from danger.

THE ALBERT PARK.—Plans and surveys are about to be prepared for a new park for Finsbury, to be called the Albert Park. The spot selected is about equidistant between the Regent's and Victoria Parks. It will cover an area of 150 acres, and the estimated cost for the purchase of the freehold is 150,000*l*. The metropolis will thus have in a short time seven parks or lungs for the benefit and comfort of its inhabitants. These establishments are genuine sanitary measures, and, if followed up by others equally necessary, will make London as thoroughly pre-eminent in a sanitary point of view as it is in all others.

PROGRESS OF EPIDEMIC DISEASE IN MAN, ANIMALS, AND PLANTS.—The cholera continues to prevail in some places in the United States, while it is disappearing in others. It has entirely ceased in St. Louis, and in Alton, Illinois; in Peoria, in the same State, there are cases of occasional occurrence. It has also broken out at Fannington, in Fulton county, and at Carthage, Hancock county, and lingers still in Monmouth, Warren county, and at Quincy, where, however, it is abating. In the latter place, the total number of deaths has been 150. In Bethel and Pisgah, in Morgan county, at Lewiston and Astoria, in Fulton county, and at Rushville, in Schuyler county, this dreadful disease has also shown itself. It still continues in Iowa. Several medical men have been among its victims. The miliary sweating fever is very prevalent in the communes of Briquebosq, Grosville, Sauxemesnil, Brix, and other places in the arrondissement of Valognes (France), and has recently broken out in Carentan. In the latter town its ravages are said to be most frightful, and exceedingly fatal. There were seventy fresh cases in one morning. Some cases of scarlet and miliary fevers have occurred at Sainte Marie du Mont. The cholera is disappearing in Algiers. The epidemic is rapidly decreasing in Oran. At the latest date, no new cases had been reported during the preceding forty-eight hours in the town, and the epidemic was subsiding in the provinces. The Moorish tribes on the frontier are, however, heavily afflicted. The disease is making extensive ravages among them. It continues in Jamaica, and has broken out among the soldiery stationed in Newcastle, in that island. In some districts small-pox is said to be very prevalent. The cholera has, however, entirely left the Park camp, where its deadly effects had lately been so severely felt. It is hoped that it will soon disappear from the colony. It still continues its ravages in the Grand Canary, but is gradually disappearing. Upwards of 9,000 persons have fallen its victims in that island. Teneriffe and the others are happily free from it. In Demerara and St. Thomas, influenza is very prevalent. In the latter island, three-fifths of the inhabitants had been attacked. A very singular disease, closely resembling small-pox, has lately been discovered in beans, according to the *Gardeners' Chronicle*. Its first appearance is that of well-defined papillary pustules, principally on the pods, varying much in size, perfectly smooth, and far brighter, but frequently darker, than the portion of the plant on which they are developed. They are beautifully transparent and very juicy: there is nothing in their structure to attract particular attention. There is not any discolouration of the tissues at first, and no appearance of disease, except that of hypertrophy. After a time partial discolouration occurs, as in so many forms of vegetable disease, and the walls of the cells become minutely granulated, and of a reddish brown colour. This condition soon extends to the cells at the apex of the pustules, which at length burst, and present the form of a rough black scab, the cells of which are of a dark rich brown. Two other forms of the disease occur, in one of which the pustules are more defined at the base from the first, and are by no means so transparent or vesicular in aspect, though the ultimate result is the same; and another in which the disease is more deeply seated, and neither pustule nor scab is formed, but the tissue in the centre of the patches—for they are no longer well-defined spots—become dark as that of the surface of the scabs. Many of the seeds which are not deformed by the irregular indented spots, are covered with well-defined brown maculæ, like those common on the leaves

of many plants, insomuch that the sample, when mature, can be saleable only at a very inferior price. In a few instances, where the pustule has formed immediately on the placentiferous suture, the whole pod bursts, and the seeds are greatly discoloured. The pustules have been carefully examined, to ascertain the presence of larvæ, but none have been detected. There can be but little doubt that the disease is due to a marked alternation of drought and wet during the present season, and probably to the highly manured condition of the soil. The latter cause was one of those assigned for the occurrence of the potato-disease, when it first made its appearance, more especially to the use of guano as a fertilising agent. The disease among potatoes has assuredly re-appeared, to a greater or less extent, in some places causing extensive mischief to that valuable esculent, but in others doing comparatively little damage, its ravages being principally confined to the leaves and stalks. The early planted potatoes will generally escape: the unripe ones may be expected to suffer more. The virulence of the disease is undoubtedly much mitigated, that is to say, by better cultivation the potato is more able to resist the mildew than it used to be, and possibly, by still greater skill, its powers of resistance may be still further increased. A writer in the *Gardeners' Chronicle*, however, asserts, that "it is clear that the mildew has firmly established itself in our fields, whence no skill can drive it: we are for ever saddled with this formidable foe. This has been pointed out so often, and the uncertainty of the crop has been so fully demonstrated, that we can no longer have sympathy with those who, in defiance of all advice and all experience, still continue to gamble in potato growing." Although the experience of several years past would seem to confirm this opinion, nevertheless, as this disease has occurred in bygone years, prevailed for some time, and then entirely disappeared, a hope may be entertained, that the same result may attend the present disease, especially as its virulence is markedly abating. This is clearly shown by the reports from Ireland, a country where perhaps a larger tract is planted with potatoes than in any other portion of the habitable globe. Notwithstanding the outcries of alarmists, that the crop was irretrievably destroyed, it would appear, that on the average not more than five in the hundred are diseased, and that the result will be ultimately very satisfactory. Blackening of the leaves has happened somewhat extensively, but this is not synonymous with disease of the tubers; it has often been observed that late planted potatoes have been prematurely blighted, so far as blackening of the leaves and stopping of the vegetation of the tubers before they arrived at maturity, and yet the latter remained untainted. This is not the disease of 1845; but this, it is said, is the present state of the greater part of the Irish potato crop. The leaves are totally blackened, because the crop is perfectly matured and ripe. The crop generally is most luxuriant, and there is scarcely a doubt but, even with all the tubers' disease that may exist, there will be more than an average crop.

DEATHS in the Metropolis for the week ending
Saturday, September 6, 1851.

CAUSES OF DEATH.	Sept. 6.				Sum of Ten Weeks.
	0	15	00	All Ages	
ALL CAUSES	518	303	144	967	11327
SPECIFIED CAUSES	515	303	144	964	11234
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	277	53	32	362	4745
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	2	12	15	29	436
3. Tubercular Diseases. ...	61	106	7	174	1820
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses, ...	48	31	21	100	1057
5. Diseases of the Heart and Blood- vessels	1	17	5	23	212
6. Diseases of the Lungs, and of the other Organs of Respiration ...	26	22	17	71	750
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	19	26	15	60	755
8. Diseases of the Kidneys, &c. ...	...	3	3	7	86
9. Childbirth, Diseases of the Uterus ...	...	0	2	8	105
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	1	1	3	72
11. Diseases of the Skin, Cellular Tis- sue, &c. ... ..	...	...	...	...	15
12. Malformations	3	...	...	3	36
13. Premature Birth and Debility ...	32	2	...	35	207
14. Atrophy	37	2	2	41	217
15. Age ... ..	...	...	19	19	113
16. Sudden	2	3	1	6	10
17. Violence, Privation, Cold, and In- temperance	6	12	4	22	218
Causes not Specified	3	...	...	3	43

TO CORRESPONDENTS.

[To the Editor of the Medical Times.]

SIR,—I have been rather surprised of late at hearing, in various quarters, Miss Martineau's name associated with atheistic and blasphemous principles. Will you kindly inform me on what particular grounds such charges are based?
I am, &c.,
PSYCHOLOGOS.

[Our Correspondent will, we hope, be satisfied with the following summary of Miss Martineau's views as set forth in her work, "Letters on the Laws of Man's Nature and Development," which summary appears in Dr. Bushnan's lately published replication, entitled, "Miss Martineau and her Master :"—

"That the matter which exists in space has had no beginning, and is to have no end; that it exists from eternity to eternity; that the arrangements of the universe, in all their gigantic extent, are the result of the laws of nature; that there is no design and no chance in the order of things; that plants and animals, at particular epochs, arise spontaneously, and continue for a time to exhibit the phenomena peculiar to the organised departments of nature in obedience to certain fixed laws of matter; that mind is the action of the brain; that there is no God, no hereafter for man, no liberty of action, no sin, no responsibility; that phrenology and mesmerism afford the means by which one man may study the phenomena of another's mind, as a part of nature; that distance does not prevent one man from seeing what passes in another's mind; that there is ground of hope for the improvement of the moral world in the fear inspired by mesmerism; that the inmost thoughts of any individual may be at any time subjected to the scrutiny of another; lastly, that the foretelling of future events is a power which exists in nature."

F. S.—The extensive distribution of some marine algae is explained by their peculiar structure. The hollow, pod-like receptacles in which their seeds are lodged, or the filaments attached to their seed-vessels, are plainly intended to impart buoyancy. Besides which, these hydrophytes are in general prolific, so that the smallest fragment of a branch (here analoguing the hydra of the animal kingdom) can be developed into a perfect plant. The whole subject of the geographical distribution of plants and animals is one of great interest, but is, in many cases, beset with difficulties.

Hortus Siccus.—A very simple yet pretty method of copying the form of a plant by photography, and one which we have adopted, is that classed under the name of cyanotype. It consists in washing a good surface-paper with a saturated solution of the ferro-cyanuret of potassium, which when dry must be exposed to the sun, with the plant pressed close to the paper by a plate of glass. A yellow picture on a green ground will result. The only drawback to this process is that it must be exposed to the direct rays of the sun, which, in our climate, is no joke, if many copies are required. The argentotype is a more speedy process, after the paper is prepared, but requires much more delicate manipulation, and considerable care in the "fixing" of the picture.

We have received a posting-bill announcing Lectures on Medical Botany by Doctor Coffin (ominous name). In acknowledging the compliment, we beg to refer the sender to certain Coroners' Inquests and verdicts of Man-slaughter which have graced the columns of the daily journals. Solomon hath it, "Answer a fool according to his folly,"—and, by parity, "A rogue according to his roguery." *Verb. sap., &c.*

G. B.—We do not think that the Coroner would refuse to hear you on oath. If he should, he would be acting contrary to the law. This point has been settled.

A Surgeon, Tower Hamlets.—We quite agree with you that some effort should be made to stop the dangerous practices of these herb doctors. It may not be generally known, that an inquiry took place before a coroner some time since respecting the death of a poor man, who was alleged to have been ignorantly treated by "a tea-grocer," one of Dr. Coffin's practitioners. This poor fellow, like the wretched victim whose case has been the subject of our recent comments, died of inflammation of the bowels; and it was proved in evidence, that agrimony, cayenne pepper, ground ivy, and other irritants and astringents had been administered. Coffin's Book is little better than an abstract of Hooper's "Medical Dictionary." Cayenne pepper is recommended for inflammation of the stomach (save the mark!), and lobelia is stated not to be a poison! It is disgraceful to the laws of this country that persons like Coffin's agents should be permitted to practise unchecked upon public credulity.

C. R., Westminster.—Have a little patience. We shall have something to say on the subject so soon as the arrangements have been completed. We believe that the best that the circumstances allow will be done. Your shortest way of getting information is to apply to the gentleman you name.

A Student.—The price of the book is 14s. It is the latest edition.

A Constant Reader.—We have so often answered the question respecting the amount of medical witnesses' fees in Coroners' Courts, that we suspect that our Correspondent is a less "constant reader" than he asserts. Under the circumstances stated, one guinea only could be claimed.

J. Wilson.—We know nothing of the state of affairs of the assurance office about which you inquire. Every sensible man will make an allowance for puffing, and not be deceived by it. All new Societies have great diffi-

culties to contend against, and not a few of these Societies may be unsound. That in question is probably neither better nor worse than its neighbours.

A General Practitioner.—Hastings is a very mild situation, and from being surrounded with hills landward, is a sheltered spot in winter, and desirable for delicate constitutions. In the summer it is too hot and suffocating, as there is not, and cannot be, a free circulation of air through the town, and the reflection of the sun's rays from the cliffs increases the temperature. St. Leonard's is not equally objectionable.

Oxoniensis.—Inquire of the Secretary of the Sydenham Society. There is too little demand for that kind of literature, to induce any regular publisher to undertake it. The Sydenham Society might; if not, you might gain some reputation by a venture on your own account.

M. D.—It certainly is not true that the circulation was demonstrated before the time of Harvey. Much learned argument has been adduced to prove the reverse, but, as we believe, unsuccessfully. In consequence of observations made on the structure of the heart, the circulation of the blood, as taught by Harvey, was shrewdly guessed; but the demonstration was given by that great physiologist. We cannot go minutely into the question for want of space.

H. P. W.—A suburban neighbourhood would best suit your purpose; but we cannot assume the responsibility of giving advice.

[To the Editor of the Medical Times.]

SIR,—I shall feel extremely obliged if in your Notices to Correspondents in your next Number, you will be kind enough to answer the following questions:—

Is abscess of the mamma a (legally) surgical case?—[Yes.]

May midwifery be charged for as a surgical case?—[Yes.]

In surgical cases, can payment be enforced for medicines and embrocations, as well as for visits and manipulations?—[Yes. Simpson v. Ralfe.] Have members of all Colleges of Surgeons in the United Kingdom equal power in recovering their fees?

[No. Members of Scotch and Irish Colleges cannot recover in strict law; but, perhaps, if tried, claim for work and labour done might be sustained. A Scotch or Irish diploma does not enable the possessor to practise in England. Collins v. Carnegie.]

I am, &c.

SPERO, AND AN OLD SUBSCRIBER.

[To the Editor of the Medical Times.]

SIR,—Your Correspondent, "J. C.," has still left the matter somewhat in the dark. He does not tell us which of the two extracts of aconite Mr. Cazenave uses, though they are of such different strengths that the dose of the alcoholic extract proposed in the notice of this subject in the "British and Foreign" would prove fatal to nine patients out of ten. Moreover, the heading of the paragraph (a) Mr. Pereira has devoted to this subject, would lead one to believe that the terms "aconite" and "aconitinæ" are interchangeable; and it is well known to many dispensers that some surgeons of high standing write aconitinæ in their prescriptions simply "aconit."

I am, &c.

A LOVER OF ACCURACY.

(a) P. 1338, line 8, aconitina—aconite.

J. O. asks:—1st. Is the author of the "Philosophy of Marriage" (published by Baillière, Regent-street,) the Dr. Ryan, or does it emanate from some parties assuming his name, in the "Silent Friend" style?

2nd. Does Dr. Ryan still see patients?

3rd. Where does he reside?

[We reply—

1. It is the Dr. Ryan.

2. He has been dead some years.

3. It is beyond our ken.]

[To the Editor of the Medical Times.]

SIR,—In your talented Journal of the 14th June, under the head of "Jamaica Intelligence," I remarked a question asked, What are the Government Medical Missionaries doing? and in reply, beg leave to inform you that I am located in the parish of Westmoreland, where the cholera is prevailing to an alarming extent, and am in daily attendance among the suffering community in this part of the island. I may also mention, that I have been very successful in treating the disease, under the circumstances. Messrs. Brown, Campbell, and Murphy, are employed in other places in a similar capacity.

I am, &c.

W. CRAWFORD, Assistant-Surgeon, R.N.

Westmoreland, Jamaica.

[We take this as a rather unsatisfactory reply to our question; and wish that our Correspondent, "who has been so very successful" in treating cholera, would inform us what has been his plan of treatment, out of the hundreds proposed.]

COMMUNICATIONS have been received from—

Dr. BARKER, of Bedford; Dr. J. O. McWILLIAM, R.N.; Dr. BENICE JONES; Mr. GROVE, of Wandsworth; Dr. RIGBY; Dr. LIGHTFOOT; Mr. GEORGE BRUISCK; A SUBSCRIBER, Welwyn; SPERO, Burnley; Dr. CHARLES BLAND RADCLIFFE; Dr. HISCOX, Clifton; Mr. EDWIN MORRIS, of Spalding; Mr. A. STOBO, Tortolu, Virgin Islands; Mr. W. CRAWFORD, R.N., Jamaica; Dr. HECTOR GAVIN; Dr. STONE; Dr. H. HASTINGS, of Cheltenham; SCRUTATOR; Dr. BURNETT, Alton, Hant; Mr. TOYNBEE, of Savile-row; J. O.; PSYCHOLOGOS; F. S.; HORTUS SICCUS; G. B.; A SURGEON; C. R.; A STUDENT; A CONSTANT READER; J. WILSON; A GENERAL PRACTITIONER; OXONIENSIS; M.D.; H.P. W.; A LOVER OF ACCURACY; Dr. J. B. THOMPSON; Dr. HENRY HUNT; Mr. G. F. COPELAND; Mr. NEWNHAM.

The Middlesex Hospital School of Medicine.
SESSION 1851-52.

The Session will Commence on Wednesday, OCTOBER 1, 1851, with an INTRODUCTORY LECTURE by Mr. TAYLOR.

The Hospital has recently been much enlarged and improved, and now receives 285 in-patients. Special wards are appropriated for cases of Cancer, of Syphilis, and of Uterine Disease.

The House Surgeons, Clinical Clerks, and Dressers, are selected from among the most deserving Pupils.

Clinical Lectures, and Prizes for Clinical Study, are given by the Physicians and Surgeons.

Patients with Diseases of the Eye and of the Teeth are attended apart from the other out-patients. There is also an extensive Midwifery Department open to the pupils.

Fee for Eighteen Months' Medical, and Three Years' Surgical Practice, £30.

Terms of attendance on the Hospital Practice and Lectures for the periods required by the College of Surgeons and Apothecaries' Company, £75. This sum may be paid by instalments of £30 at the beginning of the First Session, £30 at the beginning of the Second Session, and £15 at the beginning of the Third Session.

For further information apply to Mr. De Morgan, Treasurer to the School, at the Hospital, daily, from One to Two o'Clock; to Dr. Corfe, the Resident Medical Officer; or to Mr. Shedden, Secretary of the Hospital.

St. Thomas's Hospital College of Medicine and Surgery.

The next Session Commences on Wednesday, the 1st of OCTOBER, 1851, when an INTRODUCTORY ADDRESS will be delivered by Dr. LEESON, at Eight o'Clock, p.m.

Consulting Physician, Dr. Roots; Physicians, Dr. Barker, Dr. Leeson, and Dr. Bennett; Surgeons, Mr. Green, Mr. South, and Mr. Mackmurdo; Assistant-Physicians, Dr. Goolden, Dr. Cohen, and Dr. Peacock; Assistant-Surgeons, Mr. Solly, Mr. Le Gros Clark, and Mr. Dixon; Midwifery Department—Physician, Dr. Waller.

LECTURERS.—Medicine, Dr. Barker; Exanthemata, Dr. Gregory; Surgery, Mr. Green and Mr. South; Physiology, Mr. Grainger; Descriptive and Surgical Anatomy, Mr. Le Gros Clark; Chemistry, Dr. Leeson and Dr. Gladstone; Anatomical Demonstrations, Mr. Rainey and Mr. Bristowe; the Teeth, Mr. Saunders; Ophthalmic Surgery, Mr. Macmurdo; Comparative Anatomy, Dr. Meryon; Medical Jurisprudence, Dr. Barker; Materia Medica, Dr. Bennett; Midwifery, Dr. Waller; Botany, Mr. Bristowe; General Pathology, Mr. Simon; Clinical Medicine, Physicians and Surgeons.

Scholarships, Prizes, and Hospital Appointments, are awarded to meritorious students.

The Admission Fee to Hospital Practice and all the Lectures, is £40 for the first year; £40 the second year; and £10 the third. Special entries to Hospital Practice or to any particular Course of Lectures may be made.

For Detailed Prospectus and further information apply to the Dean; or to R. G. Whitfield, Medical Secretary, who is authorised to enter students.

H. B. LEESON, M.D. F.R.S., Dean.
R. G. WHITFIELD, Medical Secretary.

Medical School.

ANDERSON'S UNIVERSITY, GLASGOW.

The Winter Session will Begin on Tuesday, NOVEMBER 4, 1851. Lectures will be delivered daily for six months, on the following branches of Medical Science:—

ANATOMY, Descriptive and Physiological—Dr. M. S. Buchanan.
ANATOMY, Demonstrative and Surgical—Dr. M. S. Buchanan.
DEMONSTRATOR—Dr. George Buchanan.
PRINCIPLES and PRACTICE of SURGERY—Dr. Hunter.
PRINCIPLES and PRACTICE of MEDICINE—Dr. A. Anderson.
INSTITUTES of MEDICINE—Dr. E. Watson.
MATERIA MEDICA, PHARMACY, and DIETETICS—Dr. Easton.
CHEMISTRY—Dr. Penny.
PRACTICAL CHEMISTRY—Dr. Penny.
MIDWIFERY, and DISEASES of WOMEN and CHILDREN—Dr. Paterson.

MEDICAL JURISPRUDENCE and POLICE—Dr. Crawford.
NATURAL PHILOSOPHY (thrice a-week)—Dr. Taylor.
MATHEMATICS—Mr. Laing.

Summer Courses of Anatomy, Midwifery, Chemistry, and Botany, begin in MAY.

BOTANY—Mr. Bell.

Fee for each Class, £2 2s.; Perpetual, £3 3s.
Certificates of Attendance on the above Courses are received by the Universities of Oxford, Cambridge, London, Aberdeen, and St. Andrews,—by all the Royal Colleges of Surgeons in Great Britain and Ireland,—by the Faculty of Physicians and Surgeons in Glasgow, and by the Army, Navy, and East India Boards, and the Apothecaries' Company.

Students attending the Medical Classes have the opportunity of witnessing the practice of the following Hospitals—viz., Lying-in Hospital, 10s. 6d. for Six Months; Eye Infirmary, £2 2s. for Six Months; Royal Infirmary, £7 7s. for Two Years, including Medical and Surgical Clinical Lectures, which are delivered four times weekly. The patients admitted to the Eye Infirmary average 900 annually; those admitted to the Royal Infirmary, nearly 3000; besides 6000 out-patients, treated at the Dispensary. Average number of Surgical Operations, 120 annually.

The Saloon for Dissection, which is free to those attending either of the above Courses of Anatomy, is open from Nine a.m. to Four p.m.; and attached to it there have been opened a Reading Room and Museum for the use of the Anatomical Students.

The New and Extensive Laboratory of the Institution, fitted up expressly for Gentlemen desirous of pursuing Practical and Analytical Chemistry, is open daily from Eleven till Four o'Clock. No charge for Apparatus and Materials in the Class for Practical Medical Chemistry.

THE UNIVERSITY MUSEUM, a Splendid Collection of Specimens of Natural History, including more particularly those of Zoology, Geology, Mineralogy, and Antiquities, is open to all Students attending the University.—A valuable Medical Library is also attached to the Medical School.

University College, London.
FACULTY OF MEDICINE.

The Classes will Commence on Wednesday, OCTOBER 1st, when Dr. PARKES, Professor of Clinical Medicine, will deliver an INTRODUCTORY LECTURE, at Eight o'Clock p.m.

A Soirée will be held after the Lecture, in the Library, which the friends of the College are invited to attend.

THOMAS GRAHAM, Dean of the Faculty.
CHAS. C. ATKINSON, Secretary to the Council.

8th September, 1851.

Theatre of Anatomy and Medicine, adjoining St. George's Hospital, 1, Grosvenor-place.

SESSION 1851-52.

Introductory Address—Dr. Sibson, F.R.S., OCTOBER 1st, at Half-past Two.

ANATOMY and PHYSIOLOGY—Mr. Lane, Mr. G. E. Blenkins, and Mr. J. R. Lane.

DESCRIPTIVE and SURGICAL ANATOMY—Mr. G. E. Blenkins and Mr. J. R. Lane.

PRACTICAL ANATOMY—Mr. F. Godrich and Mr. H. Lane.

CHEMISTRY—Mr. Rodgers.

MEDICINE—Dr. J. Bampfylde Daniell, and Dr. Sibson, F.R.S.

SURGERY—Mr. Pilcher and Mr. Smith.

BOTANY—Dr. Lankester, F.R.S., F.L.S.

PRACTICAL CHEMISTRY—Mr. Rodgers.

MATERIA MEDICA—Dr. Lankester, F.R.S., F.L.S.

MIDWIFERY—Mr. Bloxam.

MEDICAL JURISPRUDENCE—Mr. Warder.

Fee for Attendance upon all Lectures required by the various Medical Boards, 42 Guineas.

For further particulars, apply at the School, No. 1, Grosvenor-place; or at the residences of the different Lecturers.

Charing-cross Hospital Medical School, West Strand, London.

Winter Session, October, 1850, to MARCH, 1851.

INTRODUCTORY ADDRESS—October 1, Three p.m.—Mr. E. Canton.

CHEMISTRY—H. H. Lewis, A.M.

DESCRIPTIVE ANATOMY—Mr. Canton.

DEMONSTRATIONS, &c.—Mr. Canton.

SURGERY—Mr. Hancock.

ANATOMY and PHYSIOLOGY—Mr. Hird.

MEDICINE—Dr. Chowne and Dr. Rowland.

SUMMER SESSION, MAY 1, 1852, to the end of JULY.

PRACTICAL CHEMISTRY in the LABORATORY—H. H. Lewis, A.M.

MATERIA MEDICA—Dr. Steggall and Dr. Willshire.

BOTANY—Dr. E. Smith.

MIDWIFERY, &c.—Dr. Chowne.

MEDICAL JURISPRUDENCE—Dr. G. Birkett.

Fee for all the Lectures required by the College of Surgeons and Society of Apothecaries, 42 Guineas; without Practical Chemistry, £42.

HOSPITAL PRACTICE.

PHYSICIANS—Dr. Golding and Dr. Chowne.

ASSISTANT-PHYSICIAN—Dr. Rowland.

SURGEONS—Mr. Hancock and Mr. Avery.

Medical Practice, full period required £15 15 0

Surgical 15 15 0

Both Medical and Surgical Practice 26 5 0

Clinical Lectures by the Physicians and Surgeons.

Attendance at this Hospital and School qualifies for Examination on the respective subjects at the University of London, Royal College of Surgeons, and Society of Apothecaries.

JOHN ROBERTSON, Hon. Secretary.

Westminster Hospital School of Medicine.

SESSION 1851-52.

The Lectures will Commence on Wednesday, 1st OCTOBER, with an INTRODUCTORY ADDRESS by Mr. Holthouse.

ANATOMY and PHYSIOLOGY—Mr. Hillman and Mr. Brooke, F.R.S.

DESCRIPTIVE and SURGICAL ANATOMY—Mr. Holthouse.

ANATOMICAL DEMONSTRATIONS—Mr. Burford Norman.

CHEMISTRY—Mr. Lewis, M.A.

MEDICINE—Dr. Hamilton Roe and Dr. Basham.

SURGERY—Mr. Phillips, F.R.S., and Mr. Holt.

MIDWIFERY and DISEASES of WOMEN—Dr. Frederic Bird.

MATERIA MEDICA—Dr. Basham.

FORENSIC MEDICINE—Dr. Fincham and Dr. Tanner.

BOTANY—Dr. Radcliffe.

DENTAL SURGERY—Mr. Clendon.

HOSPITAL PRACTICE, Daily, from Half-past Twelve to Two o'Clock.

CLINICAL LECTURES will be delivered regularly twice a-week, by the Physicians and Surgeons; those on Midwifery, by Dr. Merriman and Mr. Greenhalgh.

General Fee to the Lectures required by the College and Hall, Forty Guineas.

A Matriculation Scholarship will be instituted, the holder of which will be admitted, without fee, to the Lectures and Hospital Practice required by the College of Surgeons and the Society of Apothecaries. The Examination for this Scholarship will be held on Friday, October 3rd. A Scholarship, of the annual value of £20, tenable for three years, will be vacant in 1854, and will be awarded to the student who shall most distinguish himself in a general examination.

Further particulars may be obtained on application to the Lecturers, or to F. J. WILSON, Secretary to the Westminster Hospital.

ORIGINAL LECTURES.

LECTURES ON PUBLIC HEALTH.
ADDRESSED TO THE STUDENTS OF THE
THEOLOGICAL DEPARTMENT OF
KING'S COLLEGE.

By WILLIAM A. GUY, M.B. Cantab.,

Dean of the Medical Department of King's College, Professor of Forensic
Medicine, and Physician to King's College Hospital, &c.

CONTENTS.—The Subject of Tramps and Vagrants resumed.—The Philosophy of Vagrancy.—The *Classes Dangereuses*, how created and sustained.—Indiscriminate Almsgiving contrasted with True Charity.—Pecuniary Burdens imposed upon the Public by Typhus Fever.—Expenses occasioned by it in the London Unions.—Deaths from Typhus Fever in England and Wales, 1838 to 1842.—Deaths in London, 1838 to 1849.—Estimate of the Annual Loss of Money in England and Wales from Typhus Fever.—Agency of Filth and Defective Cleansing and Drainage in causing Typhus Fever.—Fever a contagious Malady.—Filth rarely other than a Predisposing Cause.—Occasional Origin of Fever in Filth and Defective Drainage.

In my last lecture, I promised to resume the subject of tramps and vagrants, and the part they play in the conveyance of typhus fever and other contagious maladies from place to place.

The low lodging-houses, and the vagrant or casual wards of the workhouses, are the favourite resorts and temporary resting-places of these purveyors of pestilence. Now, it is very important that you should understand who and what these tramps or vagrants are, how they have been called into existence, and how they are perpetuated. I believe that I am describing them correctly when I state, that they consist, 1st, of honest men in search of work, or of itinerant hawkers and petty tradesmen, who frequent the more respectable of the cheap lodging-houses; 2ndly, of Irish labourers on their way to some distant employment, such as harvesting, but who live in the mean time by begging, and frequent the low lodging-houses and the casual wards of the union workhouse; and, 3rdly (and this, I believe, forms the large majority), of men and women who follow the infamous trade of begging. The term "tramp" belongs, I believe, properly to the first two classes; the term "vagrant" to the last.

Of these three classes, the vagrant class is by far the most mischievous, for while the Irish tramp generally combines in his own person the two characters of mendicant and labourer, and adopts the ragged garb and filthy habits which pertain to the first character, the vagrant, properly so called, is, in a large proportion of cases, both a mendicant and a thief. The Irish mendicant labourer is generally believed to keep his hands from picking and stealing.

Now, as the class of vagrants who follow this mixed trade of begging and thieving, evidently admit of being greatly reduced in number, if not of being absolutely annihilated, while the first two classes must, in the nature of things, continue to exist, let us, like practical men, endeavour to find out how these votaries of idleness, masqueraders in rags, patrons of filth, and purveyors of pestilence, first came into existence, and are now cherished and supported.

From the inquiries of the *Special Correspondent of the Morning Chronicle*, and from other credible sources, we learn that these mendicant thieves are originally either children brought up to the trade by their parents; or neglected children of an idle and truant disposition; or children ill used at home; or perverse children rebelling against the wholesome restraints imposed upon them by parents, teachers, or masters; or children brought up in listlessness and idleness in ill-managed workhouses, who, being put

out to trades, soon yield to the manifold temptations to relapse into the bad habits of their childhood. These children, having once absconded from control, or taken up with this vagrant mode of life, find it (to our disgrace be it spoken) so easy to live by begging, that there is little or no inducement to return to the paths of industry and good conduct. They soon meet with more experienced associates, who introduce them to the low lodging-houses, where they are speedily initiated into every species of vice. If they are found possessed of sufficient quickness, adroitness, and cunning, they become *thieves*; if, on the contrary, they are destitute of these qualities, they continue in what these outcasts of society are in the habit of regarding as an inferior grade—that of the beggar and petty pilferer.

As the child grows into the youth, and the youth into the man, he becomes more and more confirmed in his evil courses, and more and more experienced in the almost numberless contrivances by which the compassionate but too credulous public may be imposed upon. Occasionally the ranks of this motley crew of mendicant thieves are recruited by grown-up men and women, who abandon the pursuits of industry from temporary failure of employment, or from distress brought on by bad habits, and who, finding the trade of begging both easy and profitable, embrace it for the remainder of their lives. Among these there are some who, having had a good education, become begging-letter impostors, or live by the drafting of petitions with forged signatures.

It is not consistent with my present limited object to enter into a more detailed examination of the several shapes which the one great giant vice of mendicancy assumes, of the manifold combinations, of which the two elements, *idleness and fraud*, are susceptible. Indeed, we cannot walk the streets of London without becoming but too well acquainted with several of its forms; such as the mere Irish beggar, without anything to recommend him but his rags and his filth, the slatternly female, with the transparent pretence of trifling articles on sale, and the street-sweeper, with the equally fraudulent show of a willingness to do something for his livelihood. Now, with regard to all of these, with scarcely an exception, it may be safely asserted, that they are filthy in their dress and habits, filthy in respect of the places they live in, and of most dissipated lives; dangerous to their neighbours from their extreme liability to infectious disorders; burdensome to the rate-payers for the same reason; demoralising to the honest poor by the example they afford of the possibility of living in filthy luxury without work; and most dangerous to the State, as furnishing the worst material of mobs and riots. In a word, they form the bulk of what our French neighbours have christened the *classes dangereuses*.

A very considerable section of this dangerous class of the community is migratory in its habits, carrying with them from London, as a centre, with something of the regularity and method of commercial travellers, their rags, their filth, their depraved tastes and dissipated habits, and their diseases, into every part of the country where indiscriminate almsgiving has created a demand for them.

In speaking, in a former lecture, of Church-lane, St. Giles's, I stated that it is a very favourite resort of thieves and beggars. They form, with a certain proportion of costermongers and hawkers of mats, oranges, and onions, the bulk of its population. Now, I would especially call your attention to what is going on in and about this street on Sunday morning. It is a great centre and source for the supply of Sabbath-breakers in the form of street-sweepers, who stand with broom in hand at all the crossings of Holborn, Tottenham-court-road, Great Russell-street, and the streets and squares leading out of it,—of mendicant Irish families, who collect on the west side of Lincoln's-inn-fields, in waiting for the congregation of the Roman Catholic chapel,—and of hawkers of fruit, who scatter themselves in large numbers through the neighbouring thoroughfares. And it is a curious and painful thing to see Christian men, in their way to and from religious worship, ministering, by their misplaced liberality, to that life of idleness, of which Sabbath-breaking is one of the manifestations.

Happily for this nation, and greatly to the satisfaction of all who take an interest in the physical, intellectual, and moral improvement of the poorer classes, the nature and true causes of this great evil of mendicancy are beginning to be understood. We have found out, that mendicancy is but the ingenious counterfeit of true poverty; that rags and filth are but the uniform of a profession; and, what is more important than all, good and humane men are opening their eyes to the startling fact, that this dropping of pence into hands held out in streets, and highways, and doorways, this thoughtless and careless distribution of money, provisions, and clothing, is as wretched a counterfeit of *true Christian almsgiving*, as the beggar disguised in rags and filth is of *true poverty*.

Men are beginning to feel, too, that these habits of self-indulgence, which they had hitherto regarded as acts of charity, have in reality called into existence and continue to support a class of outcasts from society, whose existence is fraught with every species of danger,—agigantic and populous nuisance, physical and moral, which it is our bounden duty, by the complete reform of our own careless habits of expenditure, to suppress. Nor must we be deterred from entering upon this reformation from any apprehension that the great good which must result from transferring the money now lavished in the creation and maintenance of mendicants and thieves will be counter-balanced, at least to some extent, by the starvation of some of those from whom we have withdrawn our supplies. For, in the first place, it is well known, that the average receipts of the begging community far exceed those of an equal number of honest working-men, and that they admit of being considerably reduced without danger; and, in the second place, actual experience has proved, that the late successful appeals to the public by the *Times* newspaper, though they must have been the means of transferring a considerable sum of money from the hands of these impostors into channels of true charity, or into the hands of honest working-men, were not followed by any loss of life. The same remark applies to the great change which was made in the Poor-law in the year 1834. No less than *two and a half millions of money* were then transferred from the hands of idleness to those of industry, not only without danger to life, but with great and acknowledged benefit to the community at large. Such are the marvellous adaptations of which the great machine of society is susceptible. Such is the unerring operation of the great law of supply and demand, that, just as the stage coachman, superseded by the engineer, gradually, with some suffering, but with little or no absolute loss of life, finds for himself a new occupation and a new place in society,—just as the pauper, with similar results, becomes absorbed, under some sweeping economic change, into the great industrial body to which he had belonged,—so the *classes dangereuses*, the beggar, the vagrant, the petty thief—that vast mass which now lives by idleness and depredation, by the gradual withdrawal of the fund which created and supports them, will be absorbed and blended with the classes out of which they have been seduced by the subtle temptation of indiscriminate almsgiving.

But, gentlemen, I must not allow my real meaning to be misunderstood. I am now entering a protest, not against *true*, but against *counterfeit* charity. I contend, that the self-indulgence which displays itself in the careless squandering of money, (small in the units given, but gigantic in aggregate amount,) I contend that this bad use of money is as little deserving of the name of charity as profligate extravagance deserves the name of generosity. If I had had any doubt upon this point, if I could have brought myself to look upon this habit, so mischievous in its results, as even remotely allied to true charity, I should not have said what I have; but looking upon it, as I feel justified in doing, as the prime source of a vast amount of disease and consequent misery, of heavy pecuniary burdens to the industrious, and consequent poverty, of gigantic moral evils, and wide-spread demoralisation, I trust that you will not deem me to have gone far out of my way in commending it very earnestly and seriously to your attention.

A few words more, and I return to my immediate subject—typhus fever. The thought may, perhaps, have crossed your minds, that, by such arguments as I have used, it would be possible to condemn all almsgiving. It may be said, that, as all the money that we give is taken from that which, if we did not give, we should spend, and, in spending, set labour in motion, we cannot, by almsgiving, accom-

plish any real good. Or,—to put the argument in another form,—it may be said, that the money which we *spend*, prevents the very poverty which the money we *give* only palliates. This, gentlemen, though the statement of a great and vital truth, is not the whole truth. It makes no provision for the meeting of emergencies, and these are the occasions for the display of *true charity*,—of a charity which observes all the precautions against imposition that common prudence would dictate, which equally guards against leading its object, by its own indiscretion, into temptation,—which feels that the more sacred the duty to be performed, the greater demand is there for the exercise of care in its fulfilment.

But, while we are bound to contend for the large exercise of charity in cases of proved emergency, it would be well that, even in *these* cases, the recipients of our charity should feel that the aid we tender is not merely a transference of money from wealth to poverty, but a direct withdrawal from the funds which otherwise would have gone to support and stimulate the labour of the poor. I am not aware that this principle has ever been urged in this form before; but, for my own part, I can conceive no doctrine more wholesome in its tendency than that which should proclaim money as the representative of labour; industry, as having the first claim to its use; and charity itself, as bound to justify its withdrawal or diversion from this, its first and most legitimate use, by a well-ascertained emergency. Under the operation of such a doctrine as this, mendicancy, and with it theft, (at least to a great extent,) would disappear, and the pauper would be replaced by the labourer. If we could but cut off the supplies from the great mendicant class, we should do more to restore a healthy state of things than by all the ragged-schools in the world, (valuable as they are,) and all the teaching which it is now in our power to bring home to these wretched outcasts of society. I must confess that I have much more hope of a good result from teaching the rich the manifold mischiefs attending a careless use of money, than from instructing the wretched class whom they have called into existence. But that it is our duty to do all we can to enlighten both classes—the givers and the receivers, the patrons and the clients, there can be no doubt. This twofold instruction, I am happy to say, is now going on; and the clergy are, much to their credit, beginning to administer their wholesome reproofs to both classes of offenders.

But I must hasten from this digression to the topics which still remain to be handled in reference to typhus fever. Having fairly established the parallelism between gaol fever and typhus fever in all the leading features of the two diseases, I have still to furnish you with some important statistical information relative to the amount of sickness and mortality which this fever occasions, and the heavy burdens which it entails. I have also to prove to you, by an appeal to facts, how easily typhus fever may be banished, even from its most favoured haunts, and how closely it is connected with an element I have hitherto only incidentally mentioned,—I mean filth, and defective drainage and sewerage. I may also find time to add a few words as to its moral consequences and re-actions.

Perhaps, as I have just been speaking of subjects in connexion with the production of fever, which belong to what may be termed the economical, or politico-economical, bearing of the disease, I cannot do better than read you a short and most suggestive paragraph from Dr. Southwood Smith's evidence before the Health of Towns Commission. He tells us that "the Bethnal-green and Whitechapel Unions incurred an extra expense for fever cases for the quarter ending Lady-day, 1838, the one of 216*l.* 19*s.*, the other of 400*l.*, making a total of 616*l.* 19*s.*; and being at the rate of 2467*l.* 16*s.* a year." And further, that "of the total number who received parochial relief in most of the districts, a very large proportion received it in consequence of their being ill with fever; but in one district, namely, St. George's, Southwark, out of 1467 persons who received parochial relief, 1276—that is, the whole number, with the exception of 191—are reported to have been ill with fever."

How suggestive is this remarkable statement, even to the dullest apprehension, of the vast superiority of preventive to palliative measures, and of the duty which devolves upon us all of looking closer than we have done before into the causes of the evils, whether physical or moral, which afflict our poorer brethren, and, by sure re-actions, tend to our own impoverishment and injury! Between a good sanitary law, which should prevent these evils, and the best of Poor-laws,

which can, in no case, do more than palliate them, what an infinite distance! How vastly superior the one to the other!

Such being the costliness of fever, such the heavy parochial burdens which it imposes, let us now take a larger view of the matter, and embrace the whole nation in our calculations. Let us endeavour to ascertain, first, the number of deaths from typhus fever which occur year by year in England and Wales, then the number of cases which do not prove fatal, and lastly, let us endeavour to arrive at a rough approximation of the pecuniary losses and burdens which these deaths and this sickness occasion.

First, as to the number of deaths from typhus fever occurring year by year in England and Wales.

Taking the five years 1838 to 1842 inclusive, the deaths from this disease were as follow:—

1838	18,775
1839	15,666
1840	17,177
1841	14,846
1842	16,201
<hr/>	
Total	82,665
Average	16,533

The average number of deaths, then, from typhus fever in England and Wales for these five years was upwards of 16,500. Since that period, there have been some more fatal and some less fatal years, but, taking one year with another, the average mortality from typhus fever has certainly increased. Towards the latter end of 1846 and the beginning of 1847, especially in the great manufacturing and commercial cities of the north, into which the starving and fever-stricken Irish poured by thousands, its ravages were perfectly frightful, and the number of deaths, though not yet accurately recorded, must have reached double or treble the average of ordinary years. Some idea, both of the fluctuations of the number of deaths from year to year, and of the great increase which has taken place in the last three years throughout the kingdom, may be formed by the returns for the Metropolis. These have been made up for no less than twelve years, beginning with the great epidemic year, 1838, and ending with 1849. The numbers are as follow:—1838, 4078; 1839, 1819; 1840, 1262; 1841, 1151; 1842, 1174; 1843, 2083; 1844, 1696; 1845, 1301; 1846, 1796; (here the numbers begin to increase); 1847, 3184; 1848, 3569; 1849, 2479. Now, if we take the first five years (the same which I just selected to show the deaths from fever in England and Wales), and compare them with the last five, we shall arrive at a fair probability that the 16,500 deaths from fever for the whole of England and Wales is not very far from the true average mortality, one year taken with another.

The deaths in London from typhus fever for the five years 1838 to 1842 inclusive, amount to 9484, being an average for the year, of 1897; but the deaths from the same cause for the five years ending 1849, amount to 12,329, and the yearly average to 2466, being an increase of about one third. Now, if this ratio admits of application to the kingdom at large, which I think we may fairly assume that it does, it follows that the annual deaths from fever for England and Wales during the last five years, instead of being 16,500, must have risen to considerably upwards of 20,000. With our present population, and our present liability to fever, it seems by no means unfair to assume the annual mortality from typhus fever to be about 20,000; and, without entering into minute calculations, I think we may also assume that for every fatal case of fever there were at least ten cases of recovery.

Now let us endeavour, in accordance with received estimates, to form some idea of the waste of money which, on the assumption that these attacks of fever might have been prevented, the nation incurs, year by year, by typhus fever alone. Time will not allow me to justify each item of the estimate; but I believe them to be very moderate:—

20,000 funerals, at an average expense of 5 <i>l</i> .	£100,000
200,000 attacks of fever, at an average cost in medical attendance of only 1 <i>l</i> . per head	200,000
Average loss of wages for four weeks at 1 <i>l</i> . per head	200,000
<hr/>	
	£500,000

These three items alone, without taking into account the

heavy and long-continued burden of widowhood and orphanage, resulting from a disease which attacks adult men and women in the prime of life in much larger proportion than the young and old—these three items, I say, amounting as they do, on a very low estimate, to half a million of money, will serve to give us some idea of the heavy burdens, which disease imposes upon the community,—of the large sums diverted from the butcher, the baker, the clothier, and the landlord, to be spent unprofitably and unproductively among undertakers, druggists, and doctors, in the wards of hospitals, or in the infirmaries of workhouses. The estimates which I have laid before you are ludicrously low; but the facts which I have adduced from the evidence of Dr. Southwood Smith respecting London workhouses, give us some reason to believe that in epidemic years the burdens imposed upon us by typhus fever form no inconsiderable proportion of the entire Poor-rates.

I have now to call your attention to one of the causes, or promoters, of fever, of which I have hitherto spoken only incidentally, as connected with overcrowding,—I mean filth, especially as occasioned by defective cleansing and drainage of streets and houses. Every medical man knows that fever may spread from person to person in places, and under circumstances, where cleanliness is scrupulously observed. In hospitals, for instance, if fever cases are admitted among the other patients, and either too many of such cases are put into one ward, or too little space is allotted to each patient, fever will spread in that ward among the convalescents from other maladies, and among the nurses and medical men in attendance on the sick. In fever hospitals, also, the same thing (from the greater concentration of the infectious poison) is of very frequent occurrence in spite of the most scrupulous attention to cleanliness. The disease will also, as we all know, make its appearance from time to time, and even seem to originate in houses of a superior class, and among persons of the most cleanly habits. On the other hand, it is not to be doubted that the great majority of fever cases do occur in districts remarkable for a neglect of cleansing and sewerage, and among persons of notoriously filthy habits. In confirmation of this statement I will quote a few passages from Dr. Southwood Smith, whose name I had occasion to mention in my first lecture as having taken the lead in the advocacy of sanitary measures. He says:—

“The records of the London Fever Hospital prove indubitably that there are certain localities in the Metropolis and its vicinity which are the constant seats of fever, from which this disease is never absent, though it may prevail less extensively, and be less severe in some years, and even in some seasons of the same year, than in others.” “In former years, in some localities, there was not a single house in which fever had not prevailed, and in some cases not a single room in a single house in which there had not been fever.” “The districts in which fever prevails are as familiar to the physicians of the Fever Hospital as their own names.”

Now what is the character of these districts? I will give you the answer to this question in Dr. Southwood Smith's own words:—

“In every district in which fever returns frequently and prevails extensively, there is uniformly bad sewerage, a bad supply of water, a bad supply of scavengers, and a consequent accumulation of filth; and I have observed this to be so uniformly and generally the case, that I have been accustomed to express the fact in this way: If you trace down the fever districts on a map, and then compare that map with the map of the Commissioners of Sewers, you will find that wherever the Commissioners of Sewers have not been there fever is prevalent; and, on the contrary, wherever they have been, there fever is comparatively absent.”

In confirmation of the facts stated by Dr. Southwood Smith, in reference to the occurrence of typhus fever, year after year, in the same places, and even in the same houses, I may quote a passage from the interesting work of Mr. Willis, on the social and sanitary condition of the working classes in the city of Dublin:—

“Every one,” he says, “acquainted with disease within the city must admit that there are localities from which contagious fever is never absent.” “Eighty cases of fever, including relapses, were said to have occurred in one house in the course of twelve months.” “Fifty persons have been admitted to hospital from another within a year.” “Thirty patients from another within eight months.” “Nineteen, from a fourth, in six weeks.” “The inmates of a house, which was thrice lime-washed in the space of a few weeks,

were as often re-admitted to hospital, in consequence of sleeping in their infected bedding."

The connexion of typhus fever, then, with filth and defective drainage, is as well established as its connexion with overcrowding. There is no point in the history of the malady better ascertained. But the precise relation which the one bears to the other is still, in some degree, a subject of controversy. On the one hand, it is maintained by some persons of extreme views, that typhus fever may be, and often is, occasioned by filth, without any aid from contagion. On the other hand, a large number of authorities are disposed to deny that fever can originate in any other manner than by contagion; and they assert confidently, that filth is altogether inadequate to occasion it. Perhaps I cannot better express my own views upon this subject than by quoting a passage from a lecture which I delivered some years since, when the sanitary movement was in its infancy. I quote the passage to show that, at the time at which it was written, I had not been able to make up my mind whether filth could produce fever.

"My own opinion is, that fever is a contagious disease, spreading from person to person, just as small-pox or scarlet fever does, but, like these diseases, haunting over-crowded or ill-drained districts, and all places where, from any cause whatever, the air is foul, and filled with animal and vegetable exhalations. It loves the banks of rivers, the borders of marshes, the edges of stagnant pools. It makes itself at home in the neighbourhood of cesspools and badly-constructed drains, and takes especial delight in the incense of gully-holes. It has a perfect horror of fresh air, soap, and whitewash, but, when left to itself, will linger for years amid scenes of filth and corruption, and fold in its deadly embrace all human beings who have the same depraved taste, or are so unfortunate as to be thrown into its company. It is the favourite child of *Laissez faire*, (in plain English, *Let alone*,) and bears the same relation to filth as crime does to ignorance."

The difficulty which I had in making up my mind on the true bearings of this question, was the same sort of difficulty which I have always experienced in regard to the effect of animal exhalations from grave-yards and slaughter-houses,—namely, the concurrence of more than one sufficient cause of disease on or near the spot in question. Now, contagion is a universally acknowledged cause of fever; and, in large towns, it is extremely difficult, nay, impossible, to meet with a case in which this cause might not be reasonably presumed to be in operation.

But, within a short space of time, a case has been reported by one of the most accurate observers in the Profession, and a man in all respects admirably qualified to sift and weigh evidence,—I mean Dr. Christison, of Edinburgh,—which appears to place beyond all reasonable doubt the possible origin of fever from defective drainage, and consequent accumulation of filth.

The scene of this tragedy was a farmhouse in Peeblesshire, near Edinburgh. Four persons—an aged couple, both in perfect health, their female servant, and their son—were attacked by fever in rapid succession. The first three died; the son alone survived. Fifteen other persons, who either resided in the house, or were much in it during the day, and three or four others who were occasionally in the house, were more or less severely attacked. I will not detain you by mentioning the suspicions which were excited, nor all the minute inquiries set on foot by Dr. Christison, nor all the cautious reasonings by which he arrived at the true cause, which turned out to be the foul state of the drains and sewers. They were found "closed up and obstructed with the accumulated filth," which diffused an offensive odour for a considerable distance around, and had been absorbed by the soil. A heap of farm-yard stuff had also been placed against the wall.

This case is in every respect important. It not only proves the possible origin of fever in filth, but serves, in some degree, to explain the fact which I have stated in a former lecture, that while there is, in many diseases, an immense disparity between the numbers occurring in town and country, the number of deaths from fever, in large towns, exceeds by only one-fourth those occurring in the same number of persons in the country. If the towns should become the scenes of extensive sanitary improvements, and the country should be neglected, we shall doubtless find that fever, expelled from our towns, still retains its hold upon our rural districts.

ORIGINAL COMMUNICATIONS.

OBSERVATIONS
ON
SOME OF THE MORE IMPORTANT DISEASES
INCIDENT TO WOMEN.

BY THOMAS LIGHTFOOT, M.D., &c., &c., &c.

Formerly Consulting Surgeon to the Nottingham Union Hospital and Dispensary.

(Continued from No. 4, July, 1850.)

On Malposition of the Unimpregnated Uterus; on Fibrous Tumours; and on Congenital Malformation of that Organ, viewed as a Cause of Sterility and Disease.

It must be admitted, I think, by all candid persons, that numerous cases of disease in women of an exceedingly doubtful nature, are brought under the notice of the medical man; with symptoms at times quite anomalous and unintelligible; at other times bearing seemingly no relation, or at least no correspondence, to the pathological conditions in which they are supposed to originate,—on which they are presumed to be dependent; and, if traceable to such morbid conditions, assuredly bearing no proportion in severity to their apparent producing cause.

The disease termed "malposition of the unimpregnated uterus," is one of those conditions to which I refer. The occurrence of such an alteration in the form and position of the uterus in certain persons being admitted, questions of the greatest importance arise as to—1st. The causes of the malposition; 2ndly. Its effects on the constitution; 3rdly. The means of cure. It is this latter which alone interests the public; the two former are strictly professional inquiries.

It has been said that no woman is exempt from this misfortune; the female with the well-formed, equally with the contracted pelvis, is liable to this accident. If the uterus be preternaturally large, there is greater danger of retroversion taking place than if it be of the normal form. It is to be regarded rather as an accident than as a disease; but this we shall find is not the real question, which has been always carefully kept out of view by theoretical men. It is not the possible deviation of the uterus in its unimpregnated condition from its more natural position to another less so,—anteversion or retroversion; such changes, together with lateral version, may all be admitted, together with partial prolapsus or descent,—it is not this which constitutes the essence of the question; it is the evil results to the constitution of the patient which may arise, and which can be clearly traced to such malposition.

A word or two on the circumstances which first led British medical men to turn their especial attention to the class of diseases which forms the subject of this and of the next Memoir, namely, "On the Chronic Inflammation and Ulceration of the Utero-vaginal Mucous Membrane." In order to comprehend the anger and excitement to which this inquiry gave rise in Britain, let me trace its history to and from that centre of most of the novelties which, in our Profession as well as in others, come and go for a season and for a time,—to France, or Paris if you will—for Paris is France. The extent of hospital assistance afforded the population, the freedom of speech and inquiry among all classes of the people, the habits of the people themselves, the existence of large public hospitals called *Maternités* and *Hôpitaux des Enfants Trouvés*, added to the presence in the capital of France of a scientific *réunion* of anatomists, chemists, physiologists,

and pathologists, without its equal in the world,—each and all these contributed their share towards the elucidation of those diseases of single or unmarried women, which have been hitherto left, in Britain and elsewhere, to patience and the nurse. All this was a step in the right direction. Here was a whole class of diseases elucidated neither by ancient nor modern physiology, ancient nor modern pathology, ancient nor modern practice; symptoms were present, indicating disease somewhere, or at least morbid sympathies with conditions of organs, which could not be deemed physiologically healthy. At one time, it is the case of a young woman, whether single or married, who, not having in the latter case any family, drags on a miserable existence from year to year, harassed with pain in the back, loins, and limbs; internal pains, too, not unfrequently referrible to no especial organ; wasting; unpleasant discharges; confinement to bed or couch for months; sterility, premature old age, and death. At another time, or in another case, it is the bladder which is complained of, or the rectum; inability to walk, or even to sit upright; bearing-down pains; sterility; miscarriages. Formerly, the physician on being called in (and this fact must, I think, be admitted) made little or no examination of the person. He diagnosed a constitutional disorder of the functions, recommended general remedies, objected to all strong measures, and left the patient to her fate. That such was the practice and the relation of the Profession to both classes of disease of which I am about to speak in these Memoirs, is certain. They could not well investigate them more deeply; the organs to be examined lay out of sight, and, as yet, there was no speculum. Physiology gave little or no aid—its relations to pathology being about as inconsiderable and valueless as they are now.

Our predecessors, moreover, it is probable would have hesitated in adopting, to such an alarming extent as modern practice sanctions, the exposure, always more or less, which deeper inquiries necessitate; if they respected the matron, as assuredly they did, they respected still more the feelings of the virgin. They had not then invented apparatus for washing out the virgin womb,—for clearing the Fallopian tubes. Of the speculum, and of all the consequences of its use and abuse, they were comparatively ignorant. I pretend not to blame or censure any one; medical men act, no doubt, from the best of their judgment. Science changes with time, and men's opinions also change; but the great body of the Profession was wholly at fault, when it declared that continental practices,—for they are not peculiarly French, would not be submitted to by English or British women. On this point the Profession was entirely at fault, as experience has shown.

Whilst medical practice in Britain reposed on past views and past theories, proving itself to be a practice which, to say the least of it, was anything but successful, the continental surgeon and physician kept steadily in view the fact, that cases daily presented themselves in hospitals, and in private practice, which resisted all treatment, and for symptoms of which no rational explanation could be given. Some ingenious men set their minds at work to solve the various problems arising out of such conditions,—which, in as far as loss of health is concerned, might well be called pathological,—or states of suffering. It is to the solution they offered, that I must first request the attention of my readers. To the continental part of my subject first; next to the insular, or British. Respecting the latter, I must write with discretion: a full history of it would startle the nation.

"Varium ac mutabile semper femina" was the pithy

expression of Virgil;—the ever changing habits of civilized communities, and of their social condition, attest the truth of the expression.

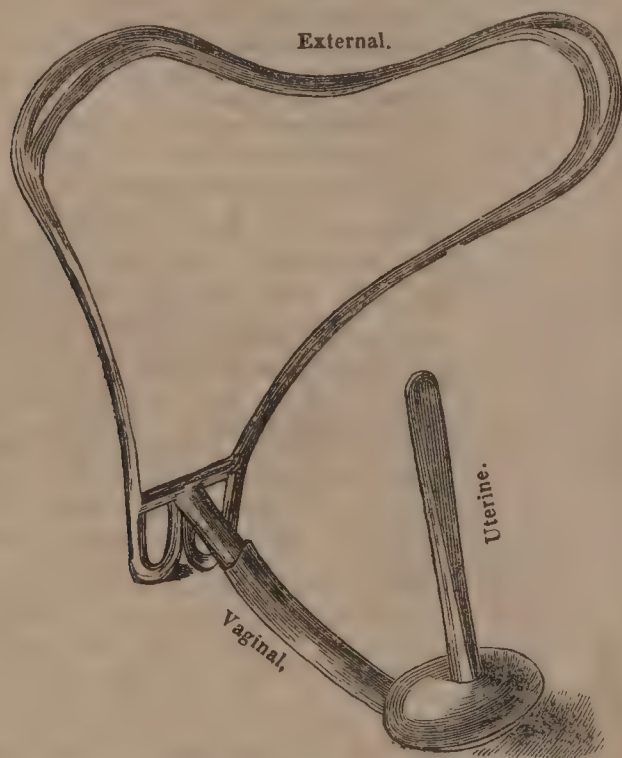
But, independent of this, the philosopher and practical physician must bear in mind, when treating woman's diseases, and more especially those of which I am now writing, that woman is a peculiar animal being, at once intellectual and volatile; prompt, full of good sense when not swayed by passion; a lover of matter of fact; cool and determined on great occasions; a despiser of theoretical, timid, and hesitating men. When an English woman is aware that she labours under a disease or diseases requiring energetic measures to save her from destruction, she will act precisely as women do all over the world. Self preservation is the first law of nature; and the Profession may be assured that, in this most valuable quality, an English woman is not utterly deficient.

If the practice and methods of exploration in certain female diseases were not resorted to in England prior to their introduction from the continent, (as is the case), it must not be ascribed to any peculiar objection on the part of English women to such practices; this idea has been proved over and over again to be a complete delusion on the part of British medical men. The fact is, that the methods were not of insular invention; that is all. They are of continental origin, birth, and growth; their decline, should they decay, which is not unlikely, will take place first in the land of their birth. But, before I speak of this, let me briefly,—for the case neither requires nor merits more than a brief notice, trace the continental part of the affair. So far as it goes, we shall find it respectable enough: novelty redeems many faults, and to discoverers much may be conceded. The fact that the unimpregnated uterus, in single and in married women, was occasionally, though rarely, liable to alter its position, (and even its form), in whole or in part, was a fact known and admitted. That the uterus might descend so far as actually to leave the cavity of the pelvis, perhaps even in the unimpregnated state, protruding to the external orifice of the vulva, causing great distress in some, and little or no inconvenience in others, was a fact universally acknowledged. On returning the uterus so displaced, the symptoms usually cease; but the difficulty of maintaining the uterus within the pelvis in a position, which if not quite the natural one, was sufficiently near it to maintain the organ in a state and condition fit for the exercise of the healthy functions, and by doing so, to remove at once all morbid symptoms, if any, caused by the malposition of the organ, has ever been a great difficulty with the surgeon. Hence the various contrivances of pessaries, none of which thoroughly fulfil the intention of their inventors; as this is the fact, it would be well, both for the patient and medical attendant, that the sufferer were early advised, on the first re-adjustment of the organ after prolapsus, to neglect nothing conducive to the restoration of health and tone, to avoid every effort likely to re-induce the malady, to take due exercise in the open air, and on no account to neglect herself for an instant. By the adoption of these means, there cannot be a doubt that future prolapsus may in most cases be avoided.

But between the state of complete prolapsus, and mechanical malposition of the uterus, there must be an infinite variety of minor degrees of descent, of which we never hear women complain. In exploration with the finger, in those who have had children, the os uteri externum may be reached at an inch and a half, two inches, or two and a half, three or three and a half distant from the orifice of the vulva, without the patient being at all sensible that anything is the matter, that the uterus has descended from its place, that it occupies a position which nature did not intend it to do. So long as the woman complains not, the mechanical position of the uterus is not blamed; and a few years ago, had various anomalous symptoms of disease in the uterine system manifested themselves, the malposition of the organ itself would never have been suspected as a cause.

But it occurred to some ingenious men, that such might really be the case; further exploration showed that the uterus was not only liable to vertical descent in the pelvis, but also to have its fundus tilted forward so as to press on the bladder, (anteversion) or backwards, the malposition being then called retroversion; or it might be twisted laterally,—lateral version or torsion; all these conditions can only be ascertained by actual touch. But these ingenious men,

overs of novelty and new views, did not stop here, did not remain contented with showing that the unimpregnated uterus might be tilted back, or bent backwards so as to encroach on the space intended by nature for the rectum; or forward, so as to interfere with the amount of space allotted to the bladder, and so on; they went further than this: they traced, or endeavoured to trace to this malposition of the uterus the entire train of anomalous symptoms troubling so many women, when these organs do not perform, or are not called upon to perform, their right functions,—such as pain in the back and general suffering, sterility, vaginal and uterine discharges, etc. In short, with the heated minds of some, the discovery—and yet the connecting link had not been discovered—was tantamount to a solution of the great problem of female disease. Having made up their minds that to a mechanical displacement, occasionally accompanied with altered form of the uterus, the vast train of symptoms I have briefly and imperfectly enumerated was mainly, if not wholly, due, the French physicians, surgeons, accoucheurs, and general practitioners in physic, surgery, and midwifery, set themselves to devise a remedy, which, mechanical in its nature, was to remove, by mechanical means, numerous pathological constitutional symptoms; a pessary was to be invented, which was not merely to put the uterus in its place, but to keep it there. The first invented was by Velpeau; it included a uterine portion, a vaginal and an external.



Many others have since been devised, but all on one principle. The persons who use them take for granted two things, which are yet to be proved:—1st. That the displacement of the uterus causes all the mischief. 2ndly. That its replacement by mechanical means is the cure for the pathological symptoms present. In the hurry to prove all this, they forgot that, to a certain extent, the uterus, whether impregnated or unimpregnated, never has any fixed place; that it rises or subsides with the condition of the surrounding organs; that it does not stand upright at any time.

It does not seem to have occurred to them, that the circumstances which gave rise to the altered form and position of the uterus, are just as likely to prove the cause of the other symptoms, and that, after a good deal of handling, the wearing for some weeks a solid staff of silver, introduced, not merely into the vagina, but into the interior of the uterus as high as its fundus, was just as likely, independent of the mechanical support, to remove the symptoms of a disease which might be, and frequently is, present, without any alteration in the position of the uterus whatever,—just as a silver staff passed into the urethra will remove an obstinate gleet, by changing the morbid condition of the mucous membrane. The same principle of action applies to both cases; for, let it be remembered, the speculum itself is a staff, no matter for what purposes it be used; that the fingers themselves, employed as a medium for detecting the presence of disease, still act on

the same principle—that is, as a solid body passed over the surfaces of diseased mucous membrane. What the staff is to the male urethra affected by chronic discharges, the uterine portion of the pessary of Velpeau is to the mucous membrane of the uterus, and the speculum and fingers are to the vagina. In the one case, the disease is blenorrhœa; in the other, leucorrhœa. All this has nothing to do with the adjusting the position of the uterus. But certain persons have made up their minds, that mal-position was really the cause of the suffering,—a supposition, we shall find, which, supported by other conjectures, terminated in testing in a wholly unexpected manner the feelings of the women of both countries.

In the long discussion on the diseases of the uterus, before the Academy, and lately carried on more fully in the *Gazette Médicale*, M. Amussat has proposed a new method of treating obstinately retroverted uterus, viz., the cauterization of the posterior neck and the adjoining portion of the vagina, so that adhesion may subsequently take place between these two surfaces. The cauterization must be sufficiently severe to cause slight ulceration. The caustic used by M. Amussat is the “potassa cum calce.” It is applied to the posterior part of the neck of the uterus, which is then lightly wiped, and made to press against the posterior vaginal wall by the insertion of pledgets of lint between the neck and the anterior wall. The caustic imbibed by the posterior face of the neck is sufficient to ulcerate lightly the vaginal wall.—*Gazette Médicale*, March 2, 1850.

But the first question to be solved was, Do the symptoms arise from the malposition? M. Amussat forgot, or lost sight of this question. To his distinguished countryman, M. Dubois, is due the merit of having first in France logically and scientifically refuted the theory of malposition,—of having shown, that inflexious descent and deviations of the uterus, when these are not extremely exaggerated, are to be arranged among the accessory phenomena, and are, for the most part, totally strange or foreign to the symptomatology of uterine affections. He even excludes engorgements and simple or granular erosions from the list of primary affections.

Exploration of the female genital organs having become the order of the day in France, the mania was sure to extend to Britain. A clever student, a well-read man, without experience, knowledge, or practice, up to the moment of his Continental trip, visits Paris, observes with attention the latest novelties, the new pathological views, the Velpeau pessary, the uterine metallic sound, the infinite variety of specula,—notices the importance such views have supported, by the pathological specimens in the museums and the beautiful models of Thibert; and imports with him into Scotland the latest Parisian fashions.

The sequel is partly known: backed by some ardent followers in Scotland and in England, the parties adopted the system *con furore*; and, as a crowd brings a crowd, the public also gave them its support.

In the mean time, or at least soon after the value of the discovery had been tested and ascertained by the strictly scientific portion of the French Academy, by Dubois and others, (of their opinions and decision I have already spoken), the novelty reached Scotland at the most convenient moment possible; it took the place of mesmerism, which had failed in the same hands; it has since been followed by ether, and chloroform, and electricity, and leather tractors or suckers, for the hawling out of refractory fœtuses; every idea being borrowed or pirated from some other person. From Scotland, the discoveries (!) extended to England; last of all to London. There they met with rather rough treatment, which I mean not to repeat, my object being merely to trace the history of these singular doings,—to ascertain what is true and what false in respect of views which, whatever be thought of them now, had at least a respectable continental origin.

One important fact at least has been proved by these inquiries,—the mucous membrane of the uterus, and the feelings of English ladies were each much less sensitive than had been supposed.

The pessaries of Velpeau and of others have proved this. Leucorrhœa also has been cured by the speculum and by the toucher. Malformations of the os uteri externum, and of the cervix uteri have been detected exercising some influence probably over sterility and dysmenorrhœa; but above all, a useful lesson has been taught the Profession, namely, that when a class of diseases remains for centuries uninvestigated

and neglected, it is but right that ingenious men should proceed with inquiries for their elucidation. Should these inquiries be taken up by riders of hobbies instead of by strictly scientific men, the public is not to blame, but the Profession.

It may readily be admitted that when the questions were first raised in France by Lisfranc, Velpeau, Bend, Hervez, and a host of others, respecting the absolute condition of the utero-vaginal organs in the troublesome diseases affecting women, the Profession in Britain had not merely given little or no attention to the matter,—but that absolutely nothing was known respecting it. Vague generalities occupied the place of strict inquiry, and, whether such diseases were local or general, none could say, for none had inquired into the matter.

For a time the views of Lisfranc prevailed; then came the theory of malposition; another followed, namely, that of engorgement. This is not the place to discuss these theories; all I have to consider here is the influence which malposition of the uterus exercises on the health of the sufferer. Is it a primary affection, and the cause of secondary ones? Is it a disease in itself, and the cause of other diseases, or is it a concomitant, or, perhaps, an effect of a more general condition of the uterine system and its appendages? It has been shown that, while these questions were all but unknown to British medical men, they had been repeatedly examined and weighed in France; every form of malposition of the uterus had been, as it were, stereotyped, by the admirable models and casts of Thibert; still the questions are far from being settled. I venture, with great diffidence, to offer the following conclusion:—A distinguished foreign observer has remarked, that deviations of the uterus are almost always associated in the same subject with other pathological facts, which have often usurped their importance and their signification. Now, it must be confessed, that this passage is anything but clear. In the next, however, we get at once at the author's meaning:—"I, therefore, attempted an analysis, and found, on separating the latter from the others, that inflexions, the descent, or prolapsus, and deviations in the form or direction of the uterus when these are not entirely exaggerated, are merely to be arraigned among the accessory phenomena, and are, for the most part, totally strange or foreign to the symptomatology of uterine affections."

Now this passage seems to me to contain nearly the whole truth; it was the conclusion I first arrived at after reviewing all the circumstances. From that period to the present I have seen no reason to change the opinion then formed, by others as well as by myself; it is held, in France, by Dubois, whose name is alone a host in an inquiry of this kind. Velpeau first maintained the deviation theory; he has, no doubt, by this time, abandoned it. Lisfranc's was the engorgement theory, which forms the subject of my second memoir.

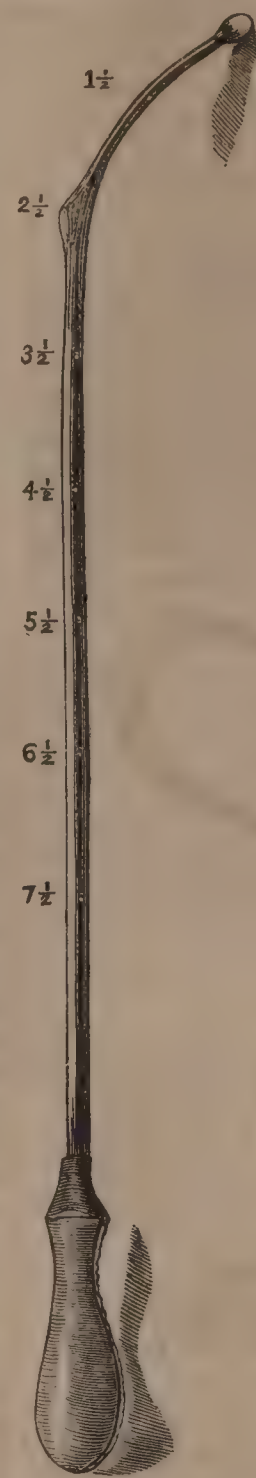
A word or two more on inflexions, or deviations, of the uterus. I believe, with Dubois, that they are mostly incurable. Displacements, when not very severe, give rise to no bad symptoms whatever. In Scotland they were considered and declared to be the cause of all the mischief; but the engorgement theory was soon afterwards adopted, the other being quite untenable.

SECTION II.

Exploration of the genital organs having in France become the order of the day, it was soon discovered that the uterus and its appendages were liable to other diseases besides malposition. The most remarkable of these were, 1. Fibrous and other tumours. 2. Malformations of the os and cervix uteri. 3. The most important of all, chronic inflammation and ulceration of the utero-vaginal mucous membrane. To believe some persons, it might safely be inferred, that at least half the women of Great Britain, France, and Ireland labour under one or other of these complaints. As a consequence, the new method or fashion spread from France to Britain, and the parties adopting it were not slow to perceive, that the theory of malposition could not take the place of a universal theory, and that other pathological conditions might be brought to play their part in the history of uterine disease.

Accordingly, it was found in France, that the new method of exploring the uterus, especially by the speculum, was at least in some instances a valuable addition to that usually practised. To this was added, as was proper, no doubt, rectal exploration; and Velpeau also employed the uterine

sound, a dangerous instrument, the use of which in England, and especially in Scotland, bestowed on some an unenviable notoriety.



Fibrous tumours of the uterus were now found to be extremely frequent, and to give rise to many bad symptoms, of which they were not before suspected. Sound pathology was somewhat against these new views.

That fibrous tumours of various sizes and even forms do affect the uterus has been long known; of these, the pendulous ones contained within the uterus itself or growing from some point close to the os uteri externum and thence descending into the vagina, or retiring into the uterus as the case may be, were chiefly important as constituting surgical disease. The history of these was well known, and their removal quite practicable.

The speculum was most unquestionably a very valuable instrument for the detecting such tumours, and might be of use in aiding their removal. No one, that I am aware, objects to the employment of the speculum under such circumstances. But the other question, namely, the frequency of pathological symptoms supposed to be traceable to the presence of these fibrous tumours could not be so clearly decided on; for it was known, or at least supposed to be known, that fibrous tumours attacking the exterior of the uterus, or growing in its walls, but yet so as not to affect the mucous membrane, are generally quite harmless, unless they should happen to grow to a considerable bulk. This, I think, was the generally received opinion with the Profession.

In a matter so difficult as this, it behoves every medical man to be cautious in offering an opinion. That fibrous tumours of the uterus, variously situated, may give rise to many distressing symptoms, is a fact which must, on several occasions, have come under the notice of those who, like myself, have practised for many years the obstetric art. Severe and dangerous hæmorrhages may be traced to the presence of tumours obviously connected with the uterus, and yet not within the sight or reach of the surgeon. Some of these cases are of extreme difficulty; others cannot be met at all with success. Still the question

remains an open one in each individual case, which should be considered on its own merits. A married or single lady, unimpregnated, falls into bad health, with a train of symptoms pointing to the uterus as the seat of the affection. Now, how are these symptoms, which I need not enumerate here, to be combatted? The first step is to ascertain the cause. The surgeon investigates, using his discretion; if he believes the symptoms to arise from malposition of the uterus, which can only be very rarely the case, he will proceed accordingly. After malposition comes the theory of malformation of the os and cervix uteri, and to this I must beg the attention of my readers.

SECTION III.

Malformation of the Cervix and Os Uteri as a Cause of Sterility and of Uterine Disease in General.

Long prior to the period when the theory of malposition was brought before the public by Velpeau and others, malformations of the cervix uteri, and abnormal conditions of the os uteri externum were brought under the notice of the Profession by many observers, Continental as well as British. They were exceedingly well known in France; their value had, in a great measure, been determined, their

true character ascertained, and their structure and anatomical characters were fully made known to the public in various works, but more especially by the pathological models of the ingenious and talented Thibert.

It was suspected by numerous continental physicians and surgeons, that the malformations of which I am about to speak might be a fertile source—

1st. Of general disease.

2ndly. And more especially of dysmenorrhœa, or painful menstruation.

3rdly. Of sterility, and all its dire consequences to the married woman.

As regards the first of these heads, namely, malformations viewed as a cause of general disease, no statistics worthy of the smallest notice have as yet been laid before the Profession. That such malformations, to which I shall advert more immediately, may occasionally give rise to vague general symptoms of disease, may be possible; but the admission, after all, amounts to nothing. With a far greater show of probability, it has been asserted, that certain malformations of the uterus may be viewed as the direct—I had almost said mechanical—cause of difficult menstruation; of several symptoms of bad health in the single, and of the same diseases, with the addition of sterility, in the married. That married women should desire to have a family is not surprising; let those who think so look at a case of sterility accompanied with some of its worst results, and his surprise, if any, will be removed. I mention this in order to remove another cause of surprise, which must, I think spring from mere affectation. I allude to the remarks of those who wonder, or pretend to wonder, that modest, highly-educated, delicate married women, will submit, and have submitted, to explorations, manipulations, and surgical treatment, of a severe and even dangerous character, for the removal of a condition of the womb, its connexion with the sterility, and with the symptoms complained of in such cases, being too often exceedingly doubtful. Let these persons attentively weigh one of these cases, with the accompanying distress, and suffering of body and mind, and they will soon learn, that to remove such symptoms few remedial or diagnostic means would or could be declined.

But before I speak of exploration, and of surgical operations, in cases of congenital malformation of the os tincæ and cervix uteri, let me very briefly state their anatomical characters.

They have been admirably designed in the models and casts of Thibert; by these, and by various other anatomical works, it has been made manifest that the uterus varies in its form in all its parts congenitally. These forms occasionally, perhaps, chiefly represent the foetal or brute forms, which the former more or less resemble; they change with years as the development goes on,—as the transformations and metamorphoses proceed, which are to convert foetal infantile and juvenile forms into the matured and normal shape of the grown adult perfect woman. I do not require to dwell, at any great length, on these varied forms, interesting to philosophical and physiological anatomists, essential to a complete history of woman's development; the details are not of much moment to the merely practical man, with the exception, perhaps, of one or two forms, to which I may more especially advert.

The vaginal orifice of the uterus presents a great variety of forms. Its normal character is well known,—transversely elongated, and corresponding in size to the uterus itself. But in many instances the form of the opening is rounded, its capacity contracted to a half or a third of that we usually call the natural size; the lips are thin, or deficient, and the whole appearance is that which we should expect to find in the child. The cervix uteri presents itself also under a variety of forms. It usually projects a little into the vagina,—in malformation it projects deeply into that cavity, is elongated, as it were, and pendulous, narrow, contracted, unnatural; from which, were a contracted os tincæ added, as is sometimes the case, difficult menstruation seems a natural result, and sterility a sure consequence. That such malformations exist,—that they may with those malpositions, which force the os tincæ too much backwards or too much forwards, prove a cause of sterility and of bad health,—I am not disposed in all cases to doubt. But when I am told that such cases are very common,—that they are remediable by operations,—that such operations are without danger,—that a large portion of the cervix, together with the os tincæ, may be coarsely snipped off with the scissors or knife

of the surgeon,—that one person alone has performed this coarse operation over two hundred times,—that sterility may be cured thereby,—then I am compelled to suspend my belief, and call in question, not merely the statistics of the operation, but to a great extent the pathological data forming the basis of such views.

I leave the matter to the course of time; time will show what is just and sound in the pathology of such cases, and what is unsound; what is true in the history of such operations, whereby the os tincæ is enlarged, or the cervix uteri in a great measure removed, not only without unpleasant immediate consequences to the patient, but with a removal of her sterility, and all her complaints.

Time will test all such doctrines and practice, reducing them to their true value. Meanwhile, I am one of those who believe that such cures and such cases form the exception and not the rule; an important distinction, which, if true, the Profession, for their own credit with the public, cannot be made to understand too soon.

ON BLISTERING IN GLEET.

By JOHN L. MILTON, Esq., M.R.C.S. Lond.

DIVISIONS OF GLEET.—NECESSITY OF CURING IT.—REMEDIES.—BLISTERING.—MODE OF ACTION.—CASES.

At first sight, nothing seems easier to cure than a slight discharge, which we can attack at one and the same time with outward and inward remedies; yet gleet in its course and history shows us how such preconceived notions fade before the stern realities of an intractable and disgusting complaint. The multiplicity of remedies brought forward proves most forcibly of all how often our ordinary resources have failed. In this, as in too many instances, our hand seems paralysed and our footstep arrested at the most hopeful stage of treatment.

As essentially local as a disease can be, gleet may yet be constitutional, and admit of constitutional treatment. Apparently uniform and simple in its history, nature, and treatment, it is yet susceptible of useful division, and exposed to complication. Let us review the classes into which it naturally falls.

The first, is that of the prolonged second stage of clap itself.(a) In some persons, in spite of any treatment that may be adopted, and of the most careful attention on the part both of the patient and surgeon, clap will continue severe, or degenerate into a slight or thin purulent running, staining the linen, becoming worse after connexion, communicating the infection, and poisoning happiness and health. Nay, in my hands, strictures formed in two cases within three months from the date of infection, although the treatment was begun with early and continued most assiduously. In such cases we must suppose a tendency in the part or constitution to keep up such a diseased state.

The second, is where there is more or less mucous discharge, ranging from that where the lips of the urethra are simply glued together, to that where there is a free flow of mucus. The former seems frequently to arise from neglect; the latter to be more constitutional.

The third, is where the testicle has been inflamed. Here there is, especially after erection of the penis, a discharge of mucus sometimes mixed with semen. It is not very common.

The fourth, is a discharge after going to stool or making water. A straining effort is made to dislodge something which seems blocking up the passage, and a large quantity of matter like white of egg is thrown out. It seems to be connected with the prostate, perhaps with the bladder.

The fifth, is the gleet of stricture. This is sometimes thin and broken, sometimes thick and purulent, sometimes pure mucus. The thin and broken discharge is generally found in weakened persons having strictures of considerable standing; the thick and purulent, where a stricture arises during a clap; and the pure mucus, where it arises during a gleet, or at all events when the remedies used have brought about

(a) I am well aware, that this, like some of the other varieties mentioned here is not properly nor commonly called gleet; but what generic name shall we give to these chronic runnings, which are not all discharges from the urethra?

the decay of the clap, not, however, in time to prevent a stricture coming on. These are all, however, only rough sketches of the classes and their causes.

The first, second, and fourth classes, will alone form the subject of this paper. In the third, it is the testicle which requires attention. In the fifth, the bougie is our sole aid and staff.

All that could be said as to the necessity of attending to and removing this state of matters as soon as possible, may be summed up in one word: *the disease must be cured*, or the patient will turn to the quack, ever ready to delude him with the hopes of a safe and rapid restoration to health and vigour. What steps have been taken to attain this end?

Much has been done. The remedies used may be divided into the attainable, as aperients, salines, copaiba, cubebs, bark, steel, and turpentine; injections, plugging the urethra with cotton, cauterizing the urethra, counter-irritation to the skin on the under surface of the urethra, cold bathing, etc.

The unattainable, as sea-voyaging, sea-bathing, change of air, and similar remedies. I call them unattainable, because not one person in fifty can resort to them; men cannot or will not always leave their business; they have not the means of obtaining change of air—the time of the year is unsuitable, or some such cogent reason is at hand; and hence, even if infallible, which my experience of them would lead me to doubt, they are objectionable. Moreover, they lead us away from a search for undiscovered remedies; so that, I think, as grand and comprehensive means of cure, the practitioner had better dismiss them from his mind.

Lastly, we have the undiscovered or neglected means of cure.

Here, then, are the elements of the problem—A disease to cure, a reason for curing it, and the modes of cure generally given. Are they adequate?

I believe (for means are yet wanting to enable us to say with complete accuracy), that in 49 cases out of 50 they are. But what is to be done with this fiftieth case, when all the usual remedies have failed? Shall we tread the same path again; ring the changes once more from aperients to astringents, from mild injections of $\frac{1}{4}$ gr. of nitrate of silver to caustic plugs and suppositories? or shall we try something new?

Experience has long ago convinced me of the hopelessness of attempting the former. When the patient is sick, and wearied of medicines, his digestion impaired and his health shaken, it is not the time to subject him to a repetition of an experiment, the first trial of which has proved ineffectual.

In these refractory cases, then, I propose to revive or introduce blistering the penis. It is, I believe, little known or used in gleet, yet, without exception, it is the most powerful that can be applied. Not merely will a single blister frequently cure the most prolonged gleet,—not merely will it rapidly sweep away all dregs of the disease in its ordinary course, but it will often cure those runnings which have resisted all known and used methods. I have seen two blisters, with a mild injection or two, at once cure a clap which had defied the most energetic treatment; and *as I never found a case which resisted blistering and injections together, that was not complicated with stricture or affection of the testicle*, I am slowly arriving at the conviction, *that every case of clap or gleet, however obstinate, may, if uncomplicated, be cured by blistering singly or combined*.

To illustrate and urge forwards this operation by every means in my power,—to invite attention to it, that it may be put to the severe test of practice,—to attest it by cases which I have collected and watched,—to point out the necessity of quitting the beaten paths of treatment, and try a new remedy more powerful than those in use, is the object of this paper. But as so many remedies have fallen into disuse from the indiscriminate use or mis-application of them, and as so many which are in favour have been arrested on their path by obstacles issuing from the same sources, I must here enter my protest against being supposed to recommend blistering in gleet, unless properly applied, and in the cases I have referred to.

In order that a blister may be properly applied, there are some points which, however trifling they may seem, require as much attention as the leading features of the case. Where these are neglected, blistering is apt to produce such a filthy excoriated mass, that the patient will not submit to it a second time; whereas, if carefully laid on and dressed, it is,

from its being out of the reach of friction in the ordinary movements of the body, even less troublesome than if on a limb or the trunk. Before putting it on, the hair at the root of the penis is cut off, and, if the foreskin be naturally retracted, it must be drawn a little forwards over the glans. A piece of paper is then to be fitted on the penis, and cut till it exactly covers it from the root to within half an inch of the mouth of the urethra. This is then laid down on the blister, which is cut out by it, wrapped round the penis, and fastened with threads behind the glans and near the root. The patient should remain perfectly quiet during the time it is on, lest any motion should bring the blister against the scrotum, and vesicate it; but he must not apply it on going to bed, or he will most likely fall asleep, and not awake till the penis is one mass of vesications,—a state productive of an unnecessary amount of suffering.

In the milder cases, or where the skin is tender, an hour or an hour and a half will be sufficient. The blister is then removed; if there are any vesicated spots, they are covered with pieces of linen spread with zinc ointment, and then a layer of cotton is bound over these, and covered with a piece of linen, kept on by a thread, or, what is better, two very thin rings of vulcanised India rubber.

Where a severer case renders a more energetic employment of the remedy necessary, it must be kept on two or four hours, until free vesication is produced; zinc ointment is then applied. To protect the penis from friction, a T bandage, with a linen bag sown into the part which receives the penis, or a handkerchief carried round the waist and dipping in front so as to receive the penis and keep it up against the abdomen, is necessary.

The first effect of this application is to increase the discharge considerably, which then terminates either by altering its character, becoming ropy and mucous, and finally disappearing in a few days, or by remaining somewhat more persistent and requiring a few injections, when the penis is so far advanced towards healing that it can be handled without pain, or demanding even a second blister. One of the most cleanly and convenient, and least painful forms of blister, is Brown's blistering tissue; it causes much less irritation, and heals much more quickly than the ordinary blister. The blistering fluids, if strong enough to vesicate, caused such pain that I soon renounced the use of them.

How does this remedy act? By counter-irritation will, perhaps, be the answer. But, if this were the case, why should there be increased action in the urethra for a few days, and why should the discharge from the urethra begin to disappear when the counter-irritant surface is healing up? It would seem as if the organised constituents of the urethra are capable of keeping up a certain amount of overaction for an indefinite time; but that when hurried beyond this by a healthy stimulant, a rebound takes place, which leaves them less capable than before of furnishing a secretion, morbid in amount or in quality, or in both. We see something similar in prurigo pubis, where a blister causes an exacerbation of the symptoms, succeeded, however, in some cases, by a healthier state of the skin; in bubo, treated by a blister, etc.

The cases which now follow have been selected from among many, with a view of showing the applicability of the remedy, not merely to a variety of cases, but under a variety of circumstances, which, in practice, are not less to be considered than the nature and duration of the disease itself.

Case 1.—Slight Acute Gonorrhœa.

A. B. applied to me, February 28, with gonorrhœa, which he had had four days, and which was treated with salines, there being some feverishness present. On the 5th of March, there being no improvement, a blister was applied, and some sulphate of magnesia was added to his medicine. On the 12th he came again; the cure was complete.

Case 2.—Slight Acute Gonorrhœa.

Joseph G—n contracted gonorrhœa March 11, 1850; there was no chordee or painful erection, and only slight scalding.

14th.—Saline powder every morning.

19th.—The scalding continues, the discharge better. Soda and jalap powder to be taken twice a day.

21st.—The scalding continues. To go on with the powder and use a zinc injection, \mathfrak{z} i. ad Oj.

26th.—The scalding gone; the injection has relieved him most of anything.

April 6th.—He returned to-day as bad as at first, and was then blistered.

13th.—Every trace of the discharge gone. I saw him some months after; he had remained quite free from any discharge.

Case 3.—*Protracted Acute Gonorrhœa.*

John I., applied April 10th, 1850, with a running which he had had for six months; there was a free discharge attended with pain and scalding, and he seemed very weak.

Mist. ferri c. ʒj.

Dec. aloes c. ʒss.; mix and take three times a day.

12th.—The medicine agrees with him, but there is not the slightest alteration in the discharge. He has long used injections, etc., without any benefit, and as he cannot attend regularly, I have ordered a blister to be applied to the penis.

15th.—The discharge is almost gone.

To have two pills of turpentine and strychnia every night and morning.

19th.—He has not had any discharge since his last visit.

Case 4.—*Protracted Acute Gonorrhœa.*

Mr. D., a healthy man, applied to me Oct. 15th, 1850, with a clap, which he had had five months. He had taken an immense quantity of copaiba, purgatives, etc., but, in spite of all this, the disease was always coming on again as bad as ever. However favourably it might promise for a few days, it was sure to return. He asserts that he took the medicine exactly as it was ordered, notwithstanding the great aversion he has to copaiba, etc. When I first saw him he had little chordee or scalding; but there was a very free, thick, purulent discharge. He had used strong nitrate of silver injections, which gave him excessive pain, but produced no beneficial effect on the progress of the disease. He never subjected himself to any great restrictions in diet, and it would appear that he and his surgeon somehow or another never carried out very consistently any plan of treatment; for when the patient was getting well the medicine was left off, as if both were tired of it. Sometimes it was suddenly changed, and then the old copaiba mixture was resorted to, apparently without any particular reason; sometimes the patient proposed a medicine, which was forthwith accorded him; at last he came to me.

Finding his stomach much disordered, I prescribed some liq. potass in bitters. This was immediately followed by an increase in the scalding, to check which the acet. of potass was substituted, and calomel and ipecacuanha were ordered at night. At the same time, I injected him with chloride of zinc, and he himself, two or three times every evening, used the acetate and sulphate of zinc in injections; but the painful erections, constipation, pain on making water, went on unabated. On the 21st, he was suddenly attacked with irritability of the bladder, and all medicines were suspended, except the use of ether and camphor, which, with hot bathing, seemed to afford him some relief. On the 31st, all symptoms of irritability having passed off, the calomel and ipecacuanha, with the acet. of potass were recommenced, and caustic suppositories were substituted for the injections. He also went into the country, but grew worse, though he lived very regularly.

On the 8th of November he began using the camphor, to check the erection, which had become latterly nearly as bad as ever. The discharge was unchecked.

To be blistered.

10th.—The blister was kept on three hours and a half; it was followed by a free discharge from the urethra. In all other respects he is better.

12th.—The soreness of the blister is so far abated, that injections can be used. To have the sol. of chloride of zinc and nitric acid and bark.

13th and 14th.—The discharge now rapidly decreased; the erections and scalding have quite gone away.

On the 15th no discharge was to be seen, nor had he noticed any on rising that morning. He was in high spirits. To continue the injections.

19th.—On squeezing the urethra, a very little discharge, somewhat like whey was seen. There was no scalding or erection; but the urethra when pressed felt like a rigid tube, as if in a state of permanent spasm, so that I was disposed to regard this disappearance of the discharge as treacherous. Meanwhile, his general health continued pretty good, and though he worked hard, he was very abstemious.

On the 22nd the injection, which had been continued, produced more pain than usual; and on the 24th a little discharge was again seen. The injection was made milder, and on the 25th it had disappeared.

On the 28th he for the first time took a quantity of beer, the immediate effect of which was the re-appearance of the discharge, which, by the 3rd of December, had again become thick and purulent.

To be blistered again, but to continue in other respects the same. No alteration in diet.

Dec. 6th.—After putting on his blister, which he kept on three hours and a half, he found the discharge at once disappear, and has since remained free from it.

On the 16th I saw him again; he had seen no discharge at all since, though he had continued to drink beer, and have connexion with women.

In the spring of the year I saw him again, when he gave me the same account.

Case 5.—*Clap, Relapse, Cure.*

W. J. has now, Feb. 1, 1850, had clap three months, for which he tells me he has taken "all manner of physic." It is purulent, and accompanied by pain on erection, scalding, etc.

To take the saline powder, and use a zinc injection, ʒj. ad Oj.

March 8th.—Though progressing, he is not so well as might be expected; he looks pale and bloodless.

To continue the injection, and take the red oxide of iron, ʒss. ter die.

On the 12th, I began injecting him every morning, and by the 19th the discharge was gone. On the 21st it re-appeared, thick and purulent, and accompanied by great irritability of the bladder, which I partly ascribed to his having drunk some beer, and allowed his bowels to become constipated, and partly to the dull, dusty weather. He was ordered a blister to the penis, a strong sulphate of zinc injection, and a saline mixture every four hours, with ʒiss. of sulph. of magnes. in each dose.

22nd.—The blister was kept on four hours, and has risen freely; there is no discharge from the urethra, and he feels much better. All pain and uneasiness are gone, and his bowels are freely open.

To go on with the mixture, and dress the blister with cotton wadding, not cutting open the vesications.

From this time there never was any trace of the disease to be seen; on three distinct occasions I have examined the penis, and found no discharge.

Case 6.—*Gleet Alternating with Purulent Discharge—Cure.*

J. B., Esq., applied to me, June 1, 1849, giving me the following detail of his case:—About six years before, he contracted gonorrhœa, and, having a deep-rooted dislike to medicines of all kinds, he only lived low, and endeavoured for about fifteen months to let it wear itself out; but, finding that it was more likely to wear him out, he applied to various practitioners and some surgeons of eminence, without any success, for the simple reason, that he never did what they told him. He tried copaiba capsules, sea-bathing, shower-baths, and, for a little while, the tincture of steel, but got no better. Sometimes there was a discharge of pus from the urethra, sometimes only mucus, but he was never free from it; and some surgeons thought he had a stricture; but he never would allow a bougie to be passed, so that the point remained uncertain.

At last a friend brought him to me. As he had still the old dislike to "physicking," I proposed to pass a bougie, and, if there were no stricture, to blister the penis, which he considered a "disgusting nuisance;" but, he said, if there was anything that could be done at once, he did not mind how painful, he would submit to it, "only he would not have instruments poked into his bladder for any one living." I painted the penis with blistering fluid, which immediately produced intense pain for half an hour, and ordered him eight grains of calomel in one dose. This had an instantaneous effect; the discharge went away, and re-appeared in a milder form. With great difficulty I managed to procure his attendance for a few days, during which I injected the urethra with solution of sulphate of zinc, and the gleet disappeared completely. I have often seen him since, and he tells me, that sometimes, when suffering from a cold or over-living, he has seen a minute point of mucus

come from the urethra, but that, with this exception, he has remained well.

Case 7.—Gleet.—Cure.

G. K., Hoxton, applied November 6, 1849, with a gonorrhœa, which had broken out six days previously. He was ordered a saline powder, to be taken three times a day. I did not see him again till the 1st of February, but I found he had continued the use of this powder, and had injected himself three times daily with sol. of sulph. of zinc. Finding that his clap had degenerated into a gleet, I ordered him 25 minims of copaiba and 15 of sp. terebinth. three times a day. The injection to be continued.

8th.—He appears better. Continued.

21st.—The clap still persisting, I ordered a blister to the penis, and ʒss. of the red oxide of iron three times a day. When seen on the 26th, he was cured of all the discharge. The powder was continued, and he attended regularly till the 1st of March, when, no discharge having been seen since the date of the blistering, he was dismissed cured.

Case 8.—Gleet.—Cure.

R. T., has now (August 28, 1849) had gleet for about thirty-six days; he has taken various medicines, but without any material benefit.

To apply a blister to the penis for four hours.

30th.—The discharge increased very much by the morning after; but in a few hours disappeared, and has not since returned. Nothing can now be seen; the canal seems quite free from moisture, beyond the usual dampness peculiar to it.

He was not again attacked by it.

Case 9.—Gleet of Four Months' Standing.—Cure.

W. H., applied October 18, 1849, with a gonorrhœa of three weeks' standing. It is not very severe, and, up to the present moment, he has not taken any medicine for it.

To take the saline powder three times a day.

30th.—He has taken the medicine regularly. There is now only a gleet, but it is accompanied by some scalding.

To have some soda and opium powder, and take two pills with turpentine and strychnia every night.

Feb. 26, 1850.—Since the last date, he has attended very irregularly, sometimes taking his medicine, sometimes leaving it off—fancying his gleet was cured, and always finding it return. The tincture of muriate of iron was also ordered him, but had produced no great effect. He has now come for the purpose of being "cured in good earnest."

To blister the penis, and take ʒss. of the red oxide of iron three times a day.

28th.—There has been no discharge seen since. To continue.

March 1.—His bowels are confined; to have a purgative draught.

5th.—He has seen no discharge since. To continue the powder, from which, he says, he finds benefit; he thinks he gains strength from it, which he greatly needs, being a railway carrier.

Nearly twelve months after, I again saw him; he had had no return of the discharge since.

Case 10.—Gleet of Long-standing.—Cure Protracted.

C. H. applied to-day, Oct. 23, 1849, with gleet, which he has had five or six years, and for which he has tried all the usual remedies, as copaiba, injections, etc.

To blister the penis, and take the steel mixture ʒi ter die.

25th. Much better; the blister was kept on longer than I ordered, and is now discharging freely. The gleet is lessened.

He obtained a situation the following day, which prevented him from coming any more, drank beer, and neglected taking medicine. In the beginning of February, finding the gleet returning, he was tempted to try some "balsamic pills," but, not deriving benefit from this, he again came to me. I found but a very slight gleet, and it appeared from his account, that it had never been anything like so bad since he put on the blister, but still the cure was not complete. He was therefore injected, first with sulph. of zinc, and then with nit. of silver, and took the mist. ferri c. three times a day. In a few days he was cured, and when I last saw him he had had no return of the disease.

Case 11.—Gleet of Three Months' Standing.—Cure.

R. W. has now, October 31, 1849, had gleet for three months. He has been constantly under treatment, but has observed during that time no improvement.

To blister the penis, and take the turpentine and strychnia pills.

Nov. 7.—He is going on well, the discharge being now much less.

To take the copaiba and turpentine, mxxx. of the former, and mxv. of the latter, three times a day.

17th.—There has been no discharge since the blister healed.

Case 12.—Gleet of Several Weeks' Standing.—Cure.

Mr. J. J. applied to me, Jan. 3, 1850, for advice respecting a gonorrhœa which he had had some time. He had tried to cure it himself, but was not succeeding according to his expectation. As he could not come regularly, I ordered him sulph. of zinc injections, and some saline medicines, to remove the feverishness and constipation under which he was suffering. On the 8th he was better, and was directed to continue his medicines, and the same on the 24th, when the injection was made a little stronger. On the 5th of March, nothing remaining but a little gleet, he was put on the tincture of steel, thirty drops three times a day, and left off the injections.

March 20th.—I now found that there was still some slight gleet, and the injections were therefore resumed; his bowels being costive, some aperient medicine was ordered.

25th.—There is no discharge to be seen, but he says a portion about the size of a pea, and like curd in appearance, came away this morning from the mouth of the urethra. His bowels remain obstinately constipated, and he is fretful about the gleet never going away.

A strong injection, immediately followed by a blister to the penis. ʒj. of the pulv. jalap. c. every other morning.

28th.—No discharge has been seen since he put on the blister. His bowels were acted on very freely by the powder on the 26th, and have remained costive ever since. He did not take the powder this morning, fearing it might act when he was out.

R. Conf. sennæ, ʒij.; pulv. jalap., gr. x. Misce. fiat mass. omni mane sum.

April 2nd.—The same report; no discharge has been seen since. Immediately within the urethra there is a white patch, as if there had been an ulcer.

6th.—Complete cure. The white patch is still to be seen.

Case 13.—Gleet of Two Years' Standing.—Cure.

E. S., a delicate, dissipated young man, applied to me Feb. 20th, 1850, with gleet, which he has had full two years. He has taken copaiba at different intervals, and has used injections, but has never once got rid of it. His health is out of order, his appetite bad, and his bowels constipated.

R. Acid. sulph. dil., m x.; infus. quass. ʒj., ter die sum. Conf. sennæ, ʒj.; ferri. ses. ox. ʒij. M. sumat coch j. min. omni mane. Zinc. sulph., gr. iv.; aq. distil. ʒj. Ft. inj. omni mane utend.

Feb. 21.—Very much better; the discharge is almost gone; the injection produced a slight tingling. Cont.

22nd.—The discharge is gone, his bowels are open, and he feels better.

23rd.—This morning a minute point of discharge, like albumen, can be seen on pressing the urethra.

The injection to be increased to gr. viii. ad ʒi.

25th.—The last injection produced but very little tingling. He says there was some slight discharge this morning; but I can see none now. He is getting much stronger, and the confection keeps his bowels open. As he cannot come to be injected, I have ordered him a zinc injection to use three times a day. To continue the mixture and confection.

March 4.—Since his last visit he has occasionally noticed a speck of discharge; on opening the mouth of the urethra and looking in, a white blanched spot is seen; it looks as if the mucous membrane had been burnt by nitrate of silver. Bowels rather too open.

Not to take quite so much of the confection.

12th.—There has been no discharge since, and there is none to be seen now.

15th.—He has taken to his old habits again and got drunk; the discharge has re-appeared. As he will not or cannot come regularly, I have ordered him a blister to the penis, and to take the mist. ferri. c. ʒi. ter die.

22nd.—He put on the blister when going to bed, fell asleep, and when he woke next morning his penis was enormously swollen and quite raw. "It had, however," he said, "done him a mighty dale of good, and drew away a full half-pint of water!"

To continue the mixture.

He now left me, considering himself cured, but in February, 1851, was once more a patient with acute gonorrhœa; up to the date of his fresh infection he had had no discharge since using the blister, though he had been very dissipated.

Case 14.—*Prostatic (?) Gleet.—Cure.*

W. O. has now, March 5, 1850, been some time under treatment for gleet; there is great uneasiness and pain about the prostate, particularly on crossing his legs. The bladder seems also disordered, and micturition is accompanied by pain. After he has had a stool a quantity of glairy matter is thrown out of the urethra; it seems to be about a small tablespoonful in bulk. He has used injections, salines, etc., for twelve months, which have cured the gonorrhœa, but he has noticed no improvement in his gleet.

To take the copaiba and turpentine mixture three times a day, and inject with sulph. of zinc.

20th.—No improvement.

R. Hyd. c. cret. gr. iij. Pulv. rhei. gr. v. M. om. mane. sum.

A blister to the perinæum.

21st.—The blister has risen freely.

Acid nit. dil. mxv.; dec. uva. usi. ziss. M. ter die sum.

24th.—Better. Continue the mixture and powders.

28th.—Still some discharge.

Tinct. canth. mxii.; dec. pareira brav., zi. M. ter die sum.

30th.—Continue.

April 4.—Continue.

11th.—He is still pale and weak; there is now scarcely any progress made.

Rep. pulv. Mist. ferri. c. zi. ter die.

A piece of blue ointment the size of a nut to be rubbed into the perinæum every night.

13th.—Still the same.

Go on with the medicines, and take two pills of turpentine and strychnia every night.

15th.—Great improvement. Continue.

On the 20th, as some discharge still seemed to linger about him, I ordered another blister to the perinæum. This was quite effectual. I saw him some weeks after, and found he had had no discharge since.

There is, I believe, nothing novel in the idea of blistering the perinæum for gleet, and I have merely added this case for the sake of distinguishing this form of gleet, both in diagnosis and treatment. Want of space, rather than want of material, compels me to stop here; but I cannot lay down my pen without expressing a hope that the subject will not be lost sight of.

40, Jewin-street, City.

SPASMODIC ACTION OF THE UTERUS.— OBEISM.

By A. STOBO, Esq., M.R.C.S.

ANN ELIZA SMITH, aged 50, Sambo, domestic servant, mother of three children; had a miscarriage between first and second, and an interval of seventeen years between second and third child. During that interval was in bad health, and under the delusion that she was (hurt) Obeahed(a), and is now under that delusion. Always had easy confinements, and never any accident.

In June, last year, had a prolonged attack of intermittent fever. Suffered from constipated bowels, colicky pains, singing in her ears, as if surrounded with crickets, crawling pains in the abdomen, especially about the lower part of it;

(a) Obeism was a species of witchcraft employed to revenge injuries, or as a protection against theft, and is so called from Obi, the town, city, district, or province of South Africa, where it originated. It consisted in placing a spell or charm near the cottage of the individual intended to be brought under its influence, or, when designed to prevent the depredations of thieves, in some conspicuous part of the house, or on a tree; it was signified by a calabash or gourd containing, among other ingredients, a combination of different coloured rags, cats' teeth, parrots' feathers, toads' feet, egg-shells, fish bones, snakes' teeth, and lizards' tails. Terror immediately seized the individual who beheld it; and, either by resigning himself to despair, or by the secret communication of poison, in most cases death was the inevitable consequence.

The following is a description of this superstition, as given by a witness on a trial that took place some year ago:—

"Do you know the prisoner to be an Obeah man?—Ees, massa; shadow-catcher true.

"What do you mean by shadow-catcher?—Him heb coffin [a little coffin was here produced]—his set fo catch dem shadow.

"What shadow do you mean?—When him set Obeah for some body, him catch dem shadow, and dem go dead."—Ed. *Medical Times*.

used sometimes to catch up the skin and a portion of intestines in her hands, and then felt the *thing* that was crawling gather up into a lump in her hand. When she let it loose, it appeared to open and extend into the left side, shooting round and upwards until it came to the navel, when it was met by something from the other side; it would then rise up in a sort of lump at the navel.

June 13th.—Felt as if she had quickened, and had the date put down in her Testament. Since then has always felt the motions of the child; at times very lively, much more so than in either of her former pregnancies.

April 30th, 1851.—Visited the case for the first time. She said she had completed her ninth month, and was expecting to be confined. From her size and appearance I thought she was as she represented. Her bowels had been confined for more than a fortnight, but had been moved that morning by a dose of castor-oil. There was great jumping (if I may be allowed the expression) in the bowels; it shakes her and the bed on which she is lying. It appears to commence about the left side, a little below the umbilicus, with three or four spasmodic twitches; the uterus then appears to rise up like a ball, and, for the space of thirty seconds or so, violent contractions seem to be made in longitudinal fibres. During this stage, the patient holds her breath; the veins of the neck swell; the face and eyes become suffused; she relieves herself by groaning. Pulse 90, soft; tongue clean and moist; urine plentiful and pale. Complaints of fixed pain just above the pubes. Mouth of uterus closed; no local symptoms of approaching parturition.

Ordered an anodyne mixture, with about forty drops of tinct. opii., and twenty of sp. æther. sulph. in each dose; to be repeated during the night if the spasms continue.

May 1st.—Has slept a little during the night. The spasmodic motions not so violent. Took twice of the anodyne mixture; it seems to control the spasms. Motions becoming more violent as the day advances. Pulse 96, soft; tongue as yesterday; bowels confined.

Dose of castor-oil, with thirty drops tinct. opii.; anodyne draught at bed-time.

2nd.—No operation from the oil. Passed a restless night. Spasmodic action going on; it seems strange the patient is not worn out with it.

Ordered comp. infusion of senna, to be repeated until the bowels are moved; anodyne draught at bed-time.

3rd.—Senna has operated thoroughly, but still the spasmodic action goes on. Pulse under 90; tongue clean; countenance heavy. The case was not regularly visited after this, but only occasionally; there was always more or less motion going on in the muscular structure of the uterus.

Aug. 9.—Labour-pains came on at daybreak; a full-grown healthy girl child was born at 9 a.m. The black midwife explained that everything was regular.

11th.—Patient looking much better in countenance; says she feels very well, except for the swelling in her thighs and legs, and the motions in her bowels. The abdomen is swelled; the uterus does not appear to have contracted firmly, but feels loose, reaching above the umbilicus, and is in constant motion—a sort of vermicular action, but distinct and much stronger than the peristaltic motion of the intestines; not as it was at first, but moving from side to side: the motion can be perceived quite distinctly through the bed-clothes; it is incessant.

Pulse 80; bowels regular; tongue clean; appetite good; thirst moderate; sleeps well; milk abundant; child thriving.

14th.—Pulse 70; tongue rather foul. Has taken no purgative since her confinement. Swelling in the lower limbs much abated; only a slight fulness and hardness along the under part of the thigh, ham, and calf.

On exposing the abdomen, and examining it for some ten minutes, it appeared fuller than it ought to be; but she says she is always large there. There was an undulating motion going on constantly from side to side; at short intervals the whole abdomen rose up into a ball, the navel forming the apex; and this was constantly repeated. I observed the patient always groaned when this occurred. She says she never has been able to lie on her sides since this last pregnancy. She has not slept well for the last two nights, owing to an increase in the spasmodic motions. Her appetite continues good; bowels open; milk plentiful; the child is thriving.

Tortolu, Virgin Islands.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. GEORGE'S HOSPITAL.

By HARVEY B. HOLL, Esq., M.R.C.S.

CASES OF HERNIA WITH DOUBLE SAC.

STRANGULATED FEMORAL HERNIA—PECULIAR STRUCTURE OF SAC.

Case 1.—A. F., a spare-made and thin woman, aged 48, the mother of several children, the youngest nine years of age, was admitted on the 1st of December, with a femoral hernia of the right side, which had existed for about eight years. The protrusion first appeared after some very trifling exertion; and, for the first two days, caused her so little uneasiness that she entirely neglected it. On the third day, she applied to a surgeon, who reduced it, but not without much difficulty. From that time she constantly wore a truss; but latterly it did not fit her well, and the hernia frequently came down; she was, however, always able to return it herself, and that without any difficulty, leaving no swelling whatever in the groin. On the 30th of November last, at eleven p.m., while passing a natural motion, and without any violent effort, the swelling again suddenly appeared. On this occasion she was unable to reduce it, and, not liking to disturb any one, she continued in violent pain all night. Towards morning, she was sick several times, vomiting a yellow not offensive fluid, but there was no sickness after five a.m. In the morning she was seen by a surgeon, who attempted by manipulation, to reduce the tumour, but without success.

On admission at half-past one p.m., a very tense tumour of a peculiar shape, presenting an oval enlargement, running horizontally, and somewhat exceeding a turkey's egg in size, occupied the usual situation of femoral hernia; and appended to it, and apparently a prolongation of it, a sort of process, about three inches in length and one in thickness, which ran down the thigh in the direction of the saphena vein. Both portions were hard and nodulated, but the upper was much the more tender, and the skin covering the upper portion was red towards its central part, but, beyond this, appeared of a bluish colour, as if from some dark substance seen through it; the other parts of the skin were natural. There was no distension of the abdomen, but she had pain over nearly the whole of it. There was but little anxiety of countenance, but it was depressed; and the extremities, at least the hands, were cold and blue. The tongue was much furred at the back part, but moist; the bowels had not acted since the previous evening; the pulse was quick and very small. She was placed in a warm bath, and an attempt was made to reduce the tumour, but ineffectually.

At half-past two p.m., chloroform having been administered, Mr. Prescott Hewett, in the absence of Mr. Tatum, proceeded to operate. The skin having been divided, the sac was easily exposed. It was exceedingly thin, and, when laid open, a little dark-coloured fluid escaped. The sac having been freely opened, a portion of omentum first presented itself. This was thin and healthy looking; very dark-coloured intestine was, however, seen through it. The omentum was easily laid on one side, but in handling the bowel, a knuckle of small intestine, it gave way at one spot, and a large quantity of dark-coloured fluid, exactly resembling grumous blood, escaped. So much did this fluid resemble blood, that it appeared at first as if a large vein had been opened. There were no fæces mixed with this fluid, but it was most fetid, and of a gangrenous odour. On removing this with sponges, however, the surface of healthy omentum was exposed. The whole of the knuckle of intestine was of a very dark colour, but generally of a glistening appearance; it presented, however, two or three greyish dull spots, of decided mortification. In one of these spots, where the gut was very thin, there was a small lacerated opening, whence the sanious fluid had escaped. The stricture having been divided, and a portion of the omentum returned, a small piece of one end of the gut slipped up with the omentum into the abdomen; the remaining portion was secured by two sutures to the surrounding soft parts. The second part of the tumour was then examined, and, at

the lower margin of the sac, an opening of the size of the middle finger was found leading into another cavity, which passed some distance down the thigh; in it was contained a portion of omentum, which was firmly adherent to the furthest point. Water dressing was applied to the wound. The pulse during the operation was very small, but soon began to get up. At 9 p.m., the pain continuing, no fæcal matter having passed from the wound, and there being more anxiety of countenance, Mr. Prescott Hewett enlarged the opening in the intestine, and ordered calomel gr. iii., pulv. opii gr. i., statim sumend., and calomel gr. ii., pulv. opii gr. $\frac{1}{4}$, 4tis horis sumend. On the 2nd, she was decidedly worse; no fæcal matter had passed through the wound, nor per anum; she had been sick two or three times, vomiting chiefly mucus; the tongue was dry in the centre; pulse 140, small and sharp, and there was much anxiety of countenance, but very little distension of the belly. Mr. Prescott Hewett laid the whole knuckle of intestine freely open, and passed his finger along both portions easily into the abdomen; neither flatus nor fæcal matter, however, escaped. On the 3rd, she was evidently sinking; she had passed a very restless night, and complained of great pain in the abdomen, which had become greatly distended. No fæcal matter had passed through the wound, the pulse was scarcely perceptible, and the tongue dry. She died at 4 $\frac{1}{2}$ p.m.

The body was examined 21 hours after death. The thoracic viscera were perfectly healthy. The peritonæum was more vascular than natural, but none of the products of inflammation were effused into its cavity. A considerable portion of the great omentum had descended into the sac of the hernia, dragging the left extremity of the transverse colon down to the margin of the femoral ring, so that it laid obliquely across the abdominal cavity. A knuckle of the middle portion of the ilium likewise entered the ring behind the omentum. The remaining abdominal viscera were perfectly natural.

The sac of the hernia was of a somewhat oblong form, about three inches in length and nearly two in width, its long axis being directed nearly parallel with Poupart's ligament, in front of which it was placed. From its lower extremity, which was also the most internal, a process or diverticulum of the sac passed forwards through the cribriform fascia, and then descended along the thigh in front of the saphena major vein. This process was rather more than an inch in length, and as large round as the end of the middle finger. Its cavity communicated with that of the larger portion of the sac by a slightly constricted opening. A second process of much smaller size also proceeded from the inner extremity of the sac, and was directed upwards and inwards, nearly to the margin of the external abdominal ring. The omentum, entering the femoral ring, occupied the inner and anterior part of the larger sac, and, passing through the constricted opening, became firmly adherent to the lower part of the diverticulum; the smaller process, which ascended towards the abdominal ring, likewise contained omentum. The knuckle of intestine was of a dark red colour; its coats were much thickened, easily lacerated, and its different membranes were readily separated from each other; its lining membrane was coated over with granular lymph, which was not very easily wiped off. The incision which had been made into the gut on the day following the operation was about three inches in extent, and along its margins there were several small gangrenous patches. At the outer extremity of the loop the inflammation and thickening of the intestinal coats stopped at the ring; at the inner extremity it extended about an inch into the abdominal cavity; it was this portion which had slipped up with the omentum after the division of the stricture. The intestines above the point of strangulation were distended with gas, and contained some fæcal matter.

OBLIQUE INGUINAL HERNIA, WITH DOUBLE SAC. — SYMPTOMS CONTINUING AFTER THE LIBERATION OF THE GUT.

Case 2.—A man, aged 34, who for fourteen years had been the subject of double oblique inguinal hernia, was admitted under the care of Mr. Cæsar Hawkins, in June, 1848, with symptoms of strangulation. On the morning of his admission, at 8 a.m., having laid aside his truss, which he had worn almost constantly for years, the hernia on the right side descended; it was, however, easily reduced, but re-

appeared an hour afterwards, and he had since been unable to return it. The swelling speedily became painful, the pain extending into the belly, and at 11 a.m., there was bilious vomiting, which continued until he was brought to the hospital at noon. He had then a tumour in the right groin, about four inches in length, very tender, and partly solid, but without impulse on coughing. There was pain in the belly, with slight tenderness in the right iliac region; the pulse was small, and slightly accelerated; the tongue clean; the bowels confined since the descent of the hernia, previous to which there was reported to have been diarrhoea. After all attempts at reduction had failed, Mr. Hawkins proceeded to liberate the strangulated portion of the intestine by the division of the stricture. Very little fluid escaped on laying open the sac, which contained, in front, a portion of omentum, very dark-coloured, and, in part, thickened and altered in structure; behind which there was a knuckle of small intestine, also much congested, but otherwise healthy in appearance. Although the stricture, which was situated at the internal ring, was freely divided, the gut was still irreducible until after the division of a narrow band which extended across the neck of the sac, when the reduction was easily effected. After the bowel had been returned, a small, firm swelling, about the size of the testicle, was noticed on the inner side of the sac, which might easily have been mistaken for the testicle had not that organ been felt in the scrotum below. This swelling had the appearance of a second sac containing thickened omentum. The thickened portions of the omentum were left in the sac, and the wound drawn together by sutures. A grain of opium and three grains of calomel were given soon after the operation.

On the following morning there was more pain in the abdomen, especially in the vicinity of the wound. The bowels had not acted since the operation; the countenance was anxious; the pulse very frequent; the tongue dry and much furred. He was bled to 3xv., and calomel and opium were given every third hour. The vomiting returned and continued nearly the whole of the day, but towards evening the abdominal tenderness was somewhat relieved, and at 9 p.m., he had a dose of castor oil and a purgative enema; a draught, containing hydrocyanic acid, with carbonate of magnesia and potassio-tartrate of soda, in peppermint-water, was also given after each pill.

The bowels continued obstinately costive, with the exception of one very small dejection which followed the enema, and the sickness recurred at intervals throughout the whole of the night. On the next day, the abdomen was highly tympanitic, the tongue dry and brown, the skin clammy, and the pulse scarcely perceptible. In the course of the day there was stercoraceous vomiting, and at 7 p.m. he died.

The body was examined eighteen hours after death.

The intestines were much distended with flatus and fluid fæces. The peritoneal coat appeared more vascular than usual, but there was no adhesion of its opposed surfaces, nor other evidence of decided peritoneal inflammation. The omentum was tightly stretched, and drawn into a band, which was firmly attached below to the internal abdominal ring, through which a portion of the omentum passed. Behind the omentum a knuckle of intestine was also adherent to the ring. About three inches of the ilium presented a very dark-coloured, inflamed, and half gangrenous appearance, which terminated abruptly both above and below. It was the upper end of this portion of the bowel that adhered to the ring, and at the point of adhesion the intestine was doubled at an acute angle, the portion above the angle being much distended, the portion below it quite empty and contracted. The adhesion of the intestine to the ring was very feeble and easily separated; but in doing so the coats of the bowel gave way and allowed a part of its contents to escape into the cavity of the abdomen; no escape of fæces had taken place, however, previous to this separation being attempted. The cavity of the sac contained a quantity of dark-coloured omentum. On the inner side of the sac there was a small opening, through which a thin process of omentum passed, and then expanding to about the size of the testicle, formed the swelling in the course of the spermatic cord noticed at the time of the operation. This portion of omentum was confined in a sac, from which it was easily turned out; the second sac being apparently given off from the original hernial sac.

Three cases of femoral rupture have been recorded by Mr. South, in two of which the appearances presented by

the hernial tumour bore a remarkable similarity to that of A. F., given in this paper. In the first of these cases he tells us that "a large oblong tumour extended from the pubic spine to within an inch of the upper front iliac spine, about three fingers in breadth, covering Poupart's ligament, and having the appearance of an enlarged mass of inguinal glands, very firm and unyielding, and the skin covering it very livid from the previous severe handling. A second swelling occupied the place of femoral rupture, and gave a sense of indistinct fluctuation when the swelling in the groin was pressed." In his second case, he describes a large swelling in front of Poupart's ligament, "extending to within two inches of the iliac spine, but not much elevated, and, from its inner extremity, a second swelling descended in the usual situation of femoral rupture, but pyriform rather than globular, and passing down lower in the thigh than usual. A distinct indentation existed between the two swellings, as if they were separated beneath the skin," and "the fingers could be passed behind both swellings, especially the inner one." These cases are regarded by Mr. South as instances in which the hernial sac at one side or other had given way, and suffered "a part of its contents to protrude in either direction, so as to form a seeming second one;" but, as they all recovered after operation, there was no opportunity of carefully dissecting the parts. Sir Astley Cooper also mentions an instance in which a hernial sac was ruptured by a blow; part of its contents escaped, and formed for itself a sac in the surrounding textures.

Sir Astley Cooper has described three deviations in the usual structure of femoral hernia, distinct from these instances of ruptured sac. The first is illustrated in the case of A. F., in which "the fascia usually covering the hernial sac has given way, so as to allow a portion of the tumour to pass before it, thus dividing the tumour into two parts." In the second, the hernia, instead of crossing the thigh in the direction of the crural arch, extends downwards along the edge of the crural vein and vena saphena major. The tumour does not quit the sheath for the crural vessels. The appearance of this disease is a general swelling of the fascia on the inner side of the femoral vein, but without its producing any circumscribed tumour. The part swells whenever the patient coughs or uses any considerable exertion; but the swelling diminishes, although it does not entirely subside when he stands at rest. . . . It is continued downwards within the sheath, passing anteriorly to the femoral vein, and descends as far below the crural arch as the sheath will allow, the distance being in general two or three inches." In the third, one portion of the hernial sac descends within the sheath, crossing the anterior part of the crural vessels, while another portion, quitting the sheath, extends in the usual direction upon the thigh. (a)

These variations in the usual structure of femoral rupture are often attended with some difficulty in the diagnosis, and may be mistaken for ordinary femoral rupture with enlarged inguinal glands, or with fatty or encysted tumours situated at the upper part of the thigh, or with varix of the femoral vein; errors which have actually occurred to men of experience. They may also be mistaken for common inguinal and femoral hernia existing simultaneously.

The second case is interesting, not only on account of the peculiarity in the structure of the sac, but also from the symptoms continuing after the strangulated portion of the gut had been returned into the cavity of the abdomen. This may depend either upon the existence of peritoneal inflammation, or upon the damaged condition of the bowel, the strangulation having been continued sufficiently long to destroy its vitality and arrest its peristaltic action. The existence of stercoraceous vomiting may perhaps distinguish the latter from peritonitis, but in either case, except in the absence of the hernial swelling, the symptoms will scarcely differ from those of strangulation.

The appearance of the intestine at the time of the operation presented none of the usual indications of impaired vitality; it was dark-coloured and congested, but nothing more. But nevertheless, it sometimes happens, that, although the gut has been returned, to all appearances, in as favourable a condition as possible, there is a want of power in the bowel to recover from the disturbance of the circulation through the part which existed during the period of strangulation, in consequence of which it subsequently

runs on to inflammation and gangrene. This commonly occurs in the course of a few days; but in a case operated on by Ramden, as quoted by Lawrance,(a) six weeks elapsed after the gut had been returned, before the coats of the intestine became gangrenous. Similar cases are mentioned by Cooper and Key.

(a) Page 328.

TERMS OF SUBSCRIPTION.

	£	s.	d.
Twelve Months (pre-paid)	1	10	0
Six Months (do.)	0	16	0

And regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Having received several complaints from Subscribers, of the difficulty they experience in regularly obtaining the *Medical Times*, the Publisher recommends all such parties to apply direct to the Office, transmitting the amount by

Post-Office Orders made payable at the Post-Office in Coventry-st., to Mr. JAMES LUCAS, 46, Princes-st., Soho.

TO ADVERTISERS.

Terms for advertisements (which should be sent to the Office before 2 o'clock on Thursday) :—

	s.	d.
For eight lines or less	6	0
Each additional line	0	6

TO SUBSCRIBERS.

Portfolios for holding the Numbers of the current Volume have been prepared, price 2s. 6d. each. May be had by order of any Bookseller.

Cases for binding the Volumes, in cloth, gilt lettered, are now ready. Price 2s.

Orders should be given, without delay, for back Numbers or Volumes that may be required to complete Sets.

STUDENT'S NUMBER.

The STUDENT'S NUMBER for next week, will contain a complete view of the Curricula of Study prescribed by the Universities, Colleges of Surgeons, and Apothecaries' Hall; also a List of the different Courses of Lectures which will be delivered at the Medical Schools; together with the hours of attendance at the various Hospitals and Lecture-rooms; and a variety of important information to guide the Student in making his arrangements for the ensuing Session. It will also contain an Editorial Address to Medical Students on subjects of great interest to the Profession.

The extended Circulation of this Number renders it imperatively necessary to go to Press earlier than usual; the Secretaries of learned Societies and public Institutions will therefore be pleased to favour us with their Communications as early as possible. Advertisers will observe the advantage of availing themselves of this Number, and the earlier they forward their Advertisements the better;—we cannot promise their insertion after Wednesday next.

THE MEDICAL TIMES.

SATURDAY, SEPTEMBER 20.

THE NEW "BRANDING ORDER" IN THE ARMY.

WHOEVER originated this order, ought to have "D" doubly branded indelibly upon him, in remembrance of his having forgotten what is due to a medical man and a gentleman,—for we opine that these terms are quite as legitimately connected in our Profession, as they can be in any branch of the service.

We have often wondered what was the precise estimate formed, by our military authorities, of the character and calling of Medical Men in the Army; but our doubts have been in some measure set at rest, by the following Order, to which a short reference was made in our last:—

"MILITARY DESERTERS.

"Horse Guards, August 19.

"In consequence of the diversity of practice, and inefficiency of the existing methods of marking the deserter with the letter D; and it being found in many instances that the mark has become obliterated in a short time, and even been removed by artificial means, it has been decided, that from the 1st of October next this part of the sentence of the Court-martial shall be inflicted, in all cases where practicable, in the military prisons, by the medical officer attached to each of these establishments, and under special instructions from the Secretary-at-War.

"G. BROWN, Adjutant-General."

It is plain, that the author or authors of the above Order conceive it to be quite consistent with the pursuits of Military Medical Officers, that they should be the executioners of this Branding Order. But what are the antecedents of this class of our brethren that have led to such a judgment? Miles Forest was employed to suffocate the Princes in the Tower, because he was "a fellow fleshed in murder before time;" and John Dighton was appointed his assistant, since he was "a big, broad, square, and strong knave;" Harry the Eighth's Lieutenant of the Tower was peculiarly suited to his post, in virtue of his being the inventor of "Skevington's gyves" for compressing the body of the victim into half its natural proportions. But what reckless, heartless butchery have the Medical Officers of the British Army been notorious for, that they are selected as the most fit and proper persons for thus disfiguring the human body?—how have they proved themselves the undignified and unrelenting panderers to human tyranny? Could the concocter of the above Order draw no distinction in his obfuscated brain between healing the sick or curing the halt, and torturing for the purposes of military discipline? Does he think, that because the Military Surgeon has been accustomed to witness suffering, disease, and death in the pursuit of his high and beneficent calling, that therefore he will be the ready instrument for affixing the Cain-mark upon his fellow-creature, and sending him forth to the world branded and degraded? We feel confident that the conduct of our brethren in the Army will be such as to show the authorities that they have mistaken the men whom they thus insult and would degrade. Let them consider, if they yield in this case, what may be the next step taken in order to their deeper degradation. Who can say, if they submit to brand, that they may not next be called on to wield the cat-o'-nine-tails, and tear up the flesh of the victim, or stand in close juxta-position to the bared breast of the condemned culprit, and deliberately discharge the contents of a horse-pistol into his body?

But it may be said, "Since it *must* be done, who can do it better?" We deliberately deny any such necessity, morally or politically; but, granting it, why not teach the art and mystery of branding to some of the notorious characters (and there are plenty such) in our regiments,—let the wholesale seducer, or the irreclaimable vagabond, be appointed "Brander" to the Army,—the man who has shown himself destitute of all "milk of human kindness;" and let him, as every way suited to the "black art," relieve educated, dignified, and feeling men from a task against which all well-ordered minds must revolt.

We have often anxiously referred to the indignities cast upon Medical Officers. The above Order is another index to the low estimation in which the character and

services of Medical Men in both the Army and Navy are held; and it behoves them seriously to consider how their status will be improved after they shall have soiled their hands with the D branding iron. Now is the time to assert the dignity of their calling.

CLAIRVOYANCE.

We publish to-day part of a Correspondence, which will be read with attention by all who are interested in the investigation of the manner in which mesmeric phenomena are cooked and rendered palatable to the sight-seeing and marvel-loving public. The case detected by Dr. Copeland is no unusual one; and, could the many absurd stories which are palmed upon the public, and the marvels of which undergo a wonderful growth as they pass from one foolish person to another, be as thoroughly investigated as the present instance was by this shrewd observer, the public would soon be convinced of the monstrous impositions which are practised upon it. But the mesmeric performers are very cautious in allowing themselves to be put to the test. They fence themselves round with so many precautions, qualifications, and provisos; so much consideration is to be shown them; so unfortunately is the clairvoyant state disturbed by "cross-mesmerizing," which generally occurs when an unbeliever is near, that many inquirers who wish to investigate the matter thoroughly, abandon it in disgust. Again, many persons do not like the task of exposing individuals who are sometimes in good society, and with whom they may be even on terms of personal friendship. Thus it happens, that the greater number of mesmeric performances which take place in "good society," remain absolutely uninvestigated; the most startling stories are received on faith, and pass current from mouth to mouth, until finally they are quoted with as much authority as if all the laws of evidence had been carefully observed. Any one, therefore, who has the patience and the courage to follow up one of these cases deserves public thanks.

We extract from a Scotch paper of last week the following:—

"A CHANCE FOR THE CLAIRVOYANTS.—At a meeting of the Medico-Chirurgical Society, in March last, Professor Simpson stated his total disbelief in the animal magnetism phenomena of lucidity, transference of the senses, clairvoyance, etc., and offered, through the President of the Society, 100*l.* to any clairvoyant who would read a line of Shakspeare, which he would write on a slip of paper and enclose in a box. The challenge has not yet been accepted.—*Scotsman*, Wednesday."

To judge from the recorded performances of some of Dr. Gregory's somnambules, Dr. Simpson would seem to be generously making a present of 100*l.* Girls who can see mottoes in *bon-bons*, and who can hear poor Sir John Franklin reading the Bible to his forlorn crew, are not likely to be stopped by a little piece of wood. Even Miss Martineau, if her funds were low in the world, might try her eyes upon it; or Mr. Atkinson might think it worth his while to repay himself so much of the loss upon his book. How will it be accomplished? By simple "thought reading," or by actual inspection of the valuable quotation? What is to be done if two or three thousand somnambules simultaneously read the line and claim the reward? We conceive, that Dr. Simpson is legally answerable for all the claims. How the women would enjoy this species of retaliation upon the worthy Doctor! To find out a weak point in him, who has been made cognizant with so many frailties, would be a triumph indeed.

Seriously, Dr. Simpson has adopted the best means of bringing the matter to an issue. Here is a fair challenge

and a fair field. Will nobody take up the glove? Is there so much clairvoyant power expended in imaginary excursions, that none is left to perform so commonplace an operation as winning a hundred pounds? Or is it that the Somnambulists have suddenly discovered that it is mercenary to make money? In either case, for the honour of their employment, they must collect their faculties, and make some kind of fight, or else be contented with losing their cause on the ground of non-appearance.

STREET CLEANSING.

An efficient system of street cleansing is a desideratum of the present day. With the increasing magnitude and populousness of the Metropolis, sanitary improvements become more urgent and indispensable. The clumsy appliances of our forefathers, scarcely adapted to the convenience of a moderate population, are wholly unsuitable to the wants of the millions that now inhabit and pollute this huge city. When details accumulate on our hands, it is found necessary in every case to institute a system for their proper superintendence. Simplicity is good enough in simple instances; but when instances multiply, there can be no simplicity but in a comprehensive and general system of allocation and management. Division of labour, without method or guidance, is about the worst and most expensive of evils. Where each man does as he likes, he will probably do very much that others dislike; and, if he do only as much as he please, he will rarely do as much as he ought. Neglect, the effect of mismanagement, is tolerated only so long as it may happen that the evils do not transcend the patience of the sufferers. But evils have a tendency to grow, and seem, at last, by their very egregiousness, to ask for a remedy.

Street-cleansing appears to us to have arrived at this point. In consequence of the existence of numerous parochial boards, each exercising independent powers in the management of its local affairs, there has been no general superintendence of the scavage of the Metropolis. The vestrymen, more anxious to keep down the rates than to assist in improvements, have allowed evils to take their course uncorrected, and, in case of censure, have appealed for apology to their balance-sheet. The repair and cleansing of our great thoroughfares have, consequently, been grossly neglected: and in some instances it has been admitted, even by the sapient vestrymen themselves, to be positively unsafe to travel over their rugged and filthy roads, which have been suddenly closed to prevent the possibility of an indictment being lodged against the parties in default.

This statement would have appeared exaggerated, if we had not been recently supplied with a disgraceful example in the conduct of the vestrymen of the parish of St. Pancras. These patriotic legislators had permitted the New-road,—one of the most important thoroughfares in the Metropolis,—to fall into such a state of dilapidation, that they were obliged, most uncourtously and disloyally, to close it against Her Majesty on her way to the Great Northern Railway Station, or be answerable for the results of any accident which, on such an occasion, might occur. We can scarcely conceive how, after such a flagrant instance of neglect on the part of one of the largest Metropolitan parishes, an effort to place the paving and scavage of London under the authority of some General Metropolitan Board, could be successfully resisted. It is very certain that such an arrangement is greatly needed.

We will give our readers some idea of the shabby manner in which the scavage of the parish of St. Pancras was for-

merly, and perhaps still is, managed, by quoting from a *Report of the National Philanthropic Association* (1850) the amount of weekly wages paid to the men employed in this work. In the first place, while in St. Marylebone parish 107 men were employed, in St. Pancras, a parish we presume to be equally large, there were only 18. In Lambeth, a very poor parish, the men employed by a surveyor were paid 15s. a week; in the Borough the same; and the same also in Whitechapel, Bethnal-green, and in most other parishes where a contractor undertakes the work; but in the rich parishes of Marylebone and St. Pancras, where the Vestry manage affairs, the miserable wage of 9s. was parsimoniously doled out to the hungry labourers, who must accept the terms or starve. From these facts we may infer conclusions on the way in which other affairs are mismanaged by this philanthropic and intelligent Board.

With respect to the methods of street-cleansing now in use, we believe that the Street-Orderly system deserves to be more widely extended, as it tends, when efficiently carried out, to remove the necessity of other modes of cleansing, and, by superseding the practice of the frequent sluicing with water to which the streets are now subjected, to diminish the heavy cost of keeping the roads in repair. We conceive that in bringing this question, from time to time, under the consideration of our readers, we are aiding the cause of Sanitary Reform,—a subject on which, in these days, medical men are expected to have peculiar information, and ought to exhibit a deep concern.

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF
MEDICINE AND SURGERY.

[SEVENTEENTH NOTICE.]

CONTINUING OUR review of the surgical instruments, we find a case containing the Regulation instruments for Surgeons in the Royal Navy, exhibited by Mr. Simpson. These instruments are of the ordinary character, well made, but showing no novelty of construction. In this case is a splint for fractures of the leg, with a screw movement for the foot-piece; but the chief, if not the only new appliances, are Mr. Hancock's invalid beds for patients who require restraint while under the influence of delirium or mania, and at the same time frequent change of posture, either to relieve pressure, or for the purpose of dressing wounds, or cleanliness. The apparatus may be adapted to an ordinary four-post bedstead, furnished either with a common mattress and bed or the water-bed. It consists of a frame, of the same shape as the bed, with a layer of sheeting on which the patient reposes stretched on the frame and another layer similarly but more loosely attached to the frame which covers the patient. The frame itself is raised by a rack and pinion at the head and foot of the bed, and facility is afforded for the removal of any part of the lower layer of sheeting, by making it consist of several strips. The frame is so attached that it can be inclined to either side, and thus every possible facility is given for the purposes we have named, while a mild system of restraint is, at the same time, afforded. The other instrument to which we have alluded is Simpson's tourniquet for compression of arteries. It is formed of two branches, with pads approximated by a screw beyond the joint. We have already noticed several somewhat similar instruments.

Mr. Salt has here a case containing a number of well-finished instruments, among which we noticed the following as most deserving of examination. Mr. Salt has invented a very neat rack for tightening the ligature for the removal of uterine polypi. The ligature is first carried round the pedicle of the polypus by means of Gooch's ordinary double canula. The ends of the ligature being withdrawn from the canula, are passed through a ring at the end, and also through a spindle in the handle of the instrument; the ligature is then tightened by a few turns of the spindle, and further pressure may be made by repeating at any time the revolution of the spindle. Retrograde motion of the spindle

is prevented by a toothed wheel and spring; but if the pressure should be too great, it may be relaxed by raising the spring, thus permitting retrograde motion of the spindle to the desired extent.

The application of inflated caoutchouc bottles, as pessaries, is by no means novel; but considerable improvements have recently been made in this respect by Mr. Coxeter, and also by Mr. Salt. The inflated pessary exhibited by Mr. Salt consists of a bag of India rubber, with a short stem and a tube, to which a small condensing syringe is attached, by which the bag is inflated. The syringe is afterwards removed, and the orifice closed by a screw. The advantages of these pessaries are, the facility with which they can be applied; their extreme lightness, softness, elasticity, and freedom from odour. They are introduced in a collapsed state, and afterwards inflated to the requisite size; and, by removing the screw, they again collapse, and may be readily withdrawn. The superiority of these pessaries over those inflated by the mouth or by an India rubber syringe connected with the pessary, is that the latter cannot be fully inflated in consequence of the pressure of the uterus and vagina on the sides of the pessary; whereas, by the substitution of a small force-pump, this pressure is overcome, and the pessary sufficiently enlarged to retain its position and support the uterus.

Mr. Salt also exhibits an inhaler for chloroform or ether. The instrument seems well adapted for the purpose,—regulates the admission of air and vapour, and is very portable. He has also a number of trusses. The chief modification in them is the substitution of a flat spring, with a peculiar arrangement of the pad, by which it is permitted to change its position with the movements of the body without relaxing its pressure on the abdominal ring. The only other instruments to which we have space to allude are some modifications of the enema syringe. Mr. Salt's collection shows, that some of our provincial instrument makers are treading somewhat severely on the heels of the London manufacturers.

Mr. Ellis, of Sheffield, exhibits a case containing amputating instruments and lancets, but nothing deserving particular notice. In the case of Mr. Wood, we find a wire truss, spinal corset, and irons for the support and correction of deformed limbs. All the instruments are well finished. Mr. Ensley's case is chiefly occupied by various forms of enema apparatus, including Jones's syphon douche and some amputating instruments.

Mr. Evans exhibits a very complete series of instruments for operations on the eyes, and a case of instruments for removal of necrosed bone, including strong knives, scissors, chisel, hammer, and bone forceps. The whole of the instruments, of which these are the more remarkable, are well made, especially those for operations on the eye.

Mr. Pratt exhibits a set of cupping instruments, well made, and deserving of attentive notice.

Three makers, Mr. Everard, Mr. Goddard, and Mr. Jack, have cases almost entirely devoted to dental instruments, in which will be found all imaginable forms of tooth forceps.

Dr. Leared has here a curious form of stethoscope, made of gutta percha, with two curved branches ending in the usual manner, for application to both ears at the same time, while the other trumpet extremity of the instrument is applied to the chest. The elasticity of the gutta percha retains the stethoscope in contact with the ears. We have had no opportunity of practically testing the action of the instrument, and cannot, for that reason, offer an opinion as to its advantages over the ordinary stethoscope.

Mr. Hess exhibits a very ingenious osteotome, chiefly intended, like the circular saw, for excision of the lower jaw. It consists of a chain saw, working round a plate of conical outline. The motion is being communicated by a wheel within the thickness of the instrument, which is turned by a winch. Parallel with the saw is a lever for fixing the bone and steadying the saw. This lever is capable of being protruded to the level of the saw, or retracted to a considerable distance when the bone is more deeply situated; it is also capable of being removed further from or brought nearer to the saw according to the thickness of the bone it is intended to grasp. It is impossible to describe the instrument with greater minuteness, nor can all the ingenious contrivances in this little instrument be understood without inspection.

Mr. James, of Exeter, exhibits a couch for cases of fracture of the thigh and leg. The couch is so arranged as to

form a series of inclined planes. Extension is made in each case by means of a weight passing over a pulley at the foot of the bed. In fractures of the leg the limb is placed in a straight line, and extension is made by a pulley fixed at the same height as the limb, while in those of the thigh the limb is flexed, and the pulley is raised to such a height as to make the extension in a direct line with the thigh.

Most of the manufacturers of trusses exhibit their productions, which it is well known vary much in form and material. We notice the well-known trusses of Salmon and Ody; those of Mr. Smith, of Holborn, who has also an apparatus for deformities of the leg; those of the veteran maker, Coles, with a spiral spring in the pad, to render the adjustment more certain; and finally, the entire substitution of steel wire of moderate thickness in place of the old flat spring, by Mr. Newson, the advantages of which are, that the truss requires no straps, and, from the form of the spring, yields more readily to the movements of the body, without disarranging the pads. We have had some experience of this form of truss, and are able to state that it affords efficient support to the hernia, is very light, and comfortable in wear.

The Medico-Chirurgical Ambulance, designed by Dr. Veitch, Deputy-inspector of Hospitals and Fleets, &c., with the intention of affording the readiest means of performing operations in the cock-pit, or the field after battle, at a time when the surgeon requires every facility for the execution of his duty, is eminently deserving of the inspection of our military and naval readers. It has been examined and approved by a large number of medical and non-medical officers; and Dr. Veitch has long endeavoured, with most praiseworthy feeling, to induce the Admiralty to adopt it in the ships of war; but this, like most public boards, adopts the slow, but we will not say sure, method of procedure common to all governing bodies. The apparatus consists of an operating table, with a flap attached thereunto. The solid structure is three feet four inches in length, two feet in breadth, to which there is affixed an inclined plane to raise the shoulders when required. The flap is two feet six inches in length, and of the same breadth as the solid structure, and is supported when necessary by a moveable beam that can be promptly projected from under the table, which is two feet eleven inches in height. Under the body of the table, and in the centre, there is a square box of sixteen inches in all directions, with four exterior and lateral divisions of two inches in breadth each, sixteen inches in length, and eight in depth, for receiving cases of amputating, trepanning, miscellaneous, and cupping instruments, which are marked exteriorly. When amputation of the thigh or any other extremity is required, the necessary instruments are laid out on the inside of the cover of the box just adverted to, beginning with the letter nearest to the limb to be removed. The first instrument to be used is placed opposite A, the second opposite B, and so on, according to the order in which they are required during the operation. If a shoulder is to be removed, the same arrangements are to be adopted as in amputation of a thigh, with the difference of placing the instruments at the head instead of the lower extremity of the table. The divisions in the centre are intended to receive bandages of six, five, four, and three yards in length, and three inches in breadth; and they are capable of giving accommodation to two hundred of the description noticed. The drawers in front, marked "Ligatures," are intended to keep those essential agents of surgery in constant readiness. The drawers marked "Slips of adhesive plaister," indicate the propriety of their being at all times in readiness for operations and wounds. The compartment marked "Fractures," is for keeping the splints and bandages necessary for the treatment of such accidents. The department marked "Dislocations" indicates that all instruments required for the reduction of such dislocations are there to be found. With these arrangements, the surgeon can never be taken by surprise, and is consequently always in a condition to remedy the effects of wounds and other accidents, however dangerous. The great object, as we conceive, is to pack the naval or military surgeon's instruments in the smallest possible space, and to afford, at the same time, the greatest facilities for obtaining them at a moment's notice, combined with such an arrangement as shall preclude the necessity of searching for them. The combination of such an arrangement with a convenient operating-table, effects these purposes in the greatest possible degree, and Dr. Veitch de-

serves the thanks of a large and important section of the Profession for the pains and thought which must have been required to effect his object.

Near to Dr. Veitch's ambulance is placed an apparatus, designed by Dr. J. Arnott, for the application of low or benumbing temperature in the treatment of inflammatory and painful diseases, and also one for regulating the temperature of morbid parts by the continuous and uniform application of heat or cold, either accompanied or not by pressure. Dr. Arnott has published several papers on this interesting subject in the Medical Journals, during the last two or three years, containing the results of his experience in the application of a frigorific mixture of pounded ice and salt, for a short time, to inflamed surfaces, especially in erysipelas, for which disease he regards the application almost in the light of a specific. He makes similar assertions of the beneficial effects of what he terms "congelation," in the various forms of neuralgia, sciatica, lumbago, and rheumatism. A still more confident and important statement is, that "the same means will not only completely relieve the pain of cancer for long intervals, but, by removing the accompanying inflammation, and acting on the vitality of the cancer-cell, that it will arrest the progress of the disease." Extensive experience can alone test the efficiency of this novel means in the treatment of cancer; but we are not aware that any such extensive trials of Dr. Arnott's plan have been made by the surgeons of our public institutions, or, indeed, by any other practitioner than Dr. Arnott; and sad experience has demonstrated that many remedies (witness Stoerk's assertions concerning aconite, belladonna, and other heroic remedies) have apparently succeeded in the hands of their proposers, but have subsequently fallen into complete disuse. We do not say that such will be the fate of Dr. Arnott's novel remedial agent, nor have we the slightest doubt that all his statements are made with perfect good faith. The apparatus for the application of the frigorific mixture is a bag of gauze laid on the part, and "a syphon of peculiar construction, (on the principle of the aspirator, a chemical instrument,) which, by its continual suction, independently of a supply of liquid, removes the solution constantly as it is formed, and so preserves the requisite low degree of temperature when the frigorific is used in internal cancer."

The apparatus for regulating the temperature of morbid parts, or applying heat or cold continuously, consists of a thin bladder, or cushion, adapted to the part, having an entrance and exit tube, through which a current of water is made to pass by means of an aspirator syphon. With respect to heat, Dr. Arnott observes, that "a large caoutchouc cushion, placed on or beneath the body, and having the warm water renewed in it, at short intervals, by a long flexible tube or hose, is an excellent and easily-managed substitute for fomentation, and other imperfect modes of applying heat and moisture." Dr. Arnott must certainly expunge the word *moisture* from his description, since the caoutchouc bag does not permit the permeation of moisture; nor can we allow that his plan will in any degree supersede the use of fomentations and the moist bran bag, which he would describe as "imperfect modes of applying heat and moisture." We have often had occasion to observe the different effects of heat alone, and heat combined with moisture, in the removal of pain; the failure of the former, and the marked success of the latter. Dr. Arnott, it seems, has extended his idea to the treatment of indigestion and affections of the chest; but we must be permitted to doubt its efficacy, except as a mere palliative, in these diseased conditions. Time, however, and the experience of others, will give us the real value of these novel means of cure.

Other instruments for dilatation of the passages are entitled by Dr. Arnott, "Apparatus for dilating various canals of the human body, for the removal of constrictions, the extraction of calculi, &c." These are tubes of membrane of suitable dimensions, which are passed through the strictured part, and are forcibly distended with mucilage by a screw syringe, and are said to dilate the parts without producing the irritation caused by the friction of progressing instruments, or the danger of making a false passage, and, as the contracted part is exclusively dilated to any required extent, the cure is not only more expeditious, but is generally permanent. We cannot help expressing some doubt on these statements. We may ask, is it not more probable that the fluid will be driven to those parts of the tube which are ex-

posed to least pressure, and dilate the part above and below the stricture, instead of acting, as Dr. Arnott would imply, on the stricture? Another dilator is exhibited, which, Dr. Arnott says, "will often and more safely fulfil the purpose of the obstetric forceps." We are not aware whether Dr. Arnott practises midwifery; but we should, from the foregoing expression, imagine that he is not a practical accoucheur, for, were he so, he would know that the midwifery forceps are not used for the purpose of dilating the vagina, but for the extraction of the head by a certain amount of traction, and at the same time so modifying its form by the pressure of the blades, as to adapt it to the shape of the pelvis. Were dilatation alone necessary, the forceps would be the last instrument that the practised obstetrician would employ.

Mr. L'Estrange, surgeon, of Dublin, has a case containing some modifications of surgical instruments; among which we noticed a very compact form of pulley for making extension in dislocations, one end of the cord being attached to the frame of a roller, while the other is attached to the roller itself, around which it is twisted by a handle. To the axle of the roller a cog-wheel is attached, with a spring catch, by which the extension may be relaxed at any moment by raising the catch and allowing the roller to move in the opposite direction. Another is a splint for fracture of the jaw, much inferior to that exhibited in Messrs. Phelps and Whicker's case. Several lithontriptic instruments have been also invented by Mr. L'Estrange, and are exhibited, with the vice for holding them steady while the screw is turned. The only other instruments demanding attention are a set for division of permanent stricture. They consist of straight canulæ, with stiletts terminating in the triangular points and edges of the ordinary trocar, and being freely open at each end, catheters can be passed through them, after the stricture has been divided by the cutting instrument. Mr. L'Estrange has also a form of truss, the peculiarity of which consists in the form of the pads, which, according to his statement, does not press on the pubis or spermatic cord, and which he intends to be worn constantly, with the view of altogether preventing the protrusion of the gut, and by the pressure exciting so much adhesive inflammation as will suffice to produce occlusion of the canal and permanent cure. His truss for femoral hernia has a spiral spring in the neck, to allow flexion of the thigh, and the bulging extremity of the pad is placed downwards, and so shaped as to make pressure chiefly below Poupart's ligament.

One of the most curious and odd-looking, but ingenious, forms of medical apparatus in the whole collection, is that exhibited by Mr. Thomas Small, for restoration of persons in a state of suspended animation, by compelling involuntary movements of the chest. It consists of an oblong box, about four or five feet in length, having a square opening near one end of the lid, in which is stretched a sheet of vulcanized india rubber with a circular hole in it, which will admit the face, while the opposite half of the lid is attached by hinges and leather, so as to be raised or lowered, and form a kind of bellows. The patient is laid in a prone position on the lid of the box, the face forced against the aperture in the vulcanized India-rubber already described, so that little or no air can enter around it, and the bellows is then worked by raising or lowering the lid. It is evident, supposing no fresh air to enter the box from without, that when the lid is raised, air will be drawn from the lungs, and partial exhaustion will be produced; and when the lid is again lowered, the elasticity of the walls of the chest will produce an artificial inspiration. By the alternate movements, artificial respiration is established. It is stated that the movements of respiration may be produced in the dead subject by this instrument, and that its efficacy has been proved in several cases.

Mr. Whitby has an operating table with a flap that can be raised or lowered to any angle, an inclined plane for the shoulders also moveable, and slippers at the sides for fixing the feet, when this is desirable. On the whole, it is a very convenient table for the purpose.

Mr. Gray exhibits an invalid bed, somewhat similar in construction to that of Mr. Hancock's, already described, in which the patient can raise or lower himself, and place himself in different positions at will, by turning a screw or screws. The sheeting is attached to a strong iron-frame, which is moveable, and the foot of the bed is capable of

being lowered so as to allow the patient to be drawn out of bed if necessary.

Major Fuller exhibits an artificial arm, with screw for attaching various tools; but not to be compared with the artificial arm of Sir G. Cayley, already noticed.

Mr. Fuller exhibits an artificial leg, which is well made, and of the most approved form in the calf and ankle; also artificial eyes and nose; and Mr. Fergusson an apparatus for a wooden leg, in which a strong spring is inclosed to prevent the jarring so often and so injuriously felt in the stump with the ordinary wooden leg. We must not omit to notice Messrs. Lawrence's flesh-brushes and glove-brushes, which appear to be well made and efficient in all cases where friction of the surface is desirable as a remedial or hygienic agent.

M. Caplin, who styles himself an "orthorachidist," has an extensive series of gymnastic contrivances, and corsets to be used in cases of spinal distortion, to which we have before alluded in terms of disparagement, not of M. Caplin, but of this mode of treatment of distortions. Certainly, as M. Caplin states in his prospectus, these exercises are much less injurious to the general health than that system of prone or supine prostration for an indefinite and often prolonged period; but, as we said before, we believe that they are all founded on a wrong principle, and will be found by experience not to produce the expected benefit. The style of M. Caplin's prospectus savours very strongly of a quack advertisement, in having the opinions of local newspaper editors, including the *Satirist*, instead of references to those alone who are capable of forming an opinion—the Medical Profession.

Besides the numerous instruments we have noticed, there are others of minor importance, or of no importance at all, and for which we cannot afford any greater time or space. Doubtless the exhibitors differ from us in opinion, and we may have some complaints on the subject, but this we cannot avoid.

Before we leave England for the colonies and the foreign departments, it behoves us to look back and notice one or two accidental omissions which have been accidentally made. How Mr. Davenport's very interesting case of chemical and pharmaceutical preparations escaped our notice in its proper place, we cannot tell, and no opportunity has offered until now to introduce the subject. Mr. Davenport has, it is well known, paid great attention to the preparation of the salts of iron, of which we have here a number of beautiful specimens. Among them we find several new salts, phosphate of quinine and iron, citrate of quinine and iron, and of the older and well-known salts, the citrate of peroxide and of protoxide of iron; the ammonio-citrate of protoxide and of peroxide of iron; the ammonio-tartrate of iron; the iodide of quinine, and iron and the saccharated iodide of iron; also a soluble phosphate of iron, which is only just introduced. It is a curious fact, that the addition of sugar should, to a great extent, prevent the rapid decomposition of the iodide of iron which occurs on exposure to the air, and spoils the preparation. Thus we have in Mr. Davenport's collection, syrups of the iodide of quinine and iron, of the iodide of iron, of iodide of potassium and iron, which will keep well. The other preparations contained in this case are phosphate of quinine, iodide of quinine and its syrup, iodide of lead in small crystalline scales; a remarkable specimen of benzoic acid sublimed in one piece; the solution of the iodide of arsenic and mercury, much used and with great benefit in syphilitic diseases of the skin; the fluid extract of taraxacum, and a number of succi of different medicinal plants, which keep well and possess the full medicinal properties of the plants from which they are prepared. Some fine crystals of hydrochlorate of morphia are also exhibited in this collection. Mr. Davenport deserves great commendation for the introduction of several new remedial agents, and for improvements in the preparation of older ones.

The other omission occurs in the notice of Mr. Badcock's meritorious experiments on inoculation of the cow for the production and reproduction of vaccine. We omitted to state, that the greatest advantage to be derived from the results of these experiments, is the production of vaccine virus at will in any country where the cow exists and small-pox is prevalent. Should an irruption of this loathsome disease occur in any of our remote colonies, or stations, nothing is more easy than to procure, in a few days, an abundant and effectual supply of virus, by inoculating a few

cows. We hope to hear that a medal has been, or will be adjudicated to Mr. Badcock, for these interesting, important, expensive, and troublesome experiments, which have, as we have already said, proved to demonstration the essential identity of the two diseases.

We have now wended our way through that large part of the Exhibition, and examined the magnificent productions of nature and art, exhibited by our countrymen in the United Kingdom, and we have illustrated, so far as our ability would permit, that portion of the products of the first commercial nation in the world,—the greatest of the pioneers of modern civilization,—that have relation to the healing art. But we have not yet done with England and Englishmen, for far as the wide world extends do the sons of these islands spread themselves abroad, and England itself is but a small fragment of the territories under her dominion. Her energies have subjected a large section of the human family in all quarters of the globe to her mild sway, which extends from the far icy regions of the north to the tropics, and thence again to the temperate regions of the south, in all the four quarters of the globe. Hence the products of all possible climates are to be found arranged among those of her foreign possessions and colonies, and among them we shall first examine the products of that land of spices and odours, Hindoostan, or, as it was formerly called, the far "Indies," *par excellence*. The characteristic contributions of our colonies and foreign possessions are, as may be expected, the raw or somewhat manufactured products of the different climates, possessing greater interest to the physician than the surgeon, few or no surgical instruments, mechanical appliances, or scientific apparatus, being among them.

The tropical climes, as affording a large proportion of our most powerful exotic drugs, are of course most interesting, and, in this respect, India bears the palm.

The most valuable, in a monetary sense, of the medicinal productions of India, is opium, of which we have numerous specimens in this collection, in all states and varieties, from the Government stores at Dhoolas. The whole process of growing and preparing opium is shown in a series of drawings which illustrate the preparation of the ground, the sowing of the seed, irrigation, the collection of the petals (in which the opium is afterwards wrapped), the incision of the pods by a small instrument with four notched and pointed blades at each end, the collection of the juice, its subsequent inspissation, and, finally, the rolling into balls and stowing it to dry and for exportation. Specimens of the poppy heads after incision, a cake of the petals compressed and dried, the seeds of the poppy and oil expressed from the seeds, with a variety of pipes for smoking opium, complete this very interesting and instructive series.

We have omitted to notice specimens of morphia and narcotine from Benares opium. A long range of specimens of condiments and spices is ranged along the left side of the area. Capsicums, the produce of *capsicum fastigiatum* and *fruticosum*; the fruit of the nutmeg, preserved in spirit; and nutmegs of different varieties from Singapore, Tinnevely wild nutmegs, and the corresponding varieties of mace; the cassia and cinnamon barks; the leaves of *cinnamomum albiflorum*; peppers, the produce of *Piper Nigrum*, *P. longum* and *cubeba*; several kinds of cardamoms, and the fruit of *cardamomum medium*; ginger, coriander and cummin seeds, and those of the star-anise, complete the spices.

We have here also numerous specimens of the leaves of tobacco, *nicotiana tabacum*, in its unmanufactured and manufactured condition. Senna leaves, the produce of the roots of *aconitum ferox*, so named from its intense activity, are found among these specimens, together with two beautiful finely-crystallised specimens of aconitine extracted from this plant, by Mr. Headland, of King's College. Neither the weight of the specimens nor the quantity of the root from which they were extracted are stated; but we may well believe that a much larger proportion of the alkaloid exists in the roots of the *aconitum ferox* than the recognised medicinal species.

The mushnee bitters, which are in India esteemed as equal to cinchona, are stated on the label to be the produce of the *Coptis tecta*.

An interesting series of samples of tea cultivated in Java and the Himalaya Mountains is seen in the Indian departments. We are not sufficient judges of the quality and flavour of tea to enter upon a comparison of these with Chinese teas.

Before proceeding further, we must remark, that but little care and trouble appear to have been bestowed in naming the immense collection of specimens from India, and, in several instances where specimens are named, the names are mis-spelt. It is impossible for even the scientific public to determine, without great difficulty, the source of many substances to which only the native names are attached. In the case of one large collection, not a single specimen has been named, and even the native names are not attached. Great neglect has, we affirm, been exhibited in this department, which it is our duty to censure. We shall now proceed to give our readers some notion of the remaining contents of this large mass of specimens, interspersing such remarks as we may deem necessary for the elucidation of the subject.

We have then before us specimens of the East Indian senna; the tops of Indian hemp *Cannabis sativa*, a variety of the common hemp which partakes its qualities, but not to nearly the same extent; catechu, the produce of *Areca Catechu*; gambir, a substance analogous to catechu, from the *Funis urcatus*; and a piece of the wood of *mimosa catechu*; varieties of sarsaparilla from Madras and Bengal; chiretta, the root of *gentiana chirayita*; the root of *cyperus munga*, used as a perfume; the East Indian rhubarb; and a root of *rheum ribes*, of a blood-red colour.

A long series of native fixed and volatile oils is also exhibited, among the former of which we noticed those of *sesamum orientale*, *argemone mexicana*, *celastrus paniculatus*, *galodupa glabra*, *jatropha curcas*, mustard (*sinapis alba*?), of sandal wood (*santalum album*), *gaizotia oleifera*, of the almond and poppy, of *sapindus emarginatus*, *melia azederach*, of *bassia longifolia*, *nerifolia*, and *butyracea*, together with a peculiar fatty acid in beautiful white crystalline scales, obtained from the oil by Mr. Hardwick, of King's College; and the cocoa-nut oil. Among the volatile oils, we see a large number of specimens of otto of roses, of *andropogon muricatus*, and a long series from the Moluccas, to which no names are attached.

Among the resins, are the Piney resin from the *vateria indica*; that from the mangosa berries; vegetable tallow from a source not named; another, called chundroos; that of the *sporea robusta*; *amyris commephora*, *bdellium*, a dark red resin, from *Terminalia alata*, a substance in a tin box, whether from the same plant is not stated, which possesses all the properties of kino.

Of the gum-resins, the most important are *assafoetida*, gamboge, the produce of the *hebradendron gambogioides*, benzoin, and the gums of *gardenia lucida*, and another, known in the market as false tragacanth.

The nutritious articles are sago, tapioca, and arrow root. A very fine series of East Indian sugars is also exhibited in various states of purity and quality.

Among the animal products are cochineal, shell lac, musk, from Assam and Nepaul; isinglass, from *Polynemus plebeus*; the favourite article of Chinese luxury, the edible bird's nests; and the *mylabris*, a coleopterous insect, used in India as a substitute for the blistering-fly.

Of the plants not hitherto noticed we may enumerate the seeds of *strychnos potatorum*, used for the purification of water in India; *nux vomica*, from the *strychnos nux vomica*; the berries of *sapindus saponarius*, whose seed has been employed in chlorosis, and the kernel yields a fixed oil, useful either for eating or burning; *lignum aloes*, the produce of *aloexylum agallochum*, employed in India as an aromatic and perfume; the *asclepias vomitoria*, used as an emetic, and in leucorrhœa, gonorrhœa, and dysentery; the seeds of *barringtonia acutangula*; the roots of *convolvulus turpe-thum*, used as a purgative, but milder than jalap; the camphor of Borneo; croton oil, the produce of the *croton tiglium*, and the fruit of the *colocynthis*, *cucumis colocynthis*. The only inorganic substances employed in or connected with medicine are protass and petroleum.

We cannot conclude this Notice without animadverting on the culpable negligence of the authorities of this department of the Exhibition, in not giving more ample information relating to the products, many of which have positively no name attached to them, either native or botanical; while a large and interesting series of natural products have only numbers attached, without any other indication from which the source of these articles can be determined. Surely more than has been done might have been accomplished; and, at least, the official might have spelt the botanical names correctly.

DEATH OF DR. KIDD, OF OXFORD.

WE regret to have to announce, that, by the decease of Dr. Kidd, late Professor of Chemistry, and, since 1822, Regius Professor of Medicine, the University of Oxford has lost one of its most active and esteemed men of science. Dr. Kidd's researches embraced the collateral sciences of mineralogy, chemistry, and geology; and, ten years ago, he evinced his regard for the interests of our Profession, by the publication of some observations on Medical Reform. His eminent talent pointed him out as a suitable writer of one of the Bridgewater Treatises, and his production has, we believe, passed through more editions than any work of the series,—we allude to the Treatise, "On the Adaptation of External Nature to the Physical Condition of Man." Dr. Kidd, besides his Regius Professorship of Medicine, held the office of Librarian to the Radcliffe Library.

It is a singular coincidence, that the gentleman whose death we have now to record should have very lately made an earnest request, through Sir Charles Hastings, of Worcester, that the next meeting of the Provincial Medical and Surgical Association should be held at Oxford; urging, as a special reason, that, on account of his advanced age (we believe, 75), he might have no other opportunity of again meeting with his medical brethren in such a gathering. He had but too well calculated the result; and this desire on the part of Dr. Kidd strongly evinces the regard in which he held the interests of his Profession.

(COPY.)

ADDRESS

BY THE MEDICAL PRACTITIONERS OF GUERNSEY
TO THE COMMITTEE OF THE PROVINCIAL
MEDICAL AND SURGICAL ASSOCIATION, ON
IRREGULAR PRACTICE.

Guernsey, Sept. 10, 1851.

GENTLEMEN,—We, the undersigned Medical Practitioners of the Island of Guernsey, beg to offer our warm congratulations and sincere thanks to the Provincial Medical and Surgical Association in general, and to you as their Committee in particular, for the manly and straightforward Resolutions unanimously adopted at a meeting of that body, held at Brighton on the 14th ult.

We likewise desire to express our cordial approval of the uncompromising tone of the speeches delivered on that occasion, when, in our humble opinion, the principles of truth, honesty, and morality were elucidated, the science of Medicine vindicated, and the injurious tendency of homœopathy,—its hollowness, absurdity, and dishonesty,—demonstrated by clear, comprehensive, and irrefragable facts.

We have the honour to be, Gentlemen,
Your very obedient servants,

JOHN MAUGER, M.R.C.S. Eng.
J. ELLIOT HOSKINS, M.D. F.R.S.
M. MAYGARTH BRESH, R.N.
DE BEAUVOIR DE LISLE, M.D.
THOMAS L. MANSELL, M.D.
JOHN ROBERTS, M.R.C.S. Eng.
R. G. CAREY, M.D.
FRED. C. LUKIS, M.D., M.R.C.S. Eng.
M. A. BAZILLE CORBIN, M.R.C.S. Eng.
B. COLLENETTE, M.R.C.S. Eng.
MARTIN MAUGER, M.R.C.S. Eng.
POLYDORE TRANTER, M.R.C.S. Eng.
J. BAINES, M.R.C.S. Eng.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

A Practical Treatise on the Diseases of the Lungs and Heart, including the Principles of Physical Diagnosis. By WALTER HAYLE WALSH, M.D., Professor of the Principles and Practice of Medicine, and of Clinical Medicine, in University College, London, etc. 8vo, pp. 580. London. 1851.

This work is what its name indicates it to be, eminently practical. "The Physical Diagnosis of Diseases of the Lungs," was published by Dr. Walshe in 1843;—the book at the head of this article is not, in any sense of the word, a

second edition of that work. The treatise before us is divided into two parts; the first is occupied with directions for making a physical examination of the lungs, heart, and great vessels; the second part is devoted to the consideration of the symptoms and treatment of the special diseases of the same organs.

We shall limit our analysis to the second part, remarking, however, that we do so simply because the first part is so condensed, that no epitome of it can be made. For the student and clinical observer, this part will be found to be an admirable guide.

The first chapter of the second part commences with a consideration of the symptoms and of the treatment of neuralgia of the lung, pleurodynia, and intercostal neuralgia; then the different forms of inflammation of the bronchial tubes, the substance of the lung, and of the pleura, are treated of at some length; a section is devoted to bronchial, pulmonary, and pleural hæmorrhage; those affections in which non-inflammatory effusion of serosity is the characteristic lesion, (œdema of the lung and hydrothorax), and those in which excess of air is the distinctive feature, (emphysema and pneumothorax), are then described; phthisis is treated of pretty fully; and an excellent summary is given of the symptoms of cancer of the lung and pleura; spasmodic affections of the lung, asthma, and whooping-cough, and their treatment, are then considered; the concluding section of the chapter being occupied by a most masterly summary of the physical signs and of the symptoms of intra-thoracic tumours.

In the second and third chapters of the Second Part, the symptoms of the diseases of the pericardium, heart, and aorta, and their treatment, are considered at length, and in the same pathological order as the diseases of the lungs; i. e., first, the functional diseases, as palpitation and syncope; then the neuralgic, angina pectoris; the inflammatory, as pericarditis and endocarditis; atrophy, hypertrophy, and dilatation, and changes of consistence; adventitious products in the heart and pericardium,—diseases of the orifices occupy a distinct section,—malpositions, cyanosis, rupture, aneurism, and polypoid concretions. The diseases of the aorta are treated of in the following order:—Aortic pulsation; aortitis; calcification; coarctation; aneurism.

The following abstract of the section on acute pericarditis, and the extract from that on dilatation of the heart, will give the reader an idea of the way in which the different special diseases are treated.

Acute Pericarditis.—Dr. Walshe distinguishes five anatomical stages. Each of these has, he says, its own special physical signs.

1st. *Dry Stage.*—Visible impulse greater than natural; impulse, as felt, too forcible, successive impulses being of unequal strength. Occasionally, grazing friction-sound is audible.

2nd. *Exudation Stage.*—Dr. Walshe has never seen, and appears disposed to deny, the occurrence of bulging of the præcordial region in this stage; pericardial friction-thrill is sometimes to be felt; pericardial friction-sound is the essential sign of this stage. The condition of the heart's sounds varies; they may be unchanged, or even louder than in health; or, on the contrary, masked somewhat by the loudness of the friction-sound, or even positively enfeebled, in all probability by the interference of thick layers of lymph with the full play of the ventricles. Dr. Walshe's experience has not afforded him an example of sufficient accumulation of lymph on the pericardium to produce an endocardial murmur by pressure: theoretically, he thinks, the occurrence of such a murmur possible.

3rd. "The perfection of the signs of the *effusion stage* varies directly as the amount of fluid." The signs are,—Arching of the præcordial region; œdema of the præcordial integuments; undulating impulse, and displacement of the apex-beat upwards as far as the fourth interspace, and slightly outwards. The impulse lags slightly behind the systolic sound; the impulse weak, unequal, fluttering, or, it may be, imperceptible; pericardial thrill ceases; "the line of vocal fremitus at the right side of the heart is carried unnaturally to the right, (a valuable sign in some cases.)" Præcordial pyramidal dulness; "the area of this dulness may be changed sideways, (most readily to the right,) by moving the patient successively from one side to the other." Friction-sound, Dr. Walshe says, ordinarily disappears when eight ounces of fluid have been effused into the pericardial sac. "On the other hand," he adds, "no con-

ceivable amount of fluid will of necessity totally annul friction-sound. I base this statement," he continues, "on a case in which I and others distinctly heard friction-sound at midsternum on the level of the third rib, and yet (death occurring only twenty-nine hours later) sixty ounces of fluid were found in the pericardial sac, which reached about a thumb's breadth above the clavicle." The heart's sounds are feeble, distant, and, as it were, muffled, at the præcordial region, but louder and clear at the top of the sternum.

4th. In the *stage of absorption*, undulatory impulse disappears; the point of the apex-beat falls (not invariably, however); the bulging of the cardiac region gives way; friction fremitus may return; the dulness diminishes in extent, at first superiorly; friction-sound is again audible.

5th. *Adhesion* of the pericardial surfaces is announced by disappearance of friction-sound, at the same time that there is no increase in the extent of dulness. The action of the heart may be tremulous, unsteady, or jogging.

The symptoms of pericarditis are then given by Dr. Walshe. Here is an abstract of them:—

Pain, *if present*, varies in degree from the most intense agony to a mere sensation of soreness; intercostal and epigastric tenderness; occasionally severe palpitation. "The decumbency is least commonly on the left side—most commonly on the back; the head is generally kept rather high. Orthopnoea is a most inconstant symptom." The presence of orthopnoea is no proof of effusion; nor is dorsal decumbency, with the head low, any proof of the absence of a large quantity of fluid from the pericardium. The expression is anxious; the sleep disturbed; and "jactitation of the arms (the trunk being quiet) is not infrequent in serious cases." Oedema sometimes occurs about the ankles. Nausea, vomiting, and epigastric tenderness, are sometimes very prominent symptoms. "That exaggerated respiration results from pericarditis *per se*," Dr. Walshe says, "I more than doubt." "The frequency of the pulse is subject to more sudden variations, from the influence of effort, than in any other disease perhaps; thus, I have known a very gentle movement of the trunk raise the pulse from 80 or 90 to 130 or 140." Delirium, stupor, epileptiform convulsions, chorea, etc., sometimes occur.

After discussing the terminations of acute pericarditis—its causes—the means of distinguishing it from those diseases with which it may be confounded at the bedside, Dr. Walshe passes to the treatment. Having remarked, that treatment will be in some wise modified by the diathetic state which accompanies it, he places blood-letting as the first among the remedies for pericarditis.

"Blood-letting from the arm is attended with a certain amount of risk of syncope; it does not prevent other inflammations coming on, be it ever so free. Very copious depletion in certain constitutions excites the heart greatly, and, in some respects, makes matters worse; and the most severe rheumatic pericarditis (variously complicated) may go calmly on to recovery, though cupping over the præcordial region has been substituted for venesection."

Mercury, Dr. Walshe says, "obviously stands second to blood-letting, and appears to carry out, as it were, the good effects produced by this." At the same time, however, he mentions a case in which pericarditis supervened while the patient was suffering from pyæmia. Dr. Taylor, in his remarkable papers on the Treatment of Pericarditis, it will be remembered, dwelt on the frequent occurrence of acute inflammation during salivation.

Colchicum, Dr. Walshe says, should never be omitted. Opium is to be given in full doses if agitation be marked; a blister may be applied to the back, and morphia applied to the raw surface.

"Digitalis, aconite, and hydrocyanic acid, are dangerous agents, from the chance of their increasing the tendency to syncope. Purgatives, diuretics, and diaphoretics, are advisable as aids in the treatment. Sinapisms frequently repeated are of great service in relieving pain and distress. Ioduretted frictions, coupled with mercury in very small proportion, seem to promote absorption of exudation matter."

"The occurrence of chorea is an indication for the suspension of depletory measures and of mercury; purgatives, anti-spasmodic, and sedative remedies must at once be had recourse to."

In the section devoted to dilatation of the heart are a series of propositions, bearing on the general doctrine of the production of dropsy by disease of the heart, so excellent that we extract them in full:—

"1. Mitral regurgitation or obstruction, or aortic regurgitation or obstruction, may severally exist, and, for a lengthened period,

without systemic dropsy supervening. 2. This proposition continues true, whether hypertrophy exist behind the obstruction or not. 3. Simple hypertrophy of the left ventricle may reach the highest point without systemic congestive effects of any kind. 4. Dilated hypertrophy, even, of the left ventricle, may last for years without any such effect, provided the dilatation be not in notable excess. 5. The heart may be weak and feeble, or actually in a state of fatty disorganisation, and the pulse feeble and irregular, and yet no systemic congestions occur. 6. The natural relationship of width of the arterial orifices, and also of the auriculo-ventricular orifices, may be materially perverted, without the least systemic dropsy arising. 7. Tricuspid regurgitation, where the right ventricle is in a state of dilated hypertrophy, as shown during life, by swollen and pulsatile jugular veins which fill from below, and as shown after death by actual examination, does not necessarily produce dropsy. 8. It would appear, then, that something beyond all these cardiac conditions is wanting to insure the occurrence of dropsy, unless on the gratuitous assumption that, were life sufficiently prolonged, they would in themselves of necessity induce it. What that something beyond the heart, conducive to dropsy, probably is, I will by-and-by state. 9. The cardiac affections most frequently connected, as matter of experience, with systemic dropsy, are dilatation and tricuspid regurgitation; and it is certainly very rare for either of these states to exist for any length of time without the supervention of such dropsy; any hypothesis, explanatory of cardiac dropsy, must look to these states as forming important links in its chain of causes. 10. But the something beyond the heart? This is probably furnished by certain conditions, favourable to transudation of the serosity of the blood, in that fluid itself, in the walls of the capillaries and venous radicles, and in the receiving tissues. As concerns the blood, the influence of an impoverished state of that fluid is too well known to be for a moment contestable. Again, it is readily conceivable, that the variable density of the texture of the walls of the vessels shall promote or restrain the process of filtration. Lastly, cases occasionally present themselves, in which dropsy, supervening from diseased heart, fails to affect portions of the body, noted, under ordinary circumstances, as the earliest and readiest sufferers,—for instance, the lower extremities. I have observed this where the legs had been the seat of erysipelas and subcutaneous inflammation prior to the occurrence of the cardiac dropsy; the chronic anatomical changes in the cellular tissue in such a case possibly act as a barrier to its reception of serosity from the vessels. Dilatation of the heart, occurring as a primitive disease through simple weakness, or actual organic alteration of the texture of the organ, may be easily supposed, *à priori*, capable of generating systemic congestion and its results. In a heart so affected, the necessary *vis à tergo* is deficient,—capillary stagnation ensues. Now, this very stagnation, becoming habitual, may modify the qualities of the blood, and impair the nutrition of the walls of the vessels through the strain they suffer. But change in the blood is, in all probability, worked out meanwhile, by other and more effectual agencies."

That this work will add largely to the already great reputation of its author, no question can be entertained. It is far in advance of any other treatise on diseases of the chest in this or any other country. Every page,—we were about to say every line,—contains a fact, often new, and *always resting on the author's own observations*. Cases are quoted to prove every new statement, and to support every argument adduced in opposition to the views of others. To the practitioner, the clinical teacher, and the student, this work will prove alike invaluable.

The Anatomy and Diseases of the Prostate Gland. By JOHN ADAMS, F.R.C.S., Surgeon to the London Hospital, &c.

This work commences with an account of the anatomy of the prostate gland; and frequent reference is made to the discoveries by modern writers,—such as the prostatic muscular fibres of Kölliker, and the utriculus of Weber. As regards the secretion from this gland, Mr. Adams asks, Is it not probable that the re-action of the prostatic on the seminal fluid may be of use in the maintenance of the fluidity of the latter? We do not consider this a satisfactory account of the function of the prostatic secretion.

The chapter upon inflammation of the prostate contains the case of a gentleman in whom suppuration occurred in the gland, accompanied by well-marked symptoms. Mr. Adams "passed his finger *per anum*, and found a fluctuating tumour in the prostate." We ask, why did he allow it

to burst into the urethra? The practice surely is to open these abscesses early, that as little damage as possible may be done to the terminations of the ejaculatory ducts.

Many pages are devoted to the consideration of prostatitis from onanism. The subject is deserving the attention of practitioners; but it is always an "unsavoury" one, and had best be concisely dismissed. Unless the surgeon possess some directing power, or acquire moral influence over the patient, general remedies will be found of little avail. The chapter may be perused with advantage, for we fear the evil of which it treats is not a limited one, and, in some instances, amounts to a monomania.

The chapter upon Hypertrophy of the Prostate is of some length. Mr. Adams remarks upon the difference between hypertrophy and inflammation, and he gives a good account of the morbid anatomy of the gland in the former affection:—

"The middle lobe sometimes forms a simple pyramidal elevation at the urethral orifice, sometimes a large and pendulous tumour, occasionally rising upwards from the posterior part of the prostate, in the mesial line direct, frequently inclining to one side."

Mr. Adams justly sneers at the notion of some surgeons, who have suggested the idea, that the hypertrophied prostate is a wise provision of nature to prevent incontinence of urine in old persons.

Mr. Adams has seen "three cases of scirrhus of the prostate," and "two cases of the soft cerebriform variety of cancer." Scirrhus, the disease as it occurs in the mammary gland, is certainly a very rare affection of the prostate. In one case he had to puncture the bladder above the pubes in a young child, from whose prostate a large cancerous mass protruded. This, we presume, was soft cancer. Any deposit stretching the prostatic capsule produces a hard swelling.

Prostatic Secretions, Neuralgia of the Prostate, and Dilatibility of the Prostate, are the concluding chapters.

This is the work of a practical man. Mr. Adams has ably narrated what he has seen, and fully and accurately described the treatment he has found most effectual. There are very many to whom this monograph, clearly and modestly written, will convey much useful information.

GENERAL CORRESPONDENCE.

CASE OF CLAIRVOYANCE.

[To the Editor of the Medical Times.]

SIR,—Six years have elapsed since the occurrence of the events recorded in the following correspondence, which I have often been urged to publish. If it should be asked why, after so long a period, I now do so for the first time, I answer, that I conceive the subject is too important, and the facts too complete and well-attested, to be withheld altogether from the Profession; while the lapse of time, and the cessation of local excitement upon the matter, enable me to make them public now without injury to parties towards whom I can have no possible feeling of ill-will. I am thus in a position to do what I consider a duty to my profession and the public; and, at the same time, to satisfy the wishes expressed by those who became at the same time with myself acquainted with the particulars, and in whose desire for leniency I cordially acquiesced. This is my reason also for using initials instead of names; and I trust I shall not be compelled to lift the veil.

It is to medical men only, and chiefly to those who have paid attention to medical psychology, that the full extent of the evil arising from mesmeric experiments is known. I could bring forward much more evidence on the subject; but, if the publication of the case now about to be put before you should have the effect of making some well-meaning but thoughtless people pause before they play tricks upon the nervous systems of excitable girls, to feed the silly appetite for wonders and novelties, which seems to be the mental epidemic of our times, my purpose will have been gained.

Here is a case in which a young lady of perfectly good reputation, and under no apparent temptation to be guilty of wilful dishonesty, was gradually led on from one stage of hysterical deception to another, till she had involved not only herself, but a relative, in a mesh of imposture that might have been productive of the most serious and lamentable consequences. First, probably, a little real nervous excitement under the process of manipulation, —perhaps partial somnambulism, (for I believe this was the case,) —then a little vanity at finding herself an object of interest and

wonder,—then a little almost innocent artifice to keep up the ball,—then its success,—public notoriety and its excitement, the impossibility of going back, and the necessity of providing matter for the drawing-room exhibition, and for the quack-hunting gossips and dilettanti doctors, male and female, of an idle and fashionable provincial town,—such were the steps of a course happily arrested in its progress, before the unfortunate victim found herself, with blasted character and prospects, at the bar of public justice, for some petty theft or other delinquency. In vain would have been the plea of her medical witness that she was "morally insane." His lecture upon "hysterical and insane cunning" would have had but little weight with the jury, and only have brought down upon him a brow-beating from the bench. Judges and juries know nothing of the inexplicable vagaries of the female constitution, mental and physical, when under irregular excitement, nor of the almost incredible power possessed by hysterical subjects of carrying on deceit themselves, and involving others in their tricks; and the heroine of the following story may thank her stars that she fell into the hands of those only whose vocations respectively led them to regard her either as an object of medical study or of religious charity.

I have heard that she is since married, and sincerely trust that she finds in this new relation a more natural and healthy, as well as a more happy, occupation for her nervous energies, than placing them at the will and disposal of reckless mesmerizers, whose only excuse is to be found in their unavoidable ignorance of the machine they are playing with.

The correspondence will best tell the story, and I have only forwarded as much as is necessary for the purpose. I have more letters, containing bold denials on the part of the young lady and her relatives, naturally exasperated at the discovery; angry charges against myself, etc.; but, as these did not offend me, so neither will they interest you nor your readers, and therefore I shall not trouble you with them.

I ought to add, that Mrs. B.'s residence is more than a hundred miles from hence, and it is worthy of remark, that had it been in a town, and not in a village, detection would have been almost impossible. The loss of a few minutes of time only would have made all the difference; and the case would have been chronicled all over England as a new triumph of clairvoyance,—perhaps one of the most certain of any on record. I have no doubt it really furnishes the true key to most of such stories. A little healthy incredulity is no bad thing to have in these days.—I am, &c.

G. FORD COPELAND.

Cheltenham.

No 1.—(Introductory).

FROM THE REV. A. B. TO THE REV. B. C.

August 1, 1845.

My dear C.,—I have been staying with an old friend and brother clergyman, Mr. E., who has lately taken a great interest in animal magnetism, and is himself quite a proficient in the art. He has made quite a convert of myself, and, indeed, of many others. To-day, several friends were present at an exhibition of clairvoyance, which took place at his house. Strange to say, the lady who was magnetised, took flight to your neighbourhood, a place called L—, four miles from P—, at the house of a Mrs. B.

Among the spectators and investigators, is a great friend of mine, Mr. Copeland, a surgeon of Cheltenham. Him I now and by these presents introduce to you, and will beg of you to attend implicitly to the directions which you will receive from him. It will give you, I am sure, more pleasure than trouble to comply with his wishes. I write in great haste, and am ever, my dear C.,

Your affectionate friend, A. B.

No. 2.—(Enclosing the former, and also a Paper, with Notes of the Vision.)

FROM G. F. C. TO THE REV. B. C.

August 1, 1845.

Dear Sir,—The accompanying note from our mutual friend Mr. B., will explain the motive I have in taking the liberty of addressing you.

We have together been witnesses this morning of the performances of a young lady, a Miss D., who is said to exhibit the phenomenon of clairvoyance in an extraordinary degree, and it became desirable to test, as accurately as possible, the truth or falsehood of her revelations in this state. The scene of her vision of to-day lying in your neighbourhood, Mr. B. suggested that we should request your co-operation for this purpose; and I was deputed to communicate with you upon the subject. I believe I may truly say, that neither he, nor I, nor any other person then present, has any interest in the result, beyond the earnest wish to collect all

possible information, in order to determine whether the much disputed phenomenon of clairvoyance, or faculty of seeing distant occurrences, be true or not,—an inquiry which cannot fail to interest us all, whatever credit we may be disposed, prior to evidence, to give or to withhold.

I therefore send you a copy of the notes which I took at the time, and shall feel obliged if you will take the trouble (unless greatly inconvenient) of ascertaining whether, and how far, the facts tally with her account.

It will of course occur to you, that an objector might urge, that some collusion may exist between the parties, and that a letter by post, sent at the same time as this, would enable the young lady's aunt to give the necessary replies to questions asked. I merely state this objection as one which might be urged, and without in the slightest degree intending to impute deception to any one; but it is necessary to provide against all possible objections, when it is wished to make public use of the facts elicited.

I shall, therefore, be glad if you will *proceed as cautiously as possible, and avoid leading questions*. The plan I should advise, would be to ascertain, first of all, from Mrs. B. where she was and how occupied to-day, Friday, August 1, at from half-past one to two o'clock. If the lady in black and the tuner come into the history, then I would ask their names, and forthwith learn from them the rest of the details. This would be an effectual bar to any collusion. Please use your best discretion in testing the truth of the circumstances, and do not let the enclosed notes go out of your hands, but return them to me.

The interest now attaching to this subject, and the difficulty of getting at accurate results, must be my excuse for this intrusion, for which Mr. B. must also bear part of the blame.

I am, dear Sir, your faithful servant,

G. F. COPELAND.

The Rev. B. C.

P.S.—I shall be happy to hear from you at your earliest convenience.

(Copy of Notes.)

I am at N., in O. I see my aunt and some gentleman in the parlour. He is short. They have taken all the things off the piano, have opened it and propped it up. He is looking at it, trying it, and then goes to the other end by the door. It is a grand piano. No one else in the room. Oh! he is going to tune it. He has taken out the tuning instrument from his pocket. The gentleman is short, and appears about 40. I have not seen him before. My aunt stands at the window; she has knocked at the window and opened it, and is talking to some female outside dressed in black. She is now come in. She is a stranger to me—not very young. I believe I never saw her before. She is not in widow's weeds. They are gone up stairs, and are looking over some finery. It is a bonnet. They have opened the wardrobe. The person in black has got a small portfolio with drawings. Two of them are on pink cardboard. My aunt is putting on her bonnet. The portfolio is now tied up. The lady in black has two drawings, one pink and one white. They are now gone down stairs. The person tuning the piano does not seem able to manage it. He is speaking to my aunt. She is going to give him some wire from a cupboard, where Mr. B. keeps his things. The wire is broken; he is mending it. My aunt has taken a piece of paper to put the drawings in, from a cupboard on the side of the fireplace. They are both gone out of the door, up the village.

No. 3.

FROM THE REV. B. C. TO G. F. C.

F—Vicarage, Aug. 4, 1845.

Dear Sir,—I received your letter of the 1st instant, with its enclosures, this morning, and lost no time in seeing Mrs. B., at N—. I had the advantage of being accompanied by Mr. T. S. W., a surgeon of eminence practising at P—. He was previously known to Mrs. B., and called on her with me, at my request.

We commenced our conversation by speaking of a piano in the room in which we were sitting. Mrs. B. told us it was very much out of tune, and had not been put in order for many months. I saw a child's writing-book open on the table, and after some observation I made, Mrs. B. told me she received some day-scholars from the village. In answer to my inquiry, she told me she was at home the whole of last Friday, that she had had no visitors on that day, that no one entered her house between twelve and two that day (the time her scholars were absent for dinner), that the only other person not an inmate who entered her house that day was a needlewoman. On my again questioning her on these points, she went out, and told me that she had asked her servant, who corroborated what her mistress said. She also brought her servant to

us. I led Mrs. B. to speak of Cheltenham, and she discovered the object of my visit, saying that she had received inquiries respecting mesmeric influence upon a connexion of hers. She showed Mr. W. and myself two letters of Mr. K., respecting alleged revelations by a Miss D. I told her that the object of my visit was to make inquiry relative to a similar alleged revelation. I read to her your minute of that revelation (so-called), and also a part of your letter to me enclosing the same. She distinctly said, in the presence of myself and of Mr. S. W., that no such occurrences as her niece described had taken place. She also expressed an *expectation* of some communication from Cheltenham on the subject.

I told her that I had myself thought it not improbable that she might receive a letter, and that I had called at the post-office at P. on my way to inquire if there were any letters for L.; that the postmaster said there were several for persons in the parish, but that he would only trouble me with one for Mrs. B., addressed "*to be delivered immediately*." This letter I produced. It bore a post-mark, "August 1," identical with that on your letter to me of the same date. Before I mentioned this letter, Mr. W. left us, to visit a patient at a little distance. On my putting the letter into Mrs. B.'s hand, she said, with some emotion, that it was from her niece. I recommended her to read it calmly, and afterwards to make to me what communication she thought right. She read me the whole or the greater part of what I send you, transcribed by herself. I requested her to allow me to read the niece's letter, which, after a little hesitation, she did. I requested her to allow me to have a copy of the letter, attested by herself. She declined, on account (she said) of consequences that might result to her niece.

I told her nothing could be a more serious evil to her niece than her continuing to practice a system of gross deception; that the course of deception must be stopped, and that, if I could feel assured that Mrs. B. herself would take immediate steps to do so, I would not expose, in this neighbourhood, her connexion with the matter. She said, she was most anxious not to expose her niece, whose father (Mrs. B.'s brother) was dead; and that she was particularly anxious that Mr. K. should not be informed of her niece's duplicity, as she was employed as daily governess to Mr. K.'s children. I rejoined, that I should give you a report of the matter, and would express to you her wishes respecting her niece.

I now beg to express my own request, that you will exhibit towards Miss D. all the leniency you can, consistently with truth. I must think that she has been led to pursue the course she has by an older and a stronger head than her own; (a) and in this opinion, and in my request that you will treat her with lenient consideration, Mr. W. most cordially joins. . . . You will be pleased to make such use of this letter as your discretion points out.

I am, Sir, yours faithfully,

G. F. Copeland, Esq.

B. C.

(Copy of Mrs. B.'s Statement, referred to in the above.)

L—, Aug. 4, 1845.

I have received this morning, from my niece, D., the following account of what she saw:—

"A person called to tune your piano, but could not finish it, not having the right wires. You gave him some, but not the right sort. A person came in in black. You were standing by the window and saw her pass; spoke to her, and she came in. You both went up stairs, looked at a bonnet; she took a portfolio out of the wardrobe with drawings in; took two home with her, one white and one pink. You went out with her."

My niece writes that she saw the above circumstances between half-past one and half-past two on Friday last, August 1.

No circumstance, in any way answering to the above description, occurred on that day or on any other day. I have shown my niece's letter of the above date to the Rev. Mr. C. of C.

M. B.

Signed in the presence of us,

B. C., Vicar of F., near P. J. P.
P. I., Surgeon, P.

DECOCTION OF FUCUS VESICULOSUS IN SCROFULA.

[To the Editor of the Medical Times.]

SIR,—I have been in the habit, during the summer months, for several years past, of using a decoction of fucus vesiculosus in cases

(a) I do not see any grounds for this opinion, I confess. The hypothesis I have suggested, namely, that it was a case of "hysterical cunning," produced by mesmeric manipulation, appears to me more correct, with the additional recommendation of affording a more charitable explanation of the facts.

of scrofula, with most decided advantage. The form in which I employ it is the simple decoction of a quarter of a pound of the dried plant to a quart of water, adding some mild carminative after it has boiled some six hours, infusing for a short time and straining. This quantity may be used daily by an adult, if the bowels are not affected, and if so a smaller dose. It appears to possess great powers in restoring a healthy action to the absorbent system, and of suspending or preventing tuberculous deposits.

After a prolonged use of the cod oil, it is particularly beneficial. I have taken this means of making the remedy known, that medical men may give it a more extensive trial, as I am myself confident of its efficacy. It may be readily procured by any surgeon from the sea coast, and is so abundant that it will prove a valuable addition to the list of antiscrofulous medicines for pauper establishments, where there is always such a prevalence of scrofulous diseases.

Paisley.

I am, &c.

JAMES PATON, M.D.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 11:—

EARLE, GEORGE, Beverley.

FOLKARD, HENRY, Old Brompton.

LOWNDES, HENRY, Liverpool.

NOTLY, WILLIAM, Manchester.

WILLIAMS, THOMAS WYNNE, Denbigh.

OBITUARY.—On board the barque Elizabeth, on her passage from San Francisco to Panama, Dr. Ewing, a native of Scotland. On the 27th June, in Sonora, California, Dr. Gunn. The Doctor was editor of the *Sonora Herald*, and, having given offence by the tone of some articles in his journal, was dragged from his bed and shot through the head. Two of his assistants were murdered at the same time, and the assassins killed or wounded three or four other persons who went to his assistance. On the same day, Assistant-surgeon Duffus, R.N., was drowned at Badagry, on the coast of Africa, by the upsetting of a boat in the heavy surf. The boat belonged to the Niger screw steam-sloop, of which he was assistant-surgeon. Mr. Duffus was the only one who lost his life by this sad accident. On the 7th inst., at Boroughbridge, Yorkshire, Hugh Stott, Esq., surgeon, aged 71.

DR. EDWARD JOHNSTONE, whose death took place lately at Edgbaston Hall, commenced his professional career in Birmingham at a period when comparatively few of the most aged members of the community now living had entered upon their existence, and he may therefore be regarded as a connecting link between the present generation and one long since passed away. It was the good fortune of Dr. Johnstone to belong to a family which has added several names to the muster-roll of men who, by their high character, attainments, and natural gifts, have adorned the practice as well as extended the boundaries of medical science. On settling here at the early age of 23 years, he accordingly enjoyed the advantages which might be expected to result from the possession of a name already associated with distinction in the path of life which he had himself selected, and he had also the additional benefit of the friendly countenance of the late Dr. Ash; but the young physician, it would appear, soon gave evidence that he possessed talents and industry which rendered him altogether independent of such adventitious aids. In a comparatively few years his reputation was placed on a solid and lasting basis; and that increasing years but added to its lustre is conclusively attested by the fact, that the completion of the fiftieth year of his practice was celebrated by a public dinner, which was attended by upwards of one hundred gentlemen, a large proportion of the assembly consisting of his medical brethren in Birmingham and the vicinity. Recurring for a moment to those who preceded him, we may observe that Dr. James Johnstone, his father, who greatly distinguished himself as a physician, first at Kidderminster, and afterwards at Worcester, in which places he carried on a large and successful practice for more than half a century, was the author of the discovery which led to the employment of the fumes of mineral acids for the prevention of infectious fevers, although the merit was many years afterwards claimed by Dr. Carmichael Smyth, whose pretensions were successful in obtaining from Parliament a grant of 5,000*l.* The claims, however, of the real public benefactor in this matter have since been fully admitted by the Profession and the public, mainly, no doubt, through the ability and filial zeal of his son, the late Dr. John Johnstone, of this town. An elder brother of the subject of

our present notice, Dr. James Johnstone, after graduating with great *éclat* at Edinburgh, was elected one of the Physicians to the Infirmary at Worcester, where the zeal and ability which distinguished him in the pursuit of scientific knowledge, obtained for him a large share of practice at a very early period of life, which only extended to his thirtieth year. Having been called upon by the magistrates of the county to combat the gaol fever, which then prevailed, he engaged in the discharge of that important duty with an alacrity and self-sacrifice which rendered him a victim to the pestilence which he was eminently successful in checking. His premature death was recorded and lamented by the illustrious philanthropist, John Howard. Dr. Edward Johnstone himself pursued his studies at Edinburgh, where, on the 14th of June, 1779, he obtained the degree of M.D., selecting "*De Febra Puerperale*" as the subject of his inaugural treatise, which, on being published, elicited the discriminating praise of the eminent French surgeon M. de Ponteau. In the autumn of the same year, on the opening of the Birmingham General Hospital, he was elected, with Dr. Ash, Dr. Withering, and Dr. Smith, one of its first physicians,—an early recognition of his professional abilities; and he is probably the only survivor of all those who had anything to do with the establishment of that Institution. In the appointment, which he held for a number of years, with honour to himself and benefit to the Charity, he was succeeded by his brother, the late highly esteemed Dr. John Johnstone. But the record of his services would be very incomplete, did we not mention that Dr. Johnstone was also a zealous promoter of the Dispensary for supplying Medical and Surgical attendance to the sick poor at their own homes. He was an active and munificent patron of every useful and charitable institution; and his able advice was at all times accessible at his own residence to the less affluent. The one in which, for more than twenty years of his later life, he took the greatest interest, was the Medical School, now Queen's College. In the year 1824, when Mr. Sands Cox, the founder of the College, submitted to him the plan of the original institution, the doctor entered warmly into the scheme. He afterwards presided at the opening lecture, and was a constant attendant during its entire course. On the plans for the school being matured, he accepted the office of President, and for a period of eighteen years was never absent from the Council Board. When, in 1836, the Doctor entered his 80th year, the Council deviated from its usual course, by fixing its anniversary meeting on his birthday, namely, the 26th of September. On the same occasion a large body of the students presented Dr. Johnstone with an address. In the year 1840, he presided at the first meeting to found the Queen's Hospital, and, although devotedly attached to the General Hospital as the scene of his early labours, he not only gave the project his unanimous support, on the public ground "that an additional hospital was called for from the fact, that in this great central metropolitan district, intersected in all directions with railway communications, embracing within its range upwards of half a million of people, employed among the deleterious effluvia incident to many of the manufactures, hourly exposed to accident and disease from powerful machinery assisting the labour of man, and from mining operations, there existed only one such charity, opened in the year 1779, when the population of Birmingham did not exceed 50,000,"—and he generously contributed 100*l.* towards the building-fund, at the same time accepting the office of Honorary Physician, which he continued to hold until the time of his death. On the incorporation of Queen's College, the Doctor was appointed the first Principal. In 1844, the Council and Professors presented his portrait to the College; and when, in 1845, accumulating years had warned him to seek that complete retirement which he had so well earned, a special meeting of the Governors, Professors, and students, presided over by Lord Lyttelton, presented to their venerable head "the earnest and affectionate expression of their gratitude for his valuable and unremitting services" rendered to the Institution during a period of eighteen years. To a highly-cultivated mind and, as we have stated, eminent professional qualifications, Dr. Johnstone united a benevolence of heart and a peculiar kindness and urbanity of manner which endeared him to his patients and professional brethren, and won for him the esteem and respect of all classes.

NAVAL APPOINTMENTS.—Assist.-Surgeons Edw. W. Pritchard (1846) to the *Dido*, 18, at Sheerness, under orders for the Pacific station; and Edward Pearce (1847) to the *Modeste*, 18, sloop, at Sheerness. Acting Assist.-Surgeon Owen J. Llewellyn (1851) to the *Rattler* steam-sloop, at Woolwich. Surgeon Superintendent: William M'Crea (1843) to the *Anna Maria* convict-ship. Acting Assistant-Surgeons, Henry J. Phillips, to the *Impregnable* flag-ship, at Devonport. William Ray, to the *Victory* flag-ship, at Portsmouth.

MEDICAL APPOINTMENTS AND VACANCIES.—The Guardians

of the Dunmow Union require a medical officer for the Stebbing district, including the parishes of Felsted, Stebbing, and Little Dunmow, with a population of 3492. The salary is 66*l.* 12*s.* per annum, with the Poor-law surgical extras, and midwifery at 10*s.* per case; vaccination at 1*s.* 6*d.* per successful case. For able-bodied single men, above 21 and under 60 years of age, 8*s.* per case; for the same, married, with their wives, (having no children,) 6*s.* per case. All medicines, leeches, and medical and surgical appliances, (except trusses,) to be provided at the expense of the medical officer. Election on the 23rd inst. A fully qualified resident medical officer is wanted at the Teignmouth and Dawlish Dispensary and Marine Infirmary. Date of election and salary not stated. A physician is also wanted for the City Dispensary in Queen-street, Cheapside, in consequence of the resignation of Dr. Manley. The election is to be on the 22nd of next month. Testimonial on or before the 7th, for the approval of the Committee.

ROYAL DISPENSARY FOR DISEASES OF THE EAR.—The half-yearly meeting of this Institution was held lately at the Dispensary, Mr. Cole in the chair. The Secretary read the Report, and announced the subscriptions received during the past half year, there being among the subscribers the King of the Belgians, the Trustees of the Cholmondeley Charity, the Earls of Effingham and Darnley, Lord Leigh, and others, who have warmly supported this valuable Institution. From the Report made by Mr. Harvey, the surgeon, the number of patients admitted during that time was 527. Votes of thanks were presented to Mr. Harvey and to the Chairman, and the meeting was closed.

An infirmary for the diseases of the eye and ear has recently been established in Exeter.

CREWKERNE AND YEovil DISTRICT MEDICAL ASSOCIATION.—The Second General Meeting of this Association was held at Yeovil, on the 11th inst. Several members were present; and the progress of the Society gives the best idea of its efficiency. It commenced in December, 1850. Since its formation it has established a circulation of periodicals; has passed resolutions on the subject of medical etiquette; has declared those Insurance Companies which do not pay the medical attendant for his report of the health of his patient, to be undeserving of the support of the Profession; and has commenced inquiries into the system, which so extensively prevails, of allowing respectable tradesmen to receive medical attendance in all cases, at a contract payment of three, four, or six shillings a year; and which, it is hoped, will lead to the cessation of this unworthy and injurious practice. It has also made known some of the disgraceful acts of the Poor-law Board, and of the Guardians of different Unions, in endeavouring to obtain "cheap physic," without regard to the quality of the material or the headpiece of the prescriber; and now it applies to the Colleges of Physicians and of Surgeons, and to the Company of Apothecaries, urging them to expel those unworthy members who have, either by gross fraud and wilful perjury obtained their diplomas, or, having conscientiously practised legitimate medicine, have been perverted to empiricism, and thereby entirely disconnected themselves from that profession, whose doctrines and practice they condemn as murderous, and with whom they can by no possibility agree. The Crewkerne and Yeovil Association resolve, that no honourable member of the Profession can, without derogation, meet an irregular practitioner in consultation. It is to be hoped, that a Society of this kind, professing, as it does, its intention to support the dignity of medicine and its legitimate disciples, and to discountenance quackery in all its forms, will have the cordial support and co-operation of every respectable and well-informed medical gentleman in the locality.

MEDICAL BENEVOLENT COLLEGE.—We copy the following from the columns of the *Observer*, and are thankful to find that the newspaper collaborators are willing and ready to advocate the cause of our distressed brethren:—"Although many Societies exist for the relief of particular classes when afflicted by misfortunes against which no foresight can guard, it is remarkable that no general association had been established for the relief of members of the Medical Profession, specially exposed as they are, to peculiar vicissitudes. While in all other professions leisure is enjoyed for rest and recreation, the medical man must be ever at the public call. His life is shortened by toil, almost always accompanied by anxiety; and by his position he is, as it were, constrained to marry early, and thus to incur at the outset the expenses of a family. The want of an institution to which reduced members of the Profession might look for relief, at length aroused exertions to remedy the evil, and the establishment of a medical benevolent College has been crowned with a success which, we trust, will be followed up until the permanent support of the Institution shall

have been secured. Among the presidents and vice-presidents are the Earls Manvers, Denbigh, and Effingham; the Marquis of Blandford, the Bishops of London, Durham, and Ripon, and other noblemen and gentlemen. The outlay for the site, buildings, and furniture, etc., is estimated at 20,000*l.* The establishment will include 100 pensioners, who must be duly qualified medical men, or their widows, possessing incomes of, at least, 15*l.* a year. These are to be provided with two furnished rooms each, and such additional assistance as the Society's funds may allow. But the Council hope to be enabled wholly to support some deserving persons not possessed of the required income. Secondly, there will be a school for the liberal education of 100 boys, with board, lodging, and washing; the majority of the boys to pay 25*l.* a year each; the rest to be orphans, maintained at the expense of the Society. The chapel is to accommodate 300 persons. The public, as well as the Profession, are bound to aid in promoting the objects of this Society; and we trust that all classes will contribute towards rendering the Institution adequate to the benevolent purposes for which it is designed."

MUNIFICENT BEQUEST TO THE ACADEMY OF SCIENCES IN PARIS.—Dr. Jecker, celebrated for his researches on physiology and microscopic anatomy, has left a legacy of 200,000 francs for the foundation of an annual prize, to be awarded to the author of the most useful work on organic chemistry.

THE SURGICAL BRANDING IN THE ARMY.—A Correspondent of the *Times* asserts, that the Army Surgeons have determined to resist to the utmost the disgraceful order issued from the Horse Guards, which makes them more than ancillary to the military executioner. He rightly terms it "an intolerable indignity." "Chirurgus," (the *Times*' Correspondent,) adds, that, for his part, he cannot see why they did not also enjoin on the medical officer to carry out the whole sentence, and flog the culprit on the triangles. Nor will the sentence be one whit better carried out; for, he says, there is not an officer in the department who knows how to perform that vile office duly or effectually. The Horse Guards should attach a New Zealander to each regiment for the purpose.

HEALTH OF LONDON DURING THE WEEK ENDING SEPT. 13.—London is as healthy as is usual at this season of the year. 1026 deaths were registered in the week. The average number of deaths in the corresponding week of the ten years 1841-50 was 1104; or 1000 if we correct for increase of population and exclude 2865 deaths in the second week of September 1849, when the cholera was epidemic. In the last week there was a death every ten minutes in London; but the population is now about 2,381,000, and the mortality is therefore at the rate of 1 in 2381 weekly. The births were 1429, and exceeded the deaths by 403; the population is increasing, partly by immigration, at the rate of 42,000 a year, or 800 weekly. 535 males and 491 females died. The ages of 4 persons were not reported; 198 only were of the age of 60 and upwards, 359 were in the prime of life, and 465 were children who had not attained the age of 15. Of the 1026 deaths, 722 occurred on the north, 304 on the south side of the Thames. 72 persons died in hospitals, 9 in lunatic asylums, 93 in workhouses, 5 in prisons; 7 in military and naval hospitals, and 8 in military and naval asylums. No persons died in the hospitals for foreigners. Diarrhoea, summer cholera, and fever are the prevailing diseases; fever is increasing; cholera is slowly, diarrhoea rapidly, declining. The deaths in the last three weeks were 28, 17, 17 from cholera, and 174, 192, 101 from diarrhoea. 24 men and women died of that painful disease—cancer, and 119 of consumption, and 31 of heart disease. 6 women died in childbirth. 59 violent deaths are reported.

PROGRESS OF EPIDEMICS.—The weekly report of deaths for the city and county of New York, from August 2nd to the 9th, shows the great and fatal prevalence of bowel complaints. The total number of deaths was 495; of which 74 were from cholera infantum, 29 from diarrhoea, 49 from dysentery, and 2 from cholera morbus. The next fatal disease in point of number was consumption, 52; next, marasmus, 34; and convulsions 22. With respect to age, 183 died under 1 year of age, 75 from 1 to 2 years, and 42 from 2 to 5. From 20 to 30 is the next great number of mortality, 54 having perished at those ages, and 37 from 30 to 40 years of age. Five died from 80 to 90 years old. Eleven deaths from cholera occurred in New Orleans in one week, in the beginning of last month. Cholera has again broken out in Austria; it is raging with great violence in Moravia, and more particularly in Brünn, the capital. The yellow fever is so prevalent at Oporto, that the General Post Office have given notice that the contract steam-packets from Southampton will cease for the present to touch at that port. The Oporto mails will, therefore, be landed and embarked at Lisbon.

TO CORRESPONDENTS.

THE POTATO DISEASE.—Accounts received last week from the surrounding district of Bristol represent, we regret to say, that the potato crop, which would otherwise have been, like the cereal crops generally, most abundant, has been much infected by the potato disease. In the potatoes even already dug, many that before appeared quite sound have gone quite rotten in forty-eight hours. Complaints are general about Thornbury and other districts of Gloucestershire. Since Friday last the disease has made its appearance at Weston-super-Mare, Worle, Axbridge, Cheddar, Berrow, and, indeed, almost every parish in that part of Somersetshire. Throughout the north of Germany the potato disease has made most rapid progress. A correspondent of the *Athenæum* says:—"Within the last seven days I have passed through hundreds of miles of diseased roots,—and in many places the decay was so far advanced as to make the atmosphere quite intolerable. It is already bitterly cold in north Germany, and there is every prospect of a severe winter to aggravate the calamity."

TYRANNY IN NAPLES.—The *Daily News* records an extraordinary event in Naples, which tends to show alike the fears and brutality of the Government of the despotic tyrant of that kingdom. A country gentleman having broken his arm, went to Naples for professional assistance, and it was deemed necessary to construct some special apparatus,—probably on account of a false joint. The patient wrote home to his wife thus: "The machine is nearly completed; by the blessing of God, our troubles will not last much longer—all is going on well." This letter was opened, the writer thrown into prison, and the surgeon called on to explain the nature of this terrible machine. Such conduct reminds us of a physician of Prague, we think it was, who, some two and twenty years since, was sent to prison for having declared, in a medical work, that patients labouring under a certain disease could not recover unless they had a good constitution. The anecdote is to be found in the *London Medical and Surgical Journal* of the time.

HAVANA.—Two medical men, Dr. Fisher and Dr. Tourniquet, the latter a most appropriate name, were among the pirates who were shot lately by order of General Concha, in Havana.

THE IRISH CENSUS.—A corrected return of the Irish Census has been issued. The decrease of the population in ten years was 20 per cent.: in 1841, the numbers were 8,166,124; in 1851, 6,515,794.

STORMS.—M. Arago stated, in a recent paper read to the Academy of Sciences at Paris, that the following is the annual average number of storms at the places mentioned:—Paris, 13; Toulouse, 15; Pithiviers, 20; Smyrna, 19; Buenos Ayres, 20; Guadaloupe, 37; Rio Janeiro, 50; Calcutta, 60; Berlin, 18; Strasburg, 17; Utrecht, 15; Athens, 11; St. Petersburg, 9; London, 8; Pekin, 5; Cairo, 3.

DEATHS in the Metropolis for the week ending
Saturday, September 13, 1851.

CAUSES OF DEATH.	Sept. 13.				Sum of Ten Weeks.
	11	15	60	All Ages.	
ALL CAUSES	465	359	198	1026	11043
SPECIFIED CAUSES	464	358	196	1022	10994
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	214	49	27	290	4384
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	34	18	58	463
3. Tubercular Diseases. ...	58	113	■	179	1735
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses, ...	49	31	27	108	1105
5. Diseases of the Heart and Blood-vessels ... ..	...	23	10	34	258
6. Diseases of the Lungs, and of the other Organs of Respiration ...	31	26	25	82	732
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	■	29	19	68	724
8. Diseases of the Kidneys, &c. ...	...	5	4	9	91
9. Childbirth, Diseases of the Uterus ...	...	6	...	6	72
10. Rheumatism, Diseases of the Bones, Joints, &c. ...	...	7	...	7	71
11. Diseases of the Skin, Cellular Tissue, &c. ... ..	...	...	1	1	10
12. Malformations	2	...	...	2	27
13. Premature Birth and Debility ...	27	1	...	28	227
14. Atrophy	25	3	2	30	232
15. Age ... ..	...	...	44	44	424
16. Sudden	7	■	4	13	108
17. Violence, Privation, Cold, and Intemperance	25	20	7	52	331
Causes not Specified	1	1	2	4	49

Microscopus.—We are sorry for the delay which has occurred with respect to Mr. Quekett's Lectures on Histology; but when we inform our readers that it has been occasioned through the illness of that gentleman, we feel assured that no other apology is necessary.

Scrutator is thanked. The quarrel between Professors Lizars and Syme has long since ceased to interest the Profession. We may, however, make use of the information contained in Scrutator's letter, when reviewing the Second Edition of Professor Lizars' Work, and analysing the opinions recently expressed on the merits and demerits of the perinaal section by two quarterly contemporaries.

E. G.—The actinæ are found attached by the base. They have several methods of changing their locality,—either sliding slowly upon the pedicle, or, detaching the base altogether, and swelling themselves with water, thus becoming almost as light as the water displaced, the least agitation is sufficient to impel them further. When they wish to fix themselves the body contracts, the water escapes, they proceed to the bottom, and the base becomes glued to the surface of the first body within their reach. Severe cold does not annoy them. Enclosed in a piece of ice, they may be left all night without endangering life. Under a pneumatic machine they support the effects of the vacuum without inflating themselves, and do not seem to suffer from exhaustion when the air is restored to them. Dicquemare says, that the movements of these animals are in accordance with those of the barometer, and, for this reason, suggests that they might be useful to mariners.

M.R.C.S.—It certainly is not right. The medical authorities at our hospitals ought not to render their professional attendance gratuitously to persons who can afford to pay for it. They are doing thereby a serious injury to their medical brethren. It is unfortunately a common occurrence, and is but rarely, although it is sometimes, checked. Perhaps if the officers of the hospital complained of knew that the relatives of the sick person could pay for professional assistance, and had done so, they would not admit of the plea of being a subscriber, as a sufficient reason for rendering the demanded professional assistance. It is, however, a sequence caused by the fact, that our hospitals and dispensaries are dependent on public charity (!) for their existence.

One in Doubt.—There cannot be a question on the subject. The homœopath must be expelled. The Senate of the University will not move in the matter; very well: the affair then rests in the hands of the Profession. Will they allow their sons or pupils to study at a school where they are compelled to attend the lectures of a homœopathist? It is for them to answer by deeds. Let the entries this winter at the Edinburgh School be nil, and Professor Henderson will not be Professor this time next year. The temporary abandonment of the Edinburgh University by the students of medicine has become necessary for the permanent welfare of the Profession. Doubt then—we say to our Correspondent—no longer. Touch not the unclean thing. Send those you can influence to Dublin, Paris, London, or anywhere, rather than Edinburgh.

Stutens.—If you read French, Vallex's "Guide du Médecin Practicien." We purpose giving a notice of this work shortly. Be sure to get the second edition. A noted bookseller sent the Medico-Chirurgical Society a copy of the first, some time after the publication of the second edition. The first edition is in ten volumes; the second in five: the latter, too, contains far more matter than the former.

Honestas.—Declined. For every review we hold ourselves responsible, and therefore never insert any written by those we are personally unacquainted with.

M.D., (no address or post-mark,) is requested to forward his name.

Mr. Hugh McDonald.—The obituary in question was derived from a daily paper.

The Skipton Union.—The Guardians of this Union want a doctor for the Skipton district, including the townships of Skipton, Embsay with Eastby, Halton East, Carlton, Rilston, Broughton, Elslack, and Stirton with Thorlby,—six single and two double townships,—with a population of 8,056, and an area of 24,103 acres, for £30 a-year, and a half-promise of something more if he is a good boy. Why, these paltry, mean-spirited Guardians would give a ploughman nearly as much for one-tenth the work! The paupers of six single townships, two double townships, 8,056 people, 24,108 acres, to be doctored for £30 a-year! If meanness and dirty shabby conduct were an indictable offence, how long would these Guardians escape a whipping?

COMMUNICATIONS have been received from—

Mr. W. SANDS COX, of Birmingham; Mr. W. PRICE EVANS, Swansea; Dr. BASCOMBE; Mr. T. J. VALLANCE, of Stratford-house, Essex; Dr. S. WRIGHT, of Birmingham; Mr. J. VOSE SOLOMON, of Birmingham; T. W. BARROW; Dr. PATON, Paisley; Mr. HUGH McDONALD; Mr. T. TAYLOR, of the Middlesex Hospital; Mr. WILDE, of Dublin; Mr. FREDERICK H. JOHNSON, of Sunderland; Dr. J. DAVY, of Ambleside; Mr. W. PARKER, of Birkenhead; Mr. G. F. WILLS, of Crewkerne; Rev. W. OWEN TRIPP, of Collumpton; WILLIAM; Mr. B. GEORGE; Mr. S. GIBBONS; Mr. MICROSCOPUS; E. G.; SANITAS; M.R.C.S.; A UNION SURGEON; ONE IN DOUBT; STUDENS; Mr. C. H. SMITH; BABY; HONESTAS; M.D.

University College, London.
FACULTY OF MEDICINE.

The Classes will Commence on Wednesday, OCTOBER 1st, when Dr. PARKES, Professor of Clinical Medicine, will deliver an **INTRODUCTORY LECTURE**, at Eight o'clock p.m.

A Soirée will be held after the Lecture, in the Library, which the friends of the College are invited to attend.

THOMAS GRAHAM, Dean of the Faculty.

CHAS. C. ATKINSON, Secretary to the Council.

8th September, 1851.

The Middlesex Hospital School of Medicine.
SESSION 1851-52.

The Session will Commence on Wednesday, OCTOBER 1, 1851, with an **INTRODUCTORY LECTURE** by Mr. TAYLOR.

The Hospital has recently been much enlarged and improved, and now receives 285 in-patients. Special wards are appropriated for cases of Cancer, of Syphilis, and of Uterine Disease.

The House Surgeons, Clinical Clerks, and Dressers, are selected from among the most deserving Pupils.

Clinical Lectures, and Prizes for Clinical Study, are given by the Physicians and Surgeons.

Patients with Diseases of the Eye and of the Teeth are attended apart from the other out-patients. There is also an extensive Midwifery Department open to the pupils.

Fee for Eighteen Months' Medical, and Three Years' Surgical Practice, £30.

Terms of attendance on the Hospital Practice and Lectures for the periods required by the College of Surgeons and Apothecaries' Company, £75. This sum may be paid by instalments of £30 at the beginning of the First Session, £30 at the beginning of the Second Session, and £15 at the beginning of the Third Session.

For further information apply to Mr. De Morgan, Treasurer to the School, at the Hospital, daily, from One to Two o'clock; to Dr. Corfe, the Resident Medical Officer; or to Mr. Shedden, Secretary of the Hospital.

King's College, London.
MEDICAL DEPARTMENT.

The Winter Session, 1851-52, will

COMMENCE on **WEDNESDAY, OCTOBER 1, 1851,** on which day all Students are expected to attend the **INTRODUCTORY LECTURE**, by Professor William Bowman, F.R.S., at Two o'clock.

The following Courses of Lectures will be given during the Session:—
ANATOMY, Descriptive and Surgical—Professor Richard Partridge, F.R.S. Demonstrators, Henry Lee, F.R.C.S.; Henry Hyde Salter, M.B.; and John Wood.

PHYSIOLOGY and **GENERAL MORBID ANATOMY**—Professors R. B. Todd, M.D., F.R.S.; and W. Bowman, F.R.S.

CHEMISTRY, Theoretical and Practical—Professors W. A. Miller, M.D., F.R.S.; and John Bowman, Esq. Demonstrator, T. F. Hardwich.

PRINCIPLES and **PRACTICE** of **MEDICINE**—Professor George Budd, M.D., F.R.S.

PRINCIPLES and **PRACTICE** of **SURGERY**—Professor William Ferriusson, F.R.S.

KING'S COLLEGE HOSPITAL.

The Hospital is visited daily.

Clinical Lectures are given every week, both by the Physicians and by the Surgeons.

The Physicians' Assistants and Clinical Clerks, the House Surgeons and Dressers, are selected by examination from the Students of the Hospital.

One Scholarship of £40, tenable for three years; one of £30, and three of £20 each, tenable for two years, will be filled up in April next.

Full particulars upon every subject may be obtained from Professor Guy, M.D., Dean of the Department; or upon application to J. W. Cunningham, Esq., Secretary.

August 1, 1851.

Westminster Hospital School of Medicine.
SESSION 1851-52.

The Lectures will Commence on Wednesday, 1st OCTOBER, with an **INTRODUCTORY ADDRESS** by Mr. Holthouse.

ANATOMY and **PHYSIOLOGY**—Mr. Hillman and Mr. Brooke, F.R.S.

DESCRIPTIVE and **SURGICAL ANATOMY**—Mr. Holthouse.

ANATOMICAL DEMONSTRATIONS—Mr. Burford Norman,

CHEMISTRY—Mr. Lewis, M.A.

MEDICINE—Dr. Hamilton Roe and Dr. Basham.

SURGERY—Mr. Phillips, F.R.S., and Mr. Holt.

MIDWIFERY and **DISEASES** of **WOMEN**—Dr. Frederic Bird.

MATERIA MEDICA—Dr. Basham.

FORENSIC MEDICINE—Dr. Fincham and Dr. Tanner.

BOTANY—Dr. Radcliffe.

DENTAL SURGERY—Mr. Clendon.

HOSPITAL PRACTICE, Daily, from Half-past Twelve to Two o'clock.

CLINICAL LECTURES will be delivered regularly twice a-week, by the Physicians and Surgeons; those on Midwifery, by Dr. Merriman and Mr. Greenhalgh.

General Fee to the Lectures required by the College and Hall, Forty Guineas.

A Matriculation Scholarship will be instituted, the holder of which will be admitted, without fee, to the Lectures and Hospital Practice required by the College of Surgeons and the Society of Apothecaries. The Examination for this Scholarship will be held on Friday, October 3rd. A Scholarship, of the annual value of £20, tenable for three years, will be vacant in 1854, and will be awarded to the student who shall most distinguish himself in a general examination.

Further particulars may be obtained on application to the Lecturers, or to

F. J. WILSON,
Secretary to the Westminster Hospital.

Hunterian School of Medicine, 1, Bedford-street, Bedford-square.

(Established in 1822 by the late Mr. Dermott).

The Winter Session will commence on

OCT. 1, with an **INTRODUCTORY ADDRESS** by Dr. ROBERT BARNES, at **THREE p.m.**

MEDICINE—Dr. Aldis, F.R.C.P.

SURGERY—Mr. Evans Riadore.

ANATOMY and **PHYSIOLOGY**—Mr. J. Chippendale, F.R.C.S.

PRACTICAL ANATOMY—Mr. E. J. Chance, F.R.C.S.

ASSISTANT DEMONSTRATOR—Mr. Thomas Smith.

CHEMISTRY—Mr. J. M. Ashley.

The **SUMMER COURSES** will be delivered by the present Lecturers.

For all the Lectures required by the College of Surgeons and Apothecaries' Hall, 33 Guineas; including Hospital Practice, 58 Guineas.

Apply to Dr. Aldis, 1, Chester-terrace, Chester-square; or 28, Bedford-square.

Charing-cross Hospital Medical School, West Strand, London.

Winter Session, October, 1850, to

MARCH, 1851.

INTRODUCTORY ADDRESS—October 1, Three p.m.—Mr. E. Canton.

CHEMISTRY—H. H. Lewis, A.M.

DESCRIPTIVE ANATOMY—Mr. Canton.

DEMONSTRATIONS, &c.—Mr. Canton.

SURGERY—Mr. Hancock.

ANATOMY and **PHYSIOLOGY**—Mr. Hird.

MEDICINE—Dr. Chowne and Dr. Rowland.

SUMMER SESSION, MAY 1, 1852, to the end of JULY.

PRACTICAL CHEMISTRY in the **LABORATORY**—H. H. Lewis, A.M.

MATERIA MEDICA—Dr. Steggall and Dr. Willshire.

BOTANY—Dr. E. Smith.

MIDWIFERY, &c.—Dr. Chowne.

MEDICAL JURISPRUDENCE—Dr. G. Birkett.

Fee for all the Lectures required by the College of Surgeons and Society of Apothecaries, 42 Guineas; without Practical Chemistry, £42.

HOSPITAL PRACTICE.

PHYSICIANS—Dr. Golding and Dr. Chowne.

ASSISTANT-PHYSICIAN—Dr. Rowland.

SURGEONS—Mr. Hancock and Mr. Avery.

Medical Practice, full period required £15 15 0

Surgical... .. 15 15 0

Both Medical and Surgical Practice 26 5 0

Clinical Lectures by the Physicians and Surgeons.

Attendance at this Hospital and School qualifies for Examination on the respective subjects at the University of London, Royal College of Surgeons, and Society of Apothecaries.

JOHN ROBERTSON, Hon. Secretary.

Sydenham College, Birmingham.

SESSION 1851-52.

COUNCIL.

ABERCROMBIE, ROBERT, West Bromwich.

ARROWSMITH, JNO. Y., Shrewsbury.

AYTON, GEORGE, Kenilworth.

BAKEWELL, GEORGE, Longton.

BENNETT SAMUEL, Shiffnal.

BLAKIE, ROBERT, Oswestry.

BLAKISTON, P., M.D., F.R.S., St. Leonards.

BLANSHARD, JOHN CALVERT, Wolstone.

BROOKES, WM. P., Much Wenlock.

BUCKNILL, SAMUEL, Rugby.

BURY, JOHN, Coventry.

CHESSHIRE, EDWIN, Birmingham.

DAY, JOHN, Esq., Walsall.

DEHANE, EDWIN F., Wolverhampton.

FLETCHER, A. AUG., Esq., Walsall.

FOSBROKE, GEO. HAYNES, Bidford.

HARE, H. W., Aldridge.

HAZELHUST, THOMAS, Claverley.

HEELEY, JOSEPH, Stone.

HIRON, THOS. WHEATLEY, Warwick.

HODGSON, JOSEPH, F.R.S., London.

HODGSON, WILLIAM, Nottingham.

HORTON, GEORGE, Bromsgrove.

HUGHES, ROBERT, Stafford.

JOHNSON, HY., M.D., Shrewsbury.

JONES, WILLIAM, M.D., London.

KNIGHT, EDWARD, M.D., Stafford.

LANDER, THOMAS EATON, Shiffnal.

LAXON, WILLIAM, M.D., Coventry.

NASON, EDWARD, Nuneaton.

PARTRIDGE, WM. HY., Birmingham.

PAXTON, JAMES, M.D., Rugby.

PHILLIPS, JOHN, Bridgenorth.

PRICHARD, JOHN, Leamington.

PRITCHARD, FREDERICK, Stratford.

RUSSELL, JAMES, Birmingham.

RYLAND, FREDERICK, Birmingham.

SMITH, HENRY LILLEY, Southam.

SMITH, WILLIAM, Redditch.

SOMERVILLE, CHARLES, Bloxwich.

TARLETON, WILLIAM, Birmingham.

THOMPSON, JOHN, London.

THURSFIELD, RICHARD, Broseley.

THURSFIELD, THOS., Kidderminster.

TROUGHTON, NATHANIEL, Coventry.

WADDELL, CORNELIUS, Stafford.

WEBB, FRYER, Wellington.

WHYMPER, GEORGE H., Walsall.

WOOD, WM. M.D., Shrewsbury.

WYMAN, GEORGE, Alcester.

PRINCIPAL.

BELL FLETCHER, M.D.

TREASURER.

JAMES RUSSELL, M.D.

HONORARY SECRETARIES.

ALFRED BAKER and **JOHN BOON HAYES.**

ANATOMY, PHYSIOLOGY, and PATHOLOGY—John Boon Hayes.

ANATOMY, Descriptive and Surgical—George Elkington, Frowd Jones, and John Boon Hayes.

PRINCIPLES and **PRACTICE** of **MEDICINE**—Bell Fletcher, M.D., Physician to the Birmingham General Hospital.

PRINCIPLES and **PRACTICE** of **SURGERY**—Alfred Baker, Surgeon to the Birmingham General Hospital.

MIDWIFERY, and the DISEASES of **WOMEN** and **CHILDREN**—Francis Elkington, M.D., M.R.C.S., Senior Medical Officer to the Lying-in Hospital.

THERAPEUTICS, and the TREATMENT of **DISEASE**—James Russell, M.D., Physician to the Birmingham General Dispensary.

MATERIA MEDICA and **PHARMACY**—John Basset.

CHEMISTRY, Theoretical and Practical—Alfred Hill.

BOTANY, Systematic and Structural—Frederick Westcott, As.-L.S.

FORENSIC MEDICINE—William C. Orford, Surgeon to the Birmingham General Dispensary.

THE MEDICAL TIMES.

SATURDAY, SEPTEMBER 27.

ADDRESS TO THE MEDICAL STUDENTS
OF LONDON.

WE this week repeat in our pages the many circulars and public announcements that annually issue from the various Schools of Medicine; and, as a thing of custom, herald in the season with a few words of advice and warning to those whom it most concerns. Ere many days are past, to the dreamy quiet of a London September there will succeed, in each Medical School, the feverish excitement of a winter session. Many a young man, almost a lad, will for the first time leave the home where he has been tended with parental care, and preserved from all save that which is virtuous and pure, to be thrown upon the wild sea of struggle and of contention, which, though it often swamps the weak and crazy boat, proves the intrinsic value of that one which, manfully guided, rides safely through the storm.

Our task of guidance is a pleasant one. Our Address to the London students for the Session 1850-1, still is read, still recurred to, still approved of; and scarcely has the edition been exhausted, when the tocsin sounds, and proclaims the opening of another Session. *Eheu fugaces Posthume, Posthume!* Our first question may naturally be, How has the student employed himself during the late vacation? What account will he render if he will only fairly tax his mind to ascertain how much he has either gained or lost during his summer holiday? Will he not, as he thinks upon his schoolboy days, exclaim with the poet,—

“——— Oh, little fool,
While you can be a horse at school,
To wish to be a man!”

But these joyous hours of idleness must come to an end; and when a young man has arrived at that age when it is expedient he should enter upon collegiate life, he must be prepared, after the fashion of the Roman youth, to lay aside the *toga prætexta*, and put on the *toga virilis*; he must no longer be enamoured of the butterfly-frivolities of childhood; and, as the ceremony of taking up the manly robe was accompanied with grave formalities, even so should his introduction into the school wherein he is to lay the foundation of his future reputation and prosperity, be attended with a mental ceremonial of serious reflection and solemn resolutions, imposing upon him the necessity of self-dedication to the pursuit of knowledge. Science is a hard mistress, and will be worshiped but for herself; she is jealous of her votaries, and her altars cannot be approached without much self-abnegation and devotional love. But let not him who would seek her smiles deceive himself, and afterwards equivocate with his own promises. Molière, illustrates the absurdity of such self-deception by a miser feeding his own horse, and, while the animal is yet eating, stealing the corn from his manger. And so it is with those young men who misapply the means provided for their education, and cheat themselves out of their own capital. There are certain periods of life when particular studies only can be pursued to the best advantage. In youth the mind vividly receives impressions; when the memory is quick and vigorous, and other faculties expanding, mathematics, greek, and latin, are learned with more facility than in after-life. And so with medical literature. Anatomy can be learned without difficulty by any student who will apply

[No. 626.—VOL. III., NEW SERIES.]

himself steadily and diligently to its study; but the use of the scalpel must be acquired when the fingers possess a certain flexibility and delicacy of touch which the hand loses as we grow older. Hence, in the first year's course of study young men should learn to dissect with care and minuteness, remembering that it is the neatest dissector who will prove the best operator. Chemistry, in like manner, is very properly included in the first year's course; for, without knowing the elementary properties of medicines, the young Practitioner would clearly enough impersonate the ignorant apothecary described by Swift,—pouring bodies of which he knew little into a body of which he knew less. It is well, therefore, that students and their guardians should know, that the order of the lectures prescribed in the curriculum of the schools, has been laid down with the view of adapting such branch of study to the capacities and progressive advancement of the pupil. The different courses, then, should be followed in their respective order. To study physiology before anatomy, or materia medica before chemistry, would be absurd; as well might we attempt to make a pyramid stand upon its apex. To begin at the beginning, and to become what is emphatically called “well grounded,” should be the primary object of the first year of study; and this cannot be accomplished without unremitting and diligent application. We have indeed met with “clever young men,” as *par excellence* they are termed, who skim the surface of things with as much rapidity as swallows do the water. But of this they may rest assured—no science was ever grasped by a *coup de main*; no man ever obtained permanent success or eminence in any profession without having trodden the beaten path; if he wishes honestly to distinguish himself, he must, as a student, labour intellectually, as hardly as a mechanic at his trade. “It is a pernicious error,” says Sidney Smith, “to associate genius with idleness. The greatest poets, orators, statesmen, and historians—men of the most brilliant and imposing talent—have actually laboured as hard as the makers of dictionaries and the arrangers of indices; and the most obvious reason why they have been superior to other men is, that they have taken more pains than other men. Gibbon was in his study, winter and summer, at six o'clock. Burke was the most laborious and indefatigable of human beings. Leibnitz was never out of his library. Pascal killed himself by study. Cicero narrowly escaped death from the same cause. Milton was at his book with as much regularity as a merchant or an attorney—he had mastered all the knowledge of his time. So had Homer. These are the men who will be found to have been thinking while others slept,—reading while others rioted,—feeling that they should not always be kept down among the dregs of the world.” So it is with the Medical Profession. Who toiled more assiduously than the illustrious Harvey? Read attentively his work on the heart and circulation, and observe how every step of that deduction is the result of profound observation and critical sagacity. Look to the labours of Haller. Compare his “*Elementa Physiologiæ*” with any modern writer on the same subject. Or survey that monument of human industry preserved in the College of Surgeons. “When we enter,” observes Coleridge, “the magnificent Museum founded by the labours of John Hunter, and pass slowly, with meditative observation, through the august temple, which the genius of the great man has raised and dedicated to the wisdom and uniform working of the Creator, we perceive at every step the guidance,—we had almost said the inspiration,—of those profound ideas concerning life which dawn upon us, indeed, through his written works, but which he has here

preserved to us in a more perfect language than that of words—the language of God himself as uttered by Nature.” Or look around and select the most eminent of the physicians and surgeons of the present day, and we shall discover that they have all been anxious and indefatigable students.

The student may rest assured that no man ever suddenly rose to the top of the tree without as quickly tumbling down. It is true we find, especially in London practice, some charlatan advertising himself into notice, sometimes by way of authorship, often by means more insidious and surreptitious; and occasionally such adventurers obtain the patronage of some influential personage, and thus emblazon a deceitful escutcheon. But watch their career: it is transient and meteor-like; and he who boasted of having his door beset by carriages, and his hall crowded with anxious patients, will find himself ere long deserted, his reputation gone, his star for ever set, and, like the daw, stripped of his borrowed plumes, nothing remaining for him but to hide in some oblivious corner, where he may die and make no sign. How can a house endure the buffetings of the elements if it be built on sand? How can a medical man succeed in the great competition which exists in the Profession, unless he feel conscious that he treads upon firm ground, and possesses not the ostentatious, but the absolute knowledge which is necessary for the treatment of disease? Medicine comprehends within its cycle many collateral sciences; and, unless a student firmly determines to adopt industrious habits, he had better not aim at becoming a member of a Profession which demands the entire man. It must be a thorough self-dedication to the object contemplated, or he had better follow some more homely pursuit, and one more congenial to his nature. Unluckily parents do not always consult the capabilities of their children: many an indifferent physician would have made a famous barrister, and many a starveling attorney a first-rate operating surgeon. But, assuming it has been wisely determined that a youth shall become a member of the Medical Profession, before he leaves his paternal roof let him resolve within himself to lead, when at College, an industrious and exemplary life—choosing his companions from intellectual sympathy, rather than from those social qualities, which lead from the lecture-room to the tavern, from the tavern to the billiard-room, and thence to the brothel. It was thought wisdom in Plato to choose for his academy the grove of Hecademus, where, away from Athens, surrounded by lofty plane trees, and adorned with statues, he could discourse the eloquent music of his philosophy to his wondering disciples. Large cities are not favourable to habits of study; wherefore London, when without a University, abounding with theatres, hotels, taverns, coffee-houses, cigar divans, and multitudinous haunts of vice, which it requires the pencil of another Hogarth to depict in their degrading and their hideous light—was ill adapted for the residence of students; but, since the foundation of the University, we are happy to observe that men have gone forth, even from the academic groves of London, who are an honour and an ornament to the Profession. We cannot, however, conceal from ourselves, that every parent must feel deeply anxious when a son for the first time leaves home, to enter a new sphere of life; and, doubtless, upon such an occasion, many a father has given the most affectionate advice, and many a son in turn pledged himself to observe as sacred the solemn injunction. In one of Wordsworth's most touching poems, a father parting with his son thus speaks:—

“Hereafter, Luke,
When thou art gone away, should evil men
Be thy companions, think of me, my son,
And of this moment. Hither turn thy thoughts,
And God will strengthen thee. Amid all fear
And all temptations, Luke, I pray that thou
May'st bear in mind the life thy father led.”
* * * *

“But, whatever fate
Be-fal thee, I shall love thee to the last,
And bear thy memory with me to the grave.”

With this admonition deeply impressed upon his heart, let us then imagine a young man arriving in London to enter upon the session. And the first question which suggests itself is, where is he to domicile himself?—where find the comforts of another home? And upon this simple, and perhaps accidental, circumstance, may depend the good or evil fortune of his future life.

Recently, the experiment has been tried, of providing

residence for students; and in King's College, St. Bartholomew's, and St. Thomas's Hospitals, there are Collegiate Establishments, under the superintendence of a tried and experienced warden or tutor, where regular hours are, as far as possible, enforced, and numerous advantages obtained in the way of the student seeing at all hours of the day and night serious cases and accidents as they are brought to the hospital. In accordance with the religious feeling which has been so strongly revived of late throughout society, there is a chapel attached to each Institution, and it is with pleasure that we record the fact that the morning service regularly commences the labours of the day. By assembling together, and by daily communion, an *esprit du corps* is created, gentlemanly feelings are promoted, and a spirit of emulation is excited, which has manifested itself already by the fruit which it has borne. We consider the Collegiate Establishments worthy the attention of parents, although, at the same time, we must confess, that here as elsewhere, even under most careful supervision, the strong-minded will lead the weak; the tempter will prey among the young; and follies will be perpetrated. Impossibilities must not be expected from any system; and a College is not more fitted for a boy (and unfortunately some sent young to town to study Medicine can be called by no other name) than are private lodgings or chambers, where without supervision, he is left entirely to himself and to the petty larcenies of his landlady. For the very young, we recommend boarding with some private family, where he will find society in the intervals of study, and not lose that sense of home which makes men feel a pleasure in being domestic; but we trust that each year will lessen the number of this “army of martyrs.”

One of the disadvantages inseparably connected with the assemblage together of many of the same habits and age, is the formation of social clubs, and re-unions for amusement. Students in law and in medicine are not in the same position as are undergraduates at the Universities. The former are engaged in acquiring a Profession which is to maintain them in the position of gentlemen during their lives,—it is that upon which they must depend: the latter do but continue a prolonged public-school education, after which the real struggle in some higher department must be commenced. It is true, that many acquire both a reputation and an income from the Universities; but the number is small of those who rest contented with such a life. Boating and cricket clubs commence with the purest intentions; the founders resolve to conduct them upon sanitary principles; but with skill and superiority in either amusement, comes the wish to excel in competition with others. Races and matches beget dinners, and dinners cannot be eaten without expense. We will not follow the scene further. Convivial meetings do not harmonise with that frame of mind conducive to reflection and quiet evening study. No match can be played or rowed without the whole energy, both mental and bodily, being for the nonce thrown into the sport. The human mind is ever prone to find an excuse for amusement and recreation: there is no need to add to the facilities; and hence it is, that we most strongly dissuade all students from wasting a part of the brief three years allotted to them for work, in occupations and sports of the kind. They are to be considered not as boys, but men with the business of life before them.

The wards of the hospital afford sufficient exercising grounds; the day is entirely occupied with attending lectures, making up cases and arranging notes; the evening is the only time left for reading and digesting the labours of the previous hours.

The preliminaries of his residence being arranged, the student sets to work; and here we would insist as strongly as it is possible, upon the necessity of his sounding, as it were, the depths of his own intellect. It is not enough to know the bones that form the skeleton,—their angles, processes, sulci, and foramina; nor is it honest in lecturers to teach as follows:—

“This, gentlemen, is the sphenoid bone. Bat-like. It has a body, four wings, and processes. This is the upper surface, and that the under. If you hold it thus, you have its natural position in relation to the other cranial bones. This is the foramen opticum for the optic nerve and ophthalmic artery; this the rotundum for the second division of the fifth pair of nerves; this the ovale for the third division of the fifth. It articulates with the parietal, ethmoid, and other bones; and this is all you need learn about it.

“This is the femur. It is a long bone, with a body or shaft and

two-ends. The upper end is called the superior extremity, the lower end the inferior."

No! the sphenoid must not be learned, and ought not to be taught in this way. It should be described and learned in connexion with the segment of the brain which it supports, and in relation to the other cranial bones with which it is in contact. It is absurd to know, parrot-like, the name of an artery or a nerve which passes through a foramen, and to be ignorant of the reason why such a distribution should prevail. The long bones, too!—can nothing be said of them? need nothing more be known, save that they have a middle and two extremities? Have they no further meaning than this? Do they tell no wondrous tale of the mysteries of organization? Yes! they have been shown by the great Owen to be highly developed costal appendages, modified in form and multiplied in number, to give man the power of locomotion and the means of grasping and fashioning to his use the objects by which he is surrounded.

The Professor *ought* to teach, and the student *must* look with a philosophic eye on the relation of man, both to other animals and to the elements by which he is surrounded. Nothing is unital. Bones, muscles, nerves, have co-existing relations. The student should gather facts and store them in his memory; but these should be suggestive of original reflections. There are secret springs in the depths of every human mind that require but a touch to pour forth a stream of thought and elucidate the most obscure points in philosophy. But it is not enough to gather facts and leave them, like the letters of an alphabet in an infant's mind, mere isolated objects of recollection. The links of the chain must be connected; and whether studying anatomy, physiology, chemistry, or clinical medicine, the student should endeavour to extend the range of knowledge beyond the boundary of his text-book and the dry prelections of such masters as we have alluded to. Every fact he learns should be suggestive. Upon this principle Sir Humphrey Davy, before he was twenty-one years of age, drew inferences in Chemistry which were marvellously in advance of the knowledge of the day. So likewise Dr. Thomas Brown, when quite a young man, entered upon the study of the human mind, and was deservedly appointed a Professor in the University of Edinburgh, while men of his own age were lazily walking along the beaten path. It may be a great effort of the intellect, but every student in reading should endeavour to deduce some inference beyond that which the author before him teaches; and not rest contented with the idea, that he has only occasion to gain that amount of knowledge that will pass him through the portals of the College or the Hall. In the choice of books, it is well he should confine himself in the beginning to one text-book on the different departments he is to master; but as he advances he should go beyond these, and trace disputable points to their fountain-head. The circulation of the blood will lead him to the squabble,—for it deserves no better name,—between Harvey and Primrose, respecting the heart's action upon the capillary vessels. The theory of light will lead him to the conflict between Sir Isaac Newton and Huygens; and thus, while still a student, he will keep pace with the actual progress of science. He must not imagine, that attendance in the lecture-room will be all sufficient,—every lecture he hears should be suggestive of study at home. Then, again, let him not waste his energies in competing for temporary prize medals, and pretty toys,—sources of emulation for children. The student should be influenced by higher motives. "There are few things," says Southey, "of which I am more thoroughly convinced, than that the system of feeding up young men like so many game cocks for a sort of intellectual long main of an examination, is in every way pernicious. University honours are, like provincial tokens, not current beyond the narrow limits of the district in which they are coined; and, even where they pass current, they are not the only currency, nor the best."

Again, let us advise the student not to attempt *too much*. When we run over the list of subjects, which the student in Medicine is expected to acquire in the brief space of three years, it recalls to us a scene in Coleman's "Heir at Law!"

Demonstrations in the Dissecting Room; Clinical Midwifery; Physiology and General Anatomy; the Teeth, their Structure and Diseases; Microscopical Demonstrations; Surgery; Demonstrations on Anatomy; Clinical Lectures; *Post-mortem* Examinations and Demonstrations on Morbid

Anatomy; the Wards; Theory and Practice of Medicine; Theory and Practice of Chemistry; the Exanthemata; Ophthalmic Surgery; Comparative Anatomy and Natural History; Medical Jurisprudence; *Materia Medica*; Midwifery; Botany; Pathology; Practical Chemistry.

Dr. Pangloss: "Our readings will be various—Logic, Ethics, Mathematics; History, Foreign and Domestic; Geography, Ancient and Modern; Voyages and Travels; Antiquities, British and Foreign; Natural History; Natural and Moral Philosophy; Classics; Arts and Sciences; *Bellès Lettres*, and Miscellanies."

Lady Duberly: "Bless me! 'tis enough to batter the poor boy's brains to a mummy."

Dr. Pangloss: "A little learning——"

Lady Duberly: "Little! a load!"

Dr. Pangloss: "Is a dangerous thing.—*Pope*. Hem."

Lady Duberly: "And you have left out the main article."

Dr. Pangloss: "What may your ladyship mean?"

Lady Duberly: "Mean! why, dancing to be sure!"

As some of these subjects embrace a science which is a profession of itself, such as chemistry, while others, such as Comparative Anatomy, Natural History, Botany, demand each for their acquirement the usual period of man's life, it is obvious that no student can acquire a decent knowledge of them all in addition to a thorough acquaintance with the principles and practice of his Profession in its several branches, in the three years which intervene between the ages of seventeen and twenty-one. When too many subjects are thrown together, the mind recoils in disgust from the whole; it becomes bewildered and loses energy and the feeling of interest. How can a student be taken with any advantage to himself from the contemplation of the posterior mediastinum, first, to the physiological theatre, where he learns the minute structure of muscle or of bone; 2. To the chemical theatre, where he is taught the nature of alkalis; 3. Back to the dissecting-room, whence after having hardly put on his apron and sleeves, he has to hurry to the wards, that he may see how obscure surgical cases are investigated, and fractures are put up; he hurries from this scene to another lecture, viz., Descriptive and Surgical Anatomy, in which, at a distance of twenty or thirty yards, in a high seat, with a wearied brain, and perhaps with the advantage of short sight, he has pointed out to him for the first time the foramina in the temporal or palate bone, which he would see quite as well and satisfactorily were he smoking a chibouque at Grand Cairo. A dinner at 5 p.m. is followed by an evening lecture upon another subject, also new to the inquiring mind of our tortured friend.

Now, the faults which we find with such a system are threefold:—1. It professes to teach a greater number of subjects than the mind can possibly retain. 2. By hurrying the student from place to place, and from subject to subject, so rapidly, he has no time to profit satisfactorily by any one lesson; and 3. He loses, in his bewilderment, confidence in himself, and the desire, by his own reading, to think and to judge for himself. We are convinced that, for many years, lectures have been assuming a position which they should never occupy; they take the place of chamber-reading and of study. No longer few in number, and limited to explaining the broad principles of science, and to directing the student in what quarter and to what manner he should prosecute his studies, they have become too numerous to be useful, and are, in short, a *résumé* of the opinions and the discoveries of the day. When a student exclaims, "I learn much more by an hour's lecture than by an hour's work by myself," we think of the gentleman who confessed that he limited his reading to the *Edinburgh* and the *Quarterly Reviews*. He could, doubtless, skim over the literature of the day at a railway pace; but he read with another man's eyes, and thought with another man's brain, and confessed himself destitute of the quality most essential to the formation of a high character,—namely, independence of opinion and originality of idea. We doubt if any student can benefit with more than two lectures per diem. He should occupy himself, in the intervening hours, with Practical Anatomy, Practical Chemistry, Clinical Instruction, and reading; and we fear the last is but little attended to. We would then shorten the courses of lectures, and have more attention paid to practical instruction. With regard to some of the subjects,—Botany, Comparative Anatomy, Natural History, Medical Jurisprudence, *Materia Medica*, and Chemistry,—it should be optional, within certain limits, which and how many the student will take up for examination. By bring-

ing the subjects down to a reasonable number, a young man of industry may calculate with a certainty upon passing successfully through the ordeal, without the necessity of going to a "grinder."

The objection to yearly examinations in the Schools, emanates from the great Examining Colleges. It is said, and with truth, that the School examinations would supersede all others, and that discrepancies in the results between the two would lead to confusion, and perhaps to ridicule. It does not strike us in the same light; yearly examinations somewhere are essential, and conduce, in a most important manner, to sound education. How many a man loses his second year in dissipation, and forgets the little that he has learned before. The third year must then be passed in cramming, unless he choose to remain as a kind of "last man," who has outlived his race,—an object of interest and of pity to the youths who surround him and pass him every day.

We are also of opinion that great advantage would accrue by instituting different courses of lectures upon the same subjects, for first, second, and third years' men: lectures should be progressive, constantly stimulating the mind to enter into fresh paths of inquiry. It is true, this plan would require the employment of a larger staff and of more men; we reply, So much the better for the students.

The importance of clinical instruction, long since tacitly recognised, is becoming more generally appreciated every year; and we are of opinion, that after the first session, the students should attend none other than Clinical Lectures upon medical and surgical subjects, illustrated by cases at that time present in the wards. Great good has been effected by the establishment of medical clerks, whose duty consists in investigating and in taking notes of the cases before they are seen by the physician, in preparing the report for his supervision, and in communicating from day to day the progress of the disease. The same system might be carried out in the surgical department; for, although the cases are generally more numerous, many are not at all of a nature to require a very accurate record.

The body of every patient who dies should be examined at a fixed hour by a special officer appointed to the post, and an accurate account of the *post-mortem* appearances should be carefully preserved and registered in a book.

It is the custom, in certain quarters, to decry the profession of specialties among medical men; and hence it happens, that a variety of diseases which have been investigated through such a source, are almost ignored, and certainly not generally understood among the officers of large public Institutions. How many are familiar with the nomenclature of cutaneous diseases? With Mr. A all eruptions are syphilitic; with Mr. B they are eczema impetiginoides; Dr. C pronounces them maculæ of fever. Are diseases of the eye generally understood? What would become of the public without Lawrence, Travers, Dalrymple, and others, all of whom have been attached to Ophthalmic Hospitals? Does the Profession owe no debt of gratitude to Tamplin and Little for introducing in England orthopædic surgery? Would any man, in his senses, select a general practitioner in preference to a dentist for the extraction of a tooth? The division of labour is not finite, and governed by the establishment of a few recognised grades. It multiplies with the increasing knowledge of the day; and we assert, in plain terms, that it is the duty of the Governors of all hospitals to provide for the reception of every kind of improvement, to number among its officers men distinguished for every shade of professional talent; in short, to make their Institutions perfect in themselves,—temples, whence upon all points, authority may flow from an unquestioned source.

In conclusion, to the student we say, Let the responsibility of your present position be ever uppermost in your mind. It is, in all probability, the first real occasion of your being called upon to show the mettle of which you are made. We respect the old adage, "All work and no play makes Jack a dull boy," but Jack should never forget the respect that he owes to his parents as a son, and to himself as a gentleman. Avoid low places of amusement, and low society, where you are welcomed only so long as your purse is full. Shun the association of those whose feelings have been blunted both to right and to wrong. You have before you three short years. In the first, much time will be lost ere you are reconciled to the newness of your position; the third year demands unceasing

work, that the examinations may be passed with honour. It is the work of the second year, too often mispent, that makes the difference between the sound and the unsound man.

Try to resist the disinclination to stay at home of an evening. To the man of talent, interesting occupation can always be found in scientific pursuits; to the idler alone it is different.

Einem ist Wissenschaft, die hohe, die himmlische Göttin, dem Andern eine tüchtige Kuh, die ihn mit Butter versorgt.

RULES AND REGULATIONS

OF

EXAMINING MEDICAL BODIES

IN

ENGLAND.

SESSION 1851—1852.

UNIVERSITY OF OXFORD.

FULL term is understood to begin on the first day of the week after the congregation has been held; so that, if the congregation be held on the Monday, the Sunday after is considered the first day of full term.

According to the lately-altered statute respecting medical degrees, a candidate for the degree of bachelor in medicine, before he can be admitted to examination for that degree, must have kept four whole years, or sixteen terms, in the University, in like manner as is required by candidates for a degree in arts; (a) must have passed the examination for the degree of bachelor in arts; and, subsequently to that examination, must have studied medicine during three whole years, or twelve terms; and must also have completed seven years, or twenty-eight terms, from his matriculation.

The medical examination takes place only once in the course of the year, namely, in the second week of full Trinity term, commencing usually on the second Tuesday after Trinity Sunday. The candidates are examined, principally *viva voce*, but partly in writing, in the theory and practice of medicine, in anatomy, physiology, pathology, and *materia medica*; and also in chemistry and botany, as far as they elucidate the art of medicine. He is required to be conversant with the entire works of Aretæus and Celsus; the aphorisms and epidemics of Hippocrates; and that portion of Galen's writings, entitled "*De Usa Partium*;" in two, at least, of which authors, the statute directs that the examiners fail not to test the candidates' attainments. He must send, fourteen days before the day of examination, certificates of three years' attendance on the medical practice of an hospital, with the usual lectures.

Certificates are required for two courses of anatomy and physiology, each extending from October till the following April or May; two courses on the theory and practice of medicine, each course of the same extent; one course in *materia medica*; one course in botany; one course in chemistry, provided the course extend through the usual winter session, otherwise two courses will be required.

A candidate for the degree of doctor in medicine must have pursued the study of medicine during three years after he has graduated as bachelor in medicine, and must give, at least, a fortnight's previous notice of his intention to the professor of medicine, at the same time submitting to approbation a subject for a medical dissertation, which dissertation must be read in the public schools of the University within a few days of taking the degree of M.D., and delivered to the professor immediately after it has been read. No graduate in medicine from another University can be incorporated at Oxford, unless he produce testimonials by which it may clearly appear that he has kept by residence terms equal to those required to be so kept in this University; he has completed all the exercises prescribed by the University from which he migrates for the degree of bachelor of arts; and shall have previously undergone the medical examination above described; and shall have fulfilled all the other

(a) That is, he must be of sixteen terms' standing, and have actually resided in the University twelve terms.

conditions of the present statute. The fees for a bachelor of medicine are 23*l.*; for a doctor in medicine, 40*l.*

The University of Oxford is in possession of the Bodleian Library, of the Radclyffe Library, of the Ashmolean Museum, and of the Botanic Gardens, founded by the Earl of Derby in 1632. All these are open to students under certain restrictions.

Radclyffe Travelling Fellows.—Dr. Radclyffe left by will an endowment of 600*l.* per annum, to be paid to two persons, to be chosen out of the University of Oxford, when they are M.A., entered on the study of physic, for their maintenance for ten years, and no longer, the half of which time, at least, they are to travel in parts beyond sea, for their better improvement. In case of vacancy by death, or at the expiration of the ten years, a new election is to take place within six months.

UNIVERSITY OF CAMBRIDGE.

There is a course of fifty lectures delivered in this University on the principles of pathology and the practice of physic; 5*l.* 5*s.* first course, afterwards gratis. The Professor of Chemistry delivers thirty lectures, on the general principles of that science, during Lent term, and twenty lectures, principally on organic chemistry, during Easter term. Lectures on experimental philosophy, to illustrate the laws of hydrostatics, pneumatics, and optics, with particular reference to the mathematical theories of light and sound, are delivered in Easter term. About fifty lectures on anatomy are delivered in Michaelmas and Lent terms. The terms of attendance are 5*l.* 5*s.* for each of two courses, afterwards gratis. The pupils have the opportunity of dissecting in private. Botanical lectures are given during the Easter term, with herborising excursions occasionally. Lectures on natural and experimental philosophy are delivered during the Michaelmas term; the subjects being statics, dynamics, and mechanism, with their practical illustrations: first course, 3*l.* 3*s.*; second, 2*l.* 2*s.*; afterwards gratis. The Downing Professor of Physic delivers a course of fifty lectures on some medical subject. A certificate of attendance is required of persons proceeding to the degree of M.B. Addenbrooke's Hospital, which is connected with the University, is recognised by the Colleges of Physicians and Surgeons, and by Apothecaries' Hall. It contains 100 beds, and has a department reserved for cases of midwifery.

A student, before he can become a Bachelor of Physic, must have entered on his sixth year, computed from the date of his first admission at the University, have resided nine terms, and have passed the previous examination.

A Bachelor of Arts may become a Bachelor of Physic after having entered on his sixth year, computed from the date of his first admission at the University, provided that one year, at least, has intervened between his final determination in arts and his admission to the degree of Bachelor of Physic.

The exercises for this degree are one act and one opponency.

Candidates for the degree of Bachelor of Physic must, in addition to the examination by the Regius Professor of Physic, be examined by the Professors of Anatomy, Chemistry, and Botany, and by the Downing Professor of Medicine. The examinations by the Professors of Chemistry and Botany, may take place in the fourth year after admission. The other part of the examination may take place in the fifth year after admission, but not earlier. They must have diligently attended the lectures of the Regius Professor of Physic for two terms, and must bring to him certificates of examination by the above professors, and of attendance on their lectures, in case the course of lectures of the Professor of Botany consist of not less than twenty lectures, and the courses of lectures of the Professors of Anatomy and Chemistry, and of the Downing Professor of Medicine, of not less than fifty lectures each. They must also deliver to the Regius Professor of Physic certificates of having been diligently employed in attendance on medical lectures, and the practice of some well-known hospital, for two years, or for as long a time as they have been absent from the University during their undergraduateship. Fee, 10*l.* 16*s.*

A licence *ad practicandum in medicina* may be granted to a bachelor of physic in the term subsequent to that in which he has taken the degree, or to a master of arts of two years' standing.

Candidates for a licence *ad practicandum in medicina*,

being previously bachelors of physic, are required to produce to the Regius Professor of Physic certificates of their having attended on hospital practice for three years, exclusive of the nine terms which they kept by residence for the degree of bachelor of physic, and of their having attended lectures on the following subjects:—Practice of physic and pathology, anatomy and physiology, chemistry, botany, medical jurisprudence, materia medica and pharmacy, principles of surgery, principles of midwifery, practical anatomy, for two seasons.

Candidates for a licence *ad practicandum in medicina*, being previously Masters of Arts, are required to bring satisfactory evidence to the Regius Professor of Physic of their having been employed in the study of physic for five years after they became Bachelors of Arts; and to produce to him certificates of their having attended on hospital practice for three of the said five years, and of their having attended lectures on the subjects before mentioned.

Every candidate for a licence *ad practicandum in medicina*, is required to pass an examination to the satisfaction of the Regius Professor of Physic, the Professor of Anatomy, the Downing Professor of Medicine, and a doctor of Physic, to be nominated by the Vice-Chancellor, and approved by the Senate, at the first congregation after the 10th of October in each year.

There are two such examinations in every year; one in the week immediately preceding that in which the division of the Michaelmas term falls; the other in the week immediately preceding that in which the division of the Easter term falls.

A candidate for a licence *ad practicandum in medicina*, being previously Bachelor of Physic, cannot be examined for the said licence until the examination which shall occur next but one after his having passed the examination required for the Degree of Bachelor of Physic. Fee 11*l.* 6*s.*

M.D.—The degree of Doctor of Physic is granted to a Bachelor of Physic of five years', or to a Master of Arts of seven years' standing. (a)

The exercises for this degree are two acts and one opponency.

Every candidate for the degree of Doctor of Physic, who has not previously obtained a licence *ad practicandum in medicina*, is required to produce to the Regius Professor of Physic the same certificate, and pass the same examination as are required in the case of candidates for a licence *ad practicandum in medicina*. Fee 11*l.* 12*s.*

Professor Cumming's Lectures.—A course of lectures on the general principles of chemistry is given during the Easter term, in the rooms recently added to the north end of the schools in the Botanical Garden.

The medical students are required to attend these lectures under the same regulations as those of the anatomical Professor.

Dr. Clark's Lecture's on Human Anatomy.—The course consists of at least fifty lectures, which are delivered in the Anatomical School in the Michaelmas and Lent terms, (after the division of each,) between the hours of one and two. The terms of attendance are five guineas for each of two courses; afterwards, gratis.

These lectures (a certificate of attendance on which, provided they amount to fifty in number, is required by the Senate from candidates for medical degrees) explain the general and special anatomy of the human body, together with the principles of physiology.

The pupils have the opportunity of dissecting in private.

Dr. Clark's Lectures on Comparative Anatomy and Physiology.—In accordance with the Regulations of the "Natural Sciences Tripos," a course consisting of twenty-four lectures on Comparative Anatomy and Physiology, is delivered in the Anatomical School on Mondays, Wednesdays, and Fridays, at one o'clock, during the October term.

Members of the University who have not a general ticket of admission to the lectures of the Professors, may attend the above lectures on payment of two guineas for each course.

Professor Henslow's Lectures.—These lectures are delivered during the Easter term. The Professor occasionally makes herborizing excursions with his class in the neighbourhood of Cambridge.

Professor Miller's Lectures.—A course of lectures on

(a) A Master of Arts is required to declare himself a student in physic, within four years of his inauguration, in order that he may be a candidate for the degree of Doctor in the Faculty.

crystallography and mineralogy is delivered during the Lent term. These lectures are given in the new Mineralogical Museum.

The University possesses an Anatomical Museum, the Fitzwilliam, Mesman, Mineralogy, and Geological Museums, an extensive Botanic Garden, and the University Library. To all these the students have access.

LONDON UNIVERSITY.

MEDICINE.

BACHELOR OF MEDICINE.

CANDIDATES for the Degree of Bachelor of Medicine shall be required:—

1. To have been engaged during four years in their professional studies at one or more of the institutions or schools recognized by this University. 2. To have spent one year at least, of the four, in one or more of the recognised institutions or schools in the United Kingdom. 3. To pass two examinations.

First Examination.

The first examination shall take place once a-year, and commence on the first Monday in August. (a)

No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—

1. Of having completed his nineteenth year. 2. Of having taken a Degree in Arts in this University, or in a University the degrees granted by which are recognised by the senate of this University; (b) or of having passed the matriculation examination. (c) 3. Of having been a student during two years at one or more of the medical institutions or schools recognised by this university, subsequently to having taking a degree in arts, or passed the matriculation examination. 4. Of having attended a course of lectures on each of four of the subjects in the following list:—Descriptive and surgical anatomy, general anatomy and physiology, comparative anatomy, pathological anatomy, chemistry, botany, materia medica and pharmacy, general pathology, general therapeutics, forensic medicine, hygiene, midwifery and diseases peculiar to women and infants, surgery, medicine. 5. Of having dissected during nine months. 6. Of having attended a course of practical chemistry, comprehending practical exercises in conducting the more important processes of general and pharmaceutical chemistry; in applying tests for discovering the adulteration of articles of the materia medica, and the presence and nature of poisons; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c. 7. Of having attended to practical pharmacy during a sufficient length of time to enable him to acquire a practical knowledge in the preparation of medicines.

These certificates shall be transmitted to the registrar at least fourteen days before the examination begins.

The fee for this examination shall be five pounds. No candidate shall be admitted to the examination unless he have previously paid this fee to the registrar. If a candidate fail to pass the examination, the fee shall not be returned to him; but he shall be afterwards admissible to the first examination without the payment of any additional fee.

Candidates shall be examined in the following subjects:—Anatomy, Physiology, Chemistry, Botany, Materia Medica, and Pharmacy.

The examinations shall be conducted in the following order:—Morning, 10 to 1: Monday, Anatomy, and Physiology, by printed papers; Tuesday, Chemistry, by printed papers; Wednesday, 10 to 12, Botany, by printed papers. Afternoon, 3 to 6. Monday, Anatomy and Physiology, by printed papers; Tuesday, Materia Medica and Pharmacy, by printed papers. To commence on Friday, at 10. Chemistry, by *viva voce* and experiment; and Materia Medica and Pharmacy, by *viva voce* and demonstration from specimens. To commence on Tuesday, in the following week, at 10. Anatomy and Physiology, by *viva voce*, Demonstration from Preparations, and Dissection.

On Wednesday morning in the week following the com-

mencement of the examination, the examiners shall arrange in two divisions, each in alphabetical order, such of the candidates as have passed; and a pass certificate, signed by the registrar, shall be delivered to each candidate.

Such candidates only as in the opinion of the examiners are admissible to the examination for honours, shall be placed in the first division.

EXAMINATION FOR HONOURS.

Any candidate who has been placed in the first division at the first examination may be examined for honours in any or all of the following subjects:—

Anatomy and Physiology. (Candidates may illustrate their answers by sketching the parts they describe.) Chemistry; Materia Medica and Pharmaceutical Chemistry; Structural and Physiological Botany.

The examinations shall take place in the week following the commencement of the first examination. They shall be conducted by means of printed papers; but the examiners shall not be precluded from putting *viva voce* questions upon the written answers of the candidates when they appear to require explanation.

The examinations shall be conducted in the following order:—Morning, 10 to 1: Thursday, Anatomy and Physiology; Friday, Chemistry; Saturday, Structural and Physiological Botany. Afternoon, 3 to 6: Thursday, Anatomy and Physiology; Friday, Materia Medica and Pharmaceutical Chemistry.

In determining the relative position of candidates, the examiners shall have regard to the proficiency evinced by the candidates in the same subjects at the pass examination.

Candidates who pass the examinations, and acquit themselves to the satisfaction of the examiners, shall be arranged according to the several subjects and according to their proficiency in each; and candidates shall be bracketed together, unless the examiners are of opinion that there is a clear difference between them.

If, in the opinion of the examiners, sufficient merit be evinced, the candidate who shall distinguish himself the most in anatomy and physiology, the candidate who shall distinguish himself the most in chemistry, and the candidate who shall distinguish himself the most in materia medica and pharmaceutical chemistry, shall each receive an exhibition of 30*l.* per annum for the next two years.

Under the same circumstances, the first and second candidates in each of the preceding subjects shall each receive a gold medal of the value of 5*l.*

Under the same circumstances, the candidate who shall distinguish himself the most in structural and physiological botany shall receive a gold medal of the value of 5*l.*

Second Examination.

The second examination shall take place once a year, and commence on the first Monday in November.

No candidate shall be admitted to this examination within two academical years of the time of his passing the first examination, nor unless he have produced certificates to the following effect:—

1. Of having passed the first examination. 2. Of having, subsequently to having passed the first examination, attended a course of lectures on each of two of the subjects comprehended in the list above, and for which the candidate had not presented certificates at the first examination. 3. Of having, subsequently to having passed the first examination, dissected during six months. 4. Of having conducted at least six labours. (Certificates on this subject will be received from any legally-qualified practitioner in medicine. 5. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months, and lectures on clinical surgery. 6. Of having attended the medical practice of a recognised hospital or hospitals during other twelve months, and lectures on clinical medicine. 7. Of having, subsequently to the completion of his attendance on surgical and medical hospital practice, attended to practical medicine in a recognised hospital, infirmary, or dispensary, during six months. (Certificates on this subject will be received from any legally-qualified practitioner having the care of the poor of a parish. The candidate shall also produce a certificate of moral character from a teacher in the last school or institution at which he has studied, as far as the teacher's opportunity of knowledge has extended.)

These certificates shall be transmitted to the Registrar at least fourteen days before the examination begins.

(a) The annual number of examinations will be increased at a future period, should it be found desirable.

(b) The degrees in arts of all universities in the United Kingdom are recognised by the senate for this purpose.

(c) The matriculation examination is the same for students in arts and for students in medicine.

The fee for this examination shall be 5*l*. No candidate shall be admitted to the examination unless he have previously paid this fee to the Registrar. If a candidate fail to pass the examination, the fee shall not be returned to him; but he shall be afterwards admissible to the second examination without the payment of any additional fee.

Candidates shall be examined in the following subjects:—Physiology, (the papers in Physiology shall include questions in Comparative Anatomy,) General Pathology, General Therapeutics, Hygiene, Surgery, Medicine, Midwifery, Forensic Medicine.

The examinations shall be conducted in the following order:—First week. By printed papers. Morning, 10 to 1. Monday, Physiology; Tuesday, Surgery; Wednesday, Midwifery. Afternoon, 3 to 6: Monday, General Pathology, General Therapeutics, Hygiene; Tuesday, Medicine; Wednesday, Forensic Medicine. Second week. By *vivâ voce* interrogation. To commence on Monday morning, at 10.

On Monday morning in the following week the examiners shall arrange in two divisions; each in alphabetical order, such of the candidates as have passed. And a certificate, under the seal of the University, and signed by the Chancellor, shall be delivered to each candidate.

Such candidates only as in the opinion of the examiners are admissible to the Examination for Honours, shall be placed in the first division.

EXAMINATION FOR HONOURS.

Any candidate who has been placed in the first division at the second examination may be examined for honours in any or all of the following subjects:—Physiology and Comparative Anatomy, (candidates may illustrate their answers by sketching the parts they describe,) Surgery, Medicine, Midwifery.

The examinations shall take place in the week following the second examination. They shall be conducted by means of printed papers; but the examiners shall not be precluded from putting *vivâ voce* questions upon the written answers of the candidates when they appear to require explanation.

The examinations shall be conducted in the following order:—Morning, 10 to 1: Tuesday, Physiology and Comparative Anatomy; Wednesday, Surgery; Thursday, Medicine; Friday, Midwifery. Afternoon, 3 to 6: Tuesday, Physiology and Comparative Anatomy; Wednesday, Surgery; Thursday, Medicine.

In determining the relative position of candidates, the Examiners shall have regard to the proficiency evinced by the candidates in the same subjects at the pass examination.

Candidates who pass the examinations, and acquit themselves to the satisfaction of the examiners, shall be arranged according to the several subjects and according to their proficiency in each; and candidates shall be bracketed together, unless the examiners are of opinion that there is a clear difference between them.

If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in physiology and comparative anatomy, the candidate who shall distinguish himself the most in surgery, and the candidate who shall distinguish himself the most in medicine, shall each receive an exhibition of 50*l*. per annum for the next two years, with the style of University Medical Scholar.

Under the same circumstances, the first and second candidates in each of the preceding subjects, shall each receive a gold medal of the value of 5*l*.

Under the same circumstances, the candidate who shall distinguish himself the most in midwifery shall receive a gold medal of the value of 5*l*.

DOCTOR OF MEDICINE.

The examination for the degree of Doctor of Medicine shall take place once a year, and commence on the fourth Monday in November.

No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—

1. Of having taken the degree of Bachelor of Medicine in this University, or a degree in medicine or in surgery at a University the degrees granted by which are recognised by the Senate of this University. (a) (Those candidates who

have not taken the degree in this University shall produce a certificate of having completed their twenty-third year.) 2. Of having attended, subsequently to having taken one of the above degrees in medicine,—*a*. To clinical or practical medicine during two years in a hospital or medical institution recognised by this University. *b*. Or, to clinical or practical medicine during one year in a hospital or medical institution recognised by this University, and of having been engaged during three years in the practice of his profession. *c*. Or, if he have taken the degree of Bachelor of Medicine in this University, of having been engaged during five years in the practice of his profession. (One year of attendance on clinical or practical medicine, or two years of practice, will be dispensed with in the case of those candidates who at the second examination have been placed in the first division. 3. Of moral character, signed by two persons of respectability.

These certificates shall be transmitted to the Registrar at least fourteen days before the examination begins.

The fee for the degree of Doctor of Medicine shall be ten pounds. No candidate shall be admitted to the examination unless he have previously paid this fee to the Registrar. If a candidate fail to pass the examination, the fee shall not be returned to him; but he shall be admissible to any subsequent examination for the same degree without the payment of any additional fee.

The examination shall be conducted by means of printed papers and *vivâ voce* interrogation.

Candidates shall be examined in the following subjects:—Elements of Intellectual Philosophy, Logic, and Moral Philosophy; Medicine.

The examinations shall be conducted in the following order:—

By Printed Papers.—Morning 10 to 1.—Monday, Elements of Intellectual Philosophy, Logic, and Moral Philosophy. Candidates who have taken a Degree in Arts in this University, or in a University the degrees granted by which are recognised by the Senate of this University, shall be exempted from this part of the examination. (a) Tuesday, Medicine. Afternoon, 3 to 6: Monday, A Commentary on a Case in Medicine, Surgery, or Midwifery, at the option of the candidate; Tuesday, Medicine. *By vivâ voce interrogation.*—Friday Morning, at 10, Examination on the Answers to the Printed Papers, and on the Commentaries, and Examination for a certificate of Special Proficiency in Medicine, Surgery, or Midwifery, as determined by the candidate's choice of the case for commentary.

On Monday morning in the following week the examiners shall arrange in two divisions, each in alphabetical order, such of the candidates as have passed. And a certificate under the seal of the University, and signed by the Chancellor, shall be delivered to each candidate.

If in the opinion of the examiners sufficient merit be evinced, the author of the best commentary on the case in medicine, the author of the best commentary on the case in surgery, and the author of the best commentary on the case in midwifery, shall each receive a gold medal of the value of 5*l*.

Any candidate may present a thesis on a subject of his own choice. If in the opinion of the examiners sufficient merit be evinced, a gold medal of the value of 10*l*. shall be given to the author of the best thesis. The examiners shall not be precluded from examining the author on the subject of his thesis.

If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most at the examination for the degree of M.D. shall receive a gold medal of the value of 20*l*.

Regulations relating to Students who commenced their Medical Studies in or before January, 1839.

BACHELOR OF MEDICINE.

Candidates who commenced their professional studies in or before January, 1839, shall be admitted to the first examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—

1. Of having been engaged during two years in their professional studies. 2. Of having attended a course of lectures on each of four of the subjects comprehended in the above list. 3. Of having dissected during nine months. 4. Of having

(a) At present, all candidates for the degree of Doctor of Medicine must have previously obtained the degree of Bachelor of Medicine in this University.

(a) The Degrees in Arts of all the Universities in the United Kingdom are recognised by the Senate for this purpose.

attended to practical pharmacy during a sufficient length of time to enable them to acquire a practical knowledge in the preparation of medicines.

Candidates who commenced their professional studies in or before January, 1839, shall be admitted to the second examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—

1. Of having been engaged during four years in their professional studies.
2. Of having passed the first examination.
3. Of having attended a course of lectures on each of two of the subjects comprehended in the list.
4. Of having dissected during twelve months.
5. Of having attended to practical pharmacy during a sufficient length of time to enable the pupil to acquire a practical knowledge in the preparation of medicines.
6. Of having conducted at least six labours.
7. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months.
8. Of having attended the medical practice of a recognised hospital or hospitals during other twelve months.
9. Of having completed the twenty-second year of their age.
10. Of moral character from a teacher in the last school or institution at which they have studied, as far as the teacher's opportunity of knowledge has extended.

Candidates who have not taken a Degree in Arts, or passed the Matriculation Examination in this University, will be required to translate a portion of Celsus *de Re Medicâ*.

Regulations relating to Practitioners in Medicine or Surgery desirous of obtaining Degrees in Medicine.

BACHELOR OF MEDICINE.

Candidates shall be admitted to the two examinations for the degree of bachelor of medicine on producing certificates to the following effect:—

1. Of having been admitted, prior to the year 1840, members of one of the legally-constituted bodies in the United Kingdom for licensing practitioners in medicine or surgery; or of having served, previously to 1840, as surgeons or assistant-surgeons in Her Majesty's army, ordnance, or navy, or in the service of the Honourable the East India Company.
2. Of having received a part of their education at a recognised institution or school, as required by the charter of the University.
3. Of moral character, signed by two persons of respectability.

Candidates who have not taken a degree in arts, or passed the matriculation examination in this University, will be required to translate a portion of Celsus *de Re Medicâ*.

DOCTOR OF MEDICINE.

Candidates who have been engaged during five years in the practice of their profession shall be admitted to the examination for this degree on producing certificates to the following effect:—

1. Of having been engaged during five years in the practice of their profession.
 2. Of having taken the degree of bachelor of medicine in this University.
- Candidates who have not taken a degree in arts, or passed the matriculation examination in this University, will be required to translate a portion of Celsus *de Re Medicâ*.

[The regulations respecting the transmission of the certificates to the registrar, the fees, the periods and the mode of conducting the examinations, and the arrangement of the candidates after examination, are the same for all candidates for the same degrees.]

ROYAL COLLEGE OF PHYSICIANS, LONDON.

ACCORDING to the regulations of this College, no one will be admitted as a candidate for the licence or extra-licence, unless he shall have attained the age of six-and-twenty, and shall present a certificate of good moral conduct. His medical education must comprise anatomy, the theory and practice of medicine, forensic medicine, chemistry, materia medica, natural history, (particularly botany,) midwifery, and the principles of surgery, and must extend over the period of five years. Practical medicine must be studied for three years in an hospital containing at least 100 beds, and having a complete staff of physicians and surgeons. Those who have studied abroad, in addition to giving proof of five years' medical education according to the usual course of study, are required to present testimonials of a twelvemonth's attendance on medical practice at any hospital in Great Britain, having the qualifications as above.

No one will be admitted as a licentiate (*Permissus*) who is accustomed to use any secret medicine or nostrum in the treatment of disease, unless previously to his first examination he make known to the President and Censors its composition and the manner in which it is employed. Every candidate must undergo three examinations, before the President and Censors. The first examination comprises physiology, the second pathology, and the third therapeutics. At the commencement of the first examination, the President may inquire of the candidate where he studied polite literature and the principles of science, and what honours he has obtained, whether in philosophy, arts, or medicine, in order that the answers may be recorded by the Registrar. The candidate may also be examined in Greek works on medicine,—to wit, Hippocrates, Galen, or Aretæus. Passages from the Aphorisms of Hippocrates or Galen will be brought forward during the first examination, and during the second and third, passages from Hippocrates, Galen, or Aretæus, which must be translated into Latin, and illustrated with a brief commentary. If the candidate decline examination in Greek, he will be required to translate parts of Celsus or Sydenham, or some other Latin work on medicine, into English. The examinations are conducted in Latin or English at the pleasure of the Censors.

Whenever a candidate has passed the prescribed examinations, and has been approved, he will be proposed at the next *comitia majora* (or meeting of the Fellows at large) to be admitted as a licentiate; and, if the majority present consent, he will be admitted accordingly. If, however, the candidate be rejected, he cannot present himself for re-examination for a twelvemonth.

Before the licentiate is admitted, he is required to plight his faith to the College that he will obey its statutes, or pay the penalties imposed; and consult the honour of the College and the good of the public in all his medical practice.

If any one holding the licence of the College practise pharmacy afterwards, or engage in merchandise, he is liable to expulsion; and any person practising medicine in London, or within seven miles thereof, without having previously obtained the collegiate licence, is to be admonished by letter to cease his practice until after he has passed the required examinations; and if he continues to practise, despite this admonition, then *legibus regni obnoxius erit*.

Persons who have attained their fortieth year, seeking to become licentiates of the College, but whose medical education is not altogether in accordance with the regulations already stated, must present very high testimonials of professional knowledge and good moral conduct, and, if these are satisfactory to the censors, after a very strict scrutiny, the censors may recommend to the College that they should be admitted to examination the same as for licentiates in general.

The old regulation restricting the fellowship, ordinarily to the graduates of Oxford, Cambridge, and Trinity College, Dublin, was repealed in the latter part of 1835; and after Easter, 1836, all candidates were declared to be admissible as licentiates only, from which class, when duly qualified, a certain number are to be annually elected fellows in *comitia majora*; none being eligible who have not been four years in the number of licentiates.

The President of the College is *ex-officio* President of the Vaccine Board, a Trustee of the British and Hunterian Museums, and an elector to the Tancred scholarships. The College also appoints the Sheraidian Professor of Botany to the University of Oxford.

The examinations for the licence are conducted by the President and Censors. The periods at which they take place are Michaelmas, Christmas, Easter, and Midsummer. The new Censors are elected on the 25th of June. The lectures are delivered in the early part of the year. There are about fifteen delivered: three Gulstonian, three Croonian, and three Lumleian, so called from the names of those who left endowments to the College for the purpose; and six lectures on materia medica. The museum and library are the property of the fellows. But licentiates may, if they desire it, be admitted to the use of the library, on payment of a small subscription.

The College fees are 5*l.* 17*s.* for the licence.

If any fellow or licentiate should be convicted before the President and Censors, of having accused any other fellow or licentiate of professional ignorance, &c., unless it be before a legally-constituted tribunal, he shall be fined 4*l.* for the first offence, and 8*l.* for the second; if he

offend a third time, if a fellow, he shall be expelled, and, if a licentiate, fined 10*l*. This last fine is to be enforced every time afterwards the licentiate shall so offend. If any fellow or licentiate shall offer his professional assistance to any patient whom he shall know to be under the care of another physician, whether fellow or licentiate, without having been called in to see the patient professionally, he shall be fined 40*s*.

If any fellow be proved to have made any arrangement with a druggist, to share with him the proceeds in his prescriptions, he shall be expelled; if a licentiate have entered into a similar arrangement, he shall be fined 10*l*. every time he shall so offend.

Every physician, whether fellow or licentiate, shall attach to each prescription which he writes, the day of the month, the name of the sick person, and his own initials. When a consultation takes place, it is to be carried on with modesty, not in the presence of the sick; and if any difference of opinion occurs, it is to be stated with prudence and moderation, so as to be as little distressing as possible to the patient or the friends, but, if requisite, should be mentioned by the ordinary medical attendant. Whoever infringes these regulations will be fined 5*l*. by the President and Censors.

No fellow or licentiate may consult, in London, or within seven miles thereof, with a physician who does not belong to the College, under a penalty of 5*l*.

All fines are to be paid immediately.

The President and Court of the College have the power of committing individuals contemning their authority to Newgate. This power has been exercised by the Court, but not of late years.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Regulations of the Council respecting the Professional Education of Candidates for the Diploma of Member of the College.

I. Candidates will be required to produce the following Certificates, viz. :—

1. Of being twenty-one years of age.
2. Of having been engaged during four years in the acquirement of professional knowledge.
3. Of having studied Practical Pharmacy during six months.
4. Of having attended at a recognised hospital or hospitals in the United Kingdom the Practice of Physic during one winter (a) and one summer (b) session.
5. Of having attended, during three winter and three summer sessions, the Practice of Surgery at a recognised hospital or hospitals in the United Kingdom.
6. Of having studied Anatomy and Physiology, by attendance on lectures and demonstrations, and by dissections during three winter sessions.
7. Of having attended, during two winter sessions, lectures on the Principles and Practice of Surgery.
8. Of having attended, during one summer session, lectures on Materia Medica, and lectures on Midwifery; Practical Midwifery to be attended at any time after the conclusion of the session.
9. And of having attended one course of lectures on the Practice of Physic and one course on Chemistry.

The course of study hereby prescribed is required to be observed by candidates who shall have pursued their studies in hospitals and schools in England. And those candidates who shall have studied in Ireland or Scotland will be admitted to examination upon producing certificates of having attended the required courses of lectures as delivered in the schools of Ireland and Scotland.

II. Members or licentiates of any legally constituted college of surgeons in the United Kingdom, and graduates in surgery of any university requiring residence to obtain degrees, will be admitted for examination on producing their diploma, license, or degree, together with proof of being twenty-one years of age, and of having been occupied at least four years in the acquirement of professional knowledge.

(a) The winter session comprises a period of six months, and, in England, commences on the 1st of October and terminates on the 31st of March.

(b) The summer session comprises a period of three months, and, in England, commences on the 1st of May and terminates on the 31st of July. No provincial hospital will be recognised by this College which contains less than 100 patients, and no metropolitan hospital which contains less than 150 patients.

III. Graduates in medicine of any legally constituted college or university requiring residence to obtain degrees, will be admitted for examination on adducing, together with their diploma or degree, proof of having completed the anatomical and surgical education required by the foregoing regulations, either at the school and hospital of the university where they shall have graduated, or at one or more of the recognised schools and hospitals in the United Kingdom.

IV. Candidates who shall have attended at recognised colonial hospitals and schools, (a) the medical and surgical practice and the several courses of lectures, with the demonstrations and dissections required by the foregoing regulations, will be admitted for examination upon producing certificates of such attendance, together with certificates of having attended in London, during one winter session, the surgical practice of a recognised hospital, and lectures on anatomy, physiology, and surgery, with demonstrations and dissections.

V. Certificates will not be recognised from any hospital unless the surgeons thereto be members of one of the legally constituted colleges of surgeons in the United Kingdom; nor from any school of anatomy and physiology or midwifery, unless the teachers in such school be members of some legally constituted college of physicians or surgeons in the United Kingdom; nor from any school of surgery, unless the teachers in such school be members of one of the legally constituted colleges of surgeons in the United Kingdom.

VI. Certificates will not be received on more than one branch of science from one and the same lecturer; but anatomy and physiology, demonstrations and dissections, will be respectively considered as one branch of science.

VII. Certificates will not be received from candidates who have studied in London, unless they shall have registered their tickets at the College, as required by the regulations, during the last ten days of January, March, and October in each year; nor from candidates who have studied elsewhere, unless their names shall duly appear in the registers transmitted during such studies from their respective schools.

N.B. In the certificates of attendance on hospital practice and on lectures, it is required that the dates of commencement and termination be clearly expressed; and no interlineation, erasure, or alteration will be allowed.

Blank forms of the required certificates may be obtained on application to the Secretary, to whom they must be delivered, properly filled up, ten days before the candidate can be admitted to examination; and all such certificates are retained at the College.

Candidates are allowed to present themselves for the examinations in classics, mathematics, and French, at any period after they shall have attained the age of 18 years, and upon the payment of ten guineas, which sum will be allowed in the fee payable upon admission to the fellowship; and such examinations will take place in the first week of the month preceding the professional examinations.

STUDENTSHIPS.

The ordinance directs, that there shall be two studentships of the college, in Human and Comparative Anatomy, to be held by each student for the term of two years, at a salary of 100*l*. per annum. That candidates shall be members of the college, under 26 years of age. That the Council shall determine annually whether one or more of such appointments shall take place during the current year, and notify its resolution by public advertisement. That the appointment be made in the month of June, or as soon after as possible. And that the students shall be subject to such duties and restrictions as the Council from time to time shall direct; and, in case of misconduct, shall be liable to dismissal.

N.B. Candidates for the appointment must transmit their applications to the Secretary on or before the 1st of May, together with certificates of general good character and of fair acquirements in general learning, signed by two qualified members of the medical profession.

The studentships having been instituted for the cultivation and extension of human and comparative anatomy and physiology, by means of the opportunities afforded at the college in the preservation and enlargement of the museum, and in

(a) The recognition of colonial hospitals and schools is governed by the same regulations with respect to number of patients, to courses of lectures, and to physicians, surgeons, and lecturers, as apply to the recognition of provincial hospitals and schools in England.

the various scientific labours connected with that department, are held under the following

Regulations.—The students are required to devote their whole time to the study of anatomy, physiology, and the connected branches of knowledge, and to the service of the college in the museum. They shall not undertake any other employment, such as that of demonstrator, lecturer, or teacher; nor shall they engage in private practice, either as principal or assistant; and they shall avoid all appearance of practising by not designating their profession on the doors of their residences. They shall be employed at the college in such a manner as shall be pointed out by the conservators, whose directions they shall in all instances obey, referring to them in all matters on which they may entertain doubts. They shall not be absent from their duties in the museum (except in the case subsequently specified) without the permission of the conservators; nor shall they leave London without permission of the president and the knowledge of the chairman of the museum committee. They shall attend to their duties in the college from ten a.m. to four p.m., daily, except on Sunday, and on one other day in each week, on which they are allowed to visit their respective hospitals, and to read in the library of the college. On particular occasions, when the business of the museum shall require it, they shall attend, under the directions of the conservators, earlier or later than the hours above-mentioned. Each student is also required to attend in the museum for the purpose of giving information to visitors, one day in each week from twelve to four o'clock, and on any other day when the conservators, with the sanction of the museum committee, shall so direct. They shall record, in books provided for that purpose, the histories of their respective dissections and the particulars of their other occupations in the college; and they shall lay such books before the museum committee at least once a month. It is expected that they make themselves familiar with everything relating to the practical study of anatomy, such as the use of the microscope, the dissection of small animals, the art of preserving animal substances, of injecting and putting up anatomical preparations. It is also hoped that they will devote a portion of each evening to the perusal of works on anatomy and physiology, and on the auxiliary branches of knowledge.

APOTHECARIES' HALL.

Regulations, &c.

Every candidate for a certificate of qualification to practise as an apothecary, will be required to produce testimonials,—

1. Of having served an apprenticeship of not less than five years to an apothecary. No gentleman practising as an apothecary in England or Wales can give his apprentice a legal title to examination, unless he is himself legally qualified to practise as an apothecary, either by having been in practice prior to or on the 1st of August, 1815, or by having received a certificate of his qualification from the Court of Examiners. An apprenticeship for not less than five years to Surgeons practising as apothecaries in Ireland and Scotland, gives to the apprentice a title to be admitted to examination.

2. Of having attained the full age of twenty-one years. As evidence of age, a copy of the baptismal register will be required in every case where it can possibly be procured.

3. Of good moral conduct. A testimonial of moral character from the gentleman to whom the candidate has been an apprentice, will always be more satisfactory than from any other person.

4. And of having pursued a course of medical study in conformity with the regulations of the Court.

Course of Study.

Every candidate whose attendance on lectures shall commence on or after the 1st of October, 1849, must attend the following lectures and medical practice during not less than three winter and two summer sessions: each winter session to consist of not less than six months, and to commence not sooner than the 1st nor later than the 15th of October; and each summer session to extend from the 1st of May to the 31st of July.

First Year: Winter Session.—Chemistry; Anatomy and Physiology; Anatomical Demonstrations. Summer Session:

Materia Medica and Therapeutics; Botany and Vegetable Physiology; Midwifery, and Diseases of Women and Children.

Second Year: Winter Session.—Anatomy and Physiology; Anatomical Demonstrations and Dissections; Principles and Practice of Medicine; Medical Practice. (a) Summer Session: Medical Practice; (a) Midwifery and Diseases of Women and Children; Forensic Medicine; Practical Chemistry; (b) Clinical Medicine and Morbid Anatomy.

Third Year: Winter Session.—Dissections: Principles and Practice of Medicine; Medical Practice; (a) Clinical Medicine and Morbid Anatomy.

Practical Midwifery at any time after the conclusion of the first course of midwifery lectures.

The above course of study may be extended over a longer period than three winter and two summer sessions, provided the lectures and medical practice are attended in the order prescribed.

Recognition of Lecturers and Schools.

No member of the Court of Examiners will be recognised as a lecturer on any branch of medical science.

No lecturer will be recognised by the Court who is not connected with a recognised medical school; or who teaches on more than *two* branches of medical science; nor until he has produced very satisfactory testimonials of his attainments in the science he purposes to teach, and of his ability as a teacher thereof, from, at least, two persons of acknowledged talents and distinguished acquirements in the particular branch of science in question, and has also given a public course of lectures on the subject he purposes to teach; but if, after such preliminary course, the lecturer shall be recognised, certificates of attendance on that course will be received.

Satisfactory assurance must also be given that the teacher is in possession of the means requisite for the full illustration of his lectures, viz., that he has, if lecturing on chemistry, a laboratory and competent apparatus; on materia medica, a museum sufficiently extensive; on botany, a hortus siccus, plates or drawings, and recent plants; on midwifery, a museum, and such appointment in a public institution as may afford the means of practical instruction to the pupils.

Lecturers on anatomy, and physiology, and anatomical demonstrations, must be in conformity with the regulations of the Royal College of Surgeons.

The lecturer on the principles and practice of medicine, if he lectures in London, must be a member of the Royal College of Physicians of London; and if in a provincial town, either a member of the Royal College of Physicians of London, or a graduated Doctor of Medicine of a British University of four years' standing, unless prior to his graduation he had been for four years a licentiate of this Court.

The lecturer on materia medica and therapeutics must be a member of the Royal College of Physicians, or a graduated Doctor of Medicine of a British University of four years' standing; or he must have been a licentiate of this Court for the same period.

The lecturer on midwifery must be a member of one of the legally constituted Colleges of Physicians or Surgeons in the United Kingdom, of four years' standing; or he must have been a licentiate of this Court for the same period.

The names of the lecturers recognised by the Court, may be known on application to the Secretary at the Hall of the Society.

The certificates of teachers recognised by the constituted medical authorities in Ireland and Scotland, as also those of the medical professors in foreign Universities, are received by the Court.

Much inconvenience having arisen from the presentation of schedules signed by *lecturers unknown to the Court*, it is particularly requested that the registrars of the medical

(a) Medical practice must be attended during the full term of eighteen months; twelve months at an hospital connected with a recognised medical school, and six months either at a recognised hospital or dispensary, if more convenient.

(b) By Practical Chemistry is intended a specific course of instruction in the laboratory, with an opportunity of personal manipulation in the ordinary processes of chemistry, and of acquiring a knowledge of the various re-agents for poisons.

Note.—In place of the second course of lectures on the theory and practice of medicine, the Court will admit a certificate of attendance on a course of clinical lectures, delivered in a recognised hospital by a distinct Professor, consisting of not less than seventy-five lectures; attended by the student after the first systematic course upon the theory and practice of medicine.

schools will furnish a correct list of their recognised teachers to the Secretary of this Court, at the commencement of every winter session.

Hospitals and Dispensaries.

No hospital will be recognised by the Court, unless—1. It contain at least one hundred beds. 2. It be under the care of two or more physicians, members of the Royal College of Physicians of London, or graduated doctors of medicine of a British university. 3. The physicians give lectures on clinical medicine and instruction in morbid anatomy. 4. The apothecary be legally qualified, either by having been in practice prior to the 1st of August, 1815, or by having received a certificate of qualification from this Court. No dispensary will be recognised by the Court, unless it be situated in some town where there is a recognised medical school, and be under the care of at least two physicians and an apothecary legally qualified. No medical practice will be available, unless it be attended in conformity with the course of study prescribed for pupils.

Registration of Testimonials.

All testimonials must be given on a printed *schedule*, and the *blanks* therein must be filled up by the lecturers themselves. Students will be supplied with schedules at the time of their first registration:

In London, at the Hall.

In the provincial towns, from the gentlemen who keep the registers of the medical schools, and whose names may be known by application to the Secretary of the Court.

All students, in London, are required *personally* to register the several classes for which they have taken tickets; and those only will be considered as complying with the regulations of the Court, whose names and classes in the register correspond with their schedules.

Tickets of admission to lectures and medical practice must be registered in the months of October and May; but no ticket will be registered unless it be dated within *seven* days from the commencement of the course; and certificates of attendance must be registered in the months of April and August. Due notice of the days and hours of such registrations will be given from time to time.

The Court also require students at the provincial medical schools to register their names in their own handwriting, with the registrar of each respective school, within the first 21 days of October, and first 14 days of May; and to register their certificates of having duly attended lectures or medical practice within fourteen days of the completion of such attendance.

The registrars are requested to furnish the Court of Examiners with a copy of each registration *immediately* after its close, as those students only will be admitted to examination whose registrations have been *duly* communicated to the Court.

Preliminary Latin Examination.

On the first Saturday in every month, except August and September, those students who have completed two winter sessions of their medical studies may be admitted to an examination in Celsus and Gregory, provided there should be twenty names on the list. Candidates will be required to leave their schedules at the Beadle's office, on or before the preceding Monday, and to attend at half-past three o'clock p.m. on the day of examination.

Those gentlemen who fail to pass this examination satisfactorily, will not be re-admitted until they appear for their general examination.

Examination.

The Court of Examiners meet in the Hall every Thursday, where candidates are required to attend at a quarter before four o'clock.

Every person intending to offer himself for examination must give notice in writing to the Clerk of the Society, on or before the Monday previously to the day of Examination, and must at the same time deposit all the required testimonials at the office of the Beadle, where attendance is given every day, except Sunday, from ten until four o'clock.

The examination of the candidate for a certificate of qualification to practise as an apothecary, will be as follows:

In translating portions of the first four books of Celsus de Medicinâ, and of the first twenty-three chapters of Gregory's *Conspectus Medicinæ Theoreticæ*.

In Physicians' Prescriptions, and the *Pharmacopœia Londinensis*:

In Chemistry:

In *Materia Medica* and Therapeutics:

In Botany:

In Anatomy and Physiology:

In the Principles and Practice of Medicine, including Midwifery and the Diseases of Children.

The examination of the candidate for a certificate of qualification to act as assistant to an apothecary, in compounding and dispensing medicines, will be as follows:

In translating Physicians' Prescriptions, and the *Pharmacopœia Londinensis*:

In Pharmacy and *Materia Medica*.

By the 22nd section of the Act of Parliament, no rejected candidate for a certificate to practise as an apothecary, can be re-examined until the expiration of six months from his former examination; and no rejected candidate as an assistant until the expiration of three months.

The Act directs the following sums to be paid for certificates.

For London, and within ten miles thereof, ten guineas.

For all other parts of England and Wales, six guineas.

Persons having paid the latter sum become entitled to practise in London, and within ten miles thereof, by paying four guineas in addition.

For an assistant's certificate, two guineas.

For information relative to these Regulations, students are referred to the Beadle, at Apothecaries' Hall, every day (Sunday excepted), between the hours of ten and four o'clock.

It is expressly ordered by the Court of Examiners, that no gratuity be received by any officer or servant of the Court.

Information on all subjects connected with the "Act for better regulating the Practice of Apothecaries," may be obtained on application to Mr. R. B. Upton, clerk of the Society, at the Hall, every day (Sunday excepted), between the hours of one and three o'clock.

HOSPITALS AND MEDICAL SCHOOLS.

ST. BARTHOLOMEW'S HOSPITAL AND MEDICAL COLLEGE.

THE Introductory Address will be delivered by Mr. Skey, on Wednesday, October 1st. at seven o'clock in the evening.

LECTURES.

Principles and Practice of Medicine.—By George Burrows, M.D., F.R.S. One extended course will be given during the winter session. The lectures will be delivered on Mondays, Wednesdays, and Fridays, at half-past three o'clock, with occasional examinations and practical lectures on Tuesdays at the same hour. One course or session, five guineas; unlimited, seven guineas.

Surgery.—By William Lawrence, F.R.S. The introductory lecture will be delivered on Friday, the 3rd of October, at seven in the evening; and the course will be continued every Monday, Wednesday, and Thursday evening at the same hour. One course or session, five guineas; a second course, three guineas; unlimited, seven guineas.

Descriptive and Surgical Anatomy.—By Frederic C. Skey, F.R.S. Daily, at half-past two, Saturdays excepted, these days being occasionally devoted to examination of the students on the subjects treated of in the previous part of the week. One course, or half session, five guineas; two courses, or the whole session, seven guineas; unlimited, ten guineas.

Practical Anatomy.—This department is under the superintendence of the lecturers on anatomy and physiology, each of whom devotes a portion of the day to practical instruction in those parts of anatomy which are particularly treated of in his course of lectures. The demonstrators of anatomy, Mr. Holden and Mr. Holmes Coote, attend daily from half-past ten till half-past two o'clock, to direct the students in their dissections. The dissecting-rooms are open to the students who have entered to either the anatomical or the physiological lectures, from seven o'clock to four o'clock. Students who have not entered to either course of lectures may dissect on the following terms:—For three months,

one course, three guineas; for the session, five guineas. Subjects for dissection are provided, at a moderate expense, during the whole of the winter and summer sessions.

General and Morbid Anatomy and Physiology.—By James Paget, F.R.S. The lectures will be commenced on Thursday, the 2nd of October, at a quarter past nine o'clock, and will be continued daily at the same time. One course, or half session, five guineas; two courses, or the whole session, seven guineas; unlimited, ten guineas.

Chemistry.—By John Stenhouse, LL.D., F.R.S., L.&E. The lectures will be delivered on Mondays, Wednesdays, and Fridays, at a quarter past ten. Examinations of the students of the class on Friday mornings at a quarter past eleven. One course, five guineas; unlimited, seven guineas.

SUMMER SESSION.—1852.

Materia Medica and Therapeutics.—By George Leith Roupell, M.D., F.R.S. The lectures will be delivered on Tuesdays, Wednesdays, Thursdays, and Fridays, at half-past two o'clock. One course, five guineas; unlimited, seven guineas.

Botany.—By Frederic John Farre, M.D., F.L.S. Tuesdays, Thursdays, and Saturdays, at nine o'clock. One course, three guineas; unlimited, four guineas.

Midwifery, and the Diseases of Women and Children.—By Charles West, M.D. Daily, except Saturdays, at half-past three o'clock. One course, four guineas; unlimited, six guineas.

Forensic Medicine.—By William Baly, M.D., F.R.S. The lectures will be illustrated by diagrams, tables, and preparations; and also by experiments, and the use of the microscope. Mondays, Wednesdays, and Fridays, at nine o'clock. One course, three guineas; unlimited, four guineas.

Comparative Anatomy.—By A. M. M'Whinnie. On Mondays, Wednesdays, and Fridays, at nine o'clock. One course, two guineas; unlimited, three guineas.

Practical Chemistry.—By John Stenhouse, LL.D., F.R.S., L. & E., assisted by Mr. Frederick A. Abel, F.C.S. The hours of meeting are from a quarter past ten till one o'clock, on Mondays, Tuesdays, Thursdays, and Fridays. Fee for the course, two guineas; unlimited, three guineas.

The laboratory is open daily from ten o'clock till four, but on Saturdays from ten o'clock till one, throughout the year. Each laboratory student works independently; all operations being superintended by the professor and his assistants. Fee for a student working every day—Two guineas per month.

Natural Philosophy.—On Wednesdays and Saturdays, at twelve o'clock. Fee for the course, two guineas.

CLINICAL LECTURES.

On Medicine.—By Dr. Roupell and Dr. Burrows, who will lecture weekly during both the winter and summer sessions.

On Surgery.—By Mr. Lawrence, Mr. Stanley, and Mr. Lloyd, who will deliver one clinical lecture weekly during the winter session, and two weekly during the summer session.

Practical Pathology.—Inspections of morbid anatomy in the pathological theatre, as opportunities occur, at eleven o'clock; of the medical cases, by Dr. Kirkes, registrar of the hospital; of the surgical cases, by the house-surgeons, under the superintendence of the surgeons.

Entrance to all the lectures necessary for admission to the members' examination at the Royal Colleges of Physicians and Surgeons, and the Society of Apothecaries, fifty guineas; unlimited entrance to all the lectures, sixty guineas. Students having entered for any period to the hospital practice or lectures, may prolong their attendance on paying the difference between their first entrance-fee and that for any longer period.

All students of the first year are examined weekly in the several subjects of their studies, by the tutor, Mr. Savory, who resides in the college.

Hospital Practice.—St. Bartholomew's Hospital contains 600 beds: 420 are allotted to the surgical cases and to the diseases of the eyes, and 180 to the medical cases and the diseases of women. In the year 1850-51, 85,168 patients were relieved; including 5642 in-patients, 18,958 out-patients, and 60,568 casualties. Assistant-physicians, Dr. F. J. Farre, Dr. Jeaffreson, Dr. Black; Assistant-surgeons, Mr. Skey, Mr. Wormald, Mr. Paget; Physician-Accoucheur, Dr. West.

Fees of Attendance on Hospital Practice.—On the Medical Practice.—For six months, ten guineas; for nine months, twelve guineas; for eighteen months, fifteen guineas; for an unlimited period, thirty guineas. On the Surgical Practice.—For six months, fifteen guineas; for twelve months, twenty guineas; for three years, twenty-five guineas; for an unlimited period, thirty guineas. Dresserships.—For three months, twelve guineas; for six months, eighteen guineas; for twelve months, twenty-five guineas.

Collegiate Establishment.—Warden, Mr. Paget. Rules of Admission and Residence.—Students attending the practice of the hospital, or the lectures in the medical college, will be admitted to residence in the collegiate establishment on the recommendation of a medical officer of the hospital. Students commencing their attendance at the hospital or college, may obtain such recommendations on adducing satisfactory evidence of good moral character. Each student shall pay an entrance fee of two guineas, and subscribe his readiness to submit to all the regulations of the collegiate establishment and of the hospital. Resident students are expected to dine in the hall every day. Non-residents may dine in the hall, if they give notice of their intention before eleven o'clock in the morning. Students shall not be absent from their rooms after twelve o'clock at night without giving notice to the warden. Friends visiting students shall leave the rooms by twelve o'clock at night. No student shall absent himself for a night without permission of the warden. The whole expenses of rent, provisions, attendance, coals, and candles, are from twenty-eight shillings and sixpence to thirty-four shillings per week. A student may engage rooms for any number of terms and vacations, but may not, without the consent of the warden, give up his rooms in the course of a term. (The terms are three in each year; namely, one extending from the commencement of the winter session in October, to the commencement of the Christmas vacation; another, from the conclusion of the same vacation to the conclusion of the winter session at the end of March; and the third from the commencement of the summer session in May, to the conclusion of the same in July.) Students shall quit and deliver up possession of their rooms at any period of their engagement upon receiving from the warden one week's previous notice, or upon a shorter notice if the treasurer of the hospital shall require it. No servant of the establishment is permitted to receive fees from the students under any pretence whatever. No article of provision or drink is admitted into the establishment, except from persons authorised by the maitre.

Museums.—The anatomical museum is open daily to the students of the anatomical classes, from ten o'clock to half-past two. The museums of materia medica and of botany are open to the students of the classes, from eleven till half-past two o'clock daily, during the summer session. Foreigners and strangers desirous of viewing the museums may be introduced by any of the medical officers or lecturers of the hospital.

Library.—The library contains all the standard works of medical, surgical, and general science, with duplicate copies of books in most general use, and the chief medical periodicals; together with a valuable collection of works on religion, history, and general literature, lately presented by the treasurer, James Bentley, Esq., by Joshua Watson, Esq., the Rev. Dr. Wordsworth, Richard Gilbert, Esq., G. H. Foster, Esq., and Robert Hichens, Esq. Terms of subscription: for one year, one guinea; for three years, one pound ten shillings. Each subscriber is allowed to retain in his possession three volumes at a time. Any further information may be obtained by application to the librarian, who attends daily at the reading room.

Reading Room.—This room is devoted exclusively to the purpose of study. It is open for the use of the students of the college every day—during the winter session, from half-past ten until half-past two, from half-past three until five, and from six until seven o'clock; and during the summer session, from nine until three o'clock. Gentlemen who have entered to the medical or surgical practice of the hospital, or to any course of lectures delivered in the college, are admitted to the use of the room, and of the medical journals, on paying, for three years, ten shillings; subscription to both the library and the reading room, for an unlimited period, two pounds, ten shillings.

Abernethian Society.—A society, composed of the teachers and students of the college, holds its meetings in the reading room, on every Thursday evening during the winter session,

for the reading and discussion of papers on subjects of medical science or practice. Members are elected by ballot. The subscription is half a guinea annually. The transactions of the society, consisting of papers selected from those read at the meetings, are printed for the members.

Prizes and Honorary Distinctions.—At the conclusion of each session, examinations are held on the several subjects of the lectures; and prizes and honorary certificates are publicly awarded to those who show superior knowledge. The examinations are conducted in the form of written questions and answers. The competition is open to those students who have not received any license or diploma qualifying them for practice, and who have not exceeded the period of four years from their first attendance on the respective classes, or on the medical or surgical practice. The presentation of the prizes and other distinctions will take place in the hall of the hospital, in May, 1852.

Scholarships.—In April, 1852, examinations will be held for a scholarship of 50*l.* for one year, given by James Bentley, Esq., Treasurer of the hospital. The subjects of examination will be medicine, surgery, and midwifery. Candidates for this scholarship must be students who have completed their third winter's study at this hospital and college, and have no diploma qualifying for practice. The student elected to it will be required to continue his studies at the hospital, and to reside in the collegiate establishment, for the year following his election. At the same time, examinations will be held for a scholarship of the value of forty-five pounds a year, and tenable for two years. The subjects of examination will be anatomy and physiology. In each subsequent year there will be examinations for one or more scholarships of the same value. Candidates for these scholarships must be students who have been studying in this hospital and school for not less than twelve months, nor more than three years—who are not of sufficient standing to obtain any English diploma qualifying for practice—who have entered to the medical and surgical practice of the hospital—who have attended, for at least one session, the course or courses of lectures delivered in this college, on the subjects of examination for the scholarship to be competed for—and who can produce a testimonial, signed by at least three medical officers or lecturers, that they have conducted themselves with propriety during their attendance in the school. No student holding one scholarship is eligible to another. The examinations will be conducted in writing, by the medical officers and lecturers, in the same manner as the usual annual examinations in the same subjects. The examination in each subject will take place on a separate day. The names of those candidates who do not obtain scholarships, but who show superior knowledge of one or more of the subjects of examination, will be placed in the order of merit; and they will receive testimonials of the same kind as are given after the usual annual examinations in the same subjects. Students elected to these scholarships will be required to continue their studies at this hospital during the whole period in which they hold the scholarship, unless with leave given by the scholarship committee to hold it for one year while absent from the hospital; and they will be required to reside in the collegiate establishment, unless with leave given by the scholarship committee to reside elsewhere.

ST. THOMAS'S HOSPITAL.—MEDICAL AND SURGICAL COLLEGE.

The Introductory Address will be delivered by Dr. Leeson, in the hall of the hospital, on Wednesday, the 1st October, at eight o'clock in the evening.

Hospital Staff.—Consulting physician, Dr. Roots; physicians, Dr. Barker, Dr. Leeson, and Dr. Risdon Bennett; surgeons, Mr. Green, Mr. South, and Mr. Mackmurdo; assistant-physicians, Dr. Goolden, Dr. Cohen, and Dr. Peacock; assistant-surgeons, Mr. Solly, Mr. Le Gros Clark, and Mr. Dixon.

The wards are visited daily, between twelve and three. —The out-patients are seen at nine, a.m.

Ophthalmic wards, Mr. Macmurdo, surgeon; Mr. Dixon, assistant-surgeon. Midwifery Department: Physician, Dr. Waller. Clinical Pathology: Mr. Simon. *Post-mortem* Examinations: Mr. Adams and Mr. Bristowe, between twelve and one.

Gentlemen proposing to become students of St. Thomas's

Hospital, are expected to produce satisfactory testimonials of moral character and general education. The admission fee to hospital practice, and all the lectures, is 40*l.* for the first year, a similar sum for the second, and 10*l.* for each succeeding year. Special entries to any course of lectures, or to hospital practice, may be made. The library, museum, and microscopical-room, are open to the students without extra payment. A laboratory, under the direction of Dr. Leeson, will be provided for the students during the summer term. A Physical Society meets on alternate Thursdays, at 7 p.m., during term. Examinations will be held at the end of the winter, spring, and summer terms. The Christmas recess will commence December 24th, and the lectures will be resumed on Monday, January 5th. The winter session will terminate at the end of March; the summer course will commence May 1, and terminate at the end of July. The scholarships and annual prizes will be distributed at the commencement of the summer session. Students can be provided with commons and residence in college. Gentlemen wishing to enter are requested to apply to Mr. Whitfield, medical secretary, of whom may be obtained the terms and regulations.

Winter Lectures.—Anatomical demonstrations, Mr. Rainey and Mr. Bristowe, daily, from 9 a.m., to 3 p.m.; physiology and general anatomy, Mr. Grainger, Monday, Tuesday, Wednesday, and Thursday, at 10 a.m.; the teeth, their structure and diseases, Mr. Saunders, during the course of physiology, at 10; microscopical anatomy, Mr. Grainger and Mr. Rainey, Friday, at 10; surgery, Mr. Green and Mr. South, Monday, Wednesday, and Saturday, at 11; descriptive and surgical anatomy, Mr. Clark, Tuesday, Wednesday, Friday, and Saturday, at 3 p.m.; theory and practice of medicine, Dr. Barker, Monday, Wednesday, and Friday, at 4; chemistry, Dr. Leeson,—assistant, Dr. Gladstone, Tuesday, Thursday, and Saturday, at 4; the exanthemata, Dr. George Gregory, course of twelve lectures, Tuesday, at 6; ophthalmic surgery, Mr. Macmurdo, course of twenty lectures, Monday, Wednesday, and Friday, commencing Oct. 13, at 6 p.m.

Summer Lectures.—Comparative anatomy and natural history, Dr. E. Meryon, Tuesday and Saturday, at 9 a.m.; medical jurisprudence, Dr. Barker, Monday, Wednesday, and Friday, at 3 p.m.; materia medica, Dr. Risdon Bennett, Tuesday, Thursday, and Saturday, at 8 a.m.; practical chemistry in the laboratory, Dr. Gladstone, Monday, Wednesday, and Friday, at 11; midwifery, Dr. Waller, Monday, Wednesday, Thursday, and Friday, at 9; botany, Mr. Bristowe, Tuesday, Thursday, and Saturday, at 10; general pathology, Mr. Simon, course of twelve lectures, Tuesday, Thursday, and Saturday, at 3 p.m.; clinical lectures, by the physicians and surgeons, on the days of their respective attendance.

Scholarships, Prizes, and Appointments to be Awarded to the most meritorious Students.—A scholarship of 20*l.* to the student who shall be first in a voluntary classical and mathematical examination at the commencement of his studies at the hospital. The subjects for this session will be:—Classics:—Greek: Homer, first two books of Iliad; Xenophon, first two books of Anabasis. Latin: Virgil, second book of Georgics; Cicero, second Philippic. Mathematics: Arithmetic; Algebra, up to and including quadratic equations; Euclid, first three books. Two medical scholarships, for first year's men, each of the value of 20*l.* a year, and tenable for three years. Prizes to the most distinguished at the periodical examinations. The President's prizes: One of the value of ten guineas to a dresser for attention, good conduct, and reports of surgical cases; one of the value of five guineas to the best physician's clinical clerk, amongst the second year's students. The Treasurer's prizes: A gold medal for general proficiency and good conduct, for students at the completion of their studies; three prizes, each of the value of ten guineas, to the best clinical clerk of each physician; one of the value of five guineas, for the best essay read before the Physical Society. Dr. Roots's prize, of the value of ten guineas, to a physician's clinical clerk who shall produce the best report of cases which have occurred in the hospital during the preceding twelve months, with notes illustrative of their pathology, diagnosis, and treatment. Mr. Newman Smith's prize, of the value of 5*l.* for "The best Commentary on some Disease of the Nervous System." Governors' prizes: The Cheselden medal to the student who, at the end of the third year, shall most distinguish himself in the examinations on Surgical Anatomy and

Surgery; a prize, of the value of five guineas, for the best report of ophthalmic cases. Two house-surgeons and a resident accoucheur, provided with rooms and commons free of expense, selected annually from the dressers, who have obtained their diplomas to practise. Twelve dressers provided with rooms and commons in the hospital free of expense during their weeks of attendance.—Detailed conditions of the various prizes, with any other particulars which may be required, are to be obtained from the Dean, or of Mr. Whitfield, the Medical Secretary.

GUY'S HOSPITAL.

The medical session commences on the 1st of October. The Introductory Address will be given by Bransby B. Cooper, Esq., F.R.S., on Tuesday, the 1st of October, at two o'clock.

Gentlemen who desire to become students must give satisfactory testimony as to their education and conduct; they are required to pay 40*l.* for the first year, 40*l.* for the second year, and 10*l.* for every succeeding year of attendance; or the sum of 100*l.* in one payment will entitle a student to a perpetual ticket. The payment for the year admits to the lectures, practice, and all the privileges of a student, and for that year only.

Dressers, clinical clerks, assistants, and resident obstetric clerks, are selected according to merit from those students who have attended a second year. The privileges of a student will be withdrawn in the event of neglect or misconduct. Certificates will not be given for lectures and practice, unless they are duly attended.

The Christmas recess will commence December 24, and the lectures will be resumed January 6. The winter session will terminate March 31, and the summer course will commence May 1.

Medical Officers.—Consulting Physician: Richard Bright, M.D., F.R.S. Physicians: Thomas Addison, M.D.; B. G. Babington, M.D., F.R.S.; G. H. Barlow, M.D. Assistant-Physicians: H. M. Hughes, M.D.; G. Owen Rees, M.D., F.R.S.; Golding Bird, M.D., F.R.S. Surgeons: Bransby B. Cooper, Esq., F.R.S.; Edward Cock, Esq.; J. Hilton, Esq., F.R.S. Assistant-Surgeons: John Birkett, Esq.; Alfred Poland, Esq. Obstetric Physicians: J. C. W. Lever, M.D.; Henry Oldham, M.D. Surgeon of the Eye Infirmary: John F. France, Esq. Apothecary: James Stocker, Esq.

LECTURES, ETC.

Winter Courses.—Medicine: Dr. Addison, Mondays, Wednesdays, and Fridays, at half-past three. Clinical Medicine: Dr. Addison, Dr. Babington, and Dr. Barlow. Surgery: Mr. Bransby Cooper, Tuesdays, Thursdays, and Saturdays, at half-past three. Clinical Surgery: Mr. Bransby Cooper, Mr. Cock, and Mr. Hilton. Anatomy: Mr. Hilton and Mr. Birkett, daily, at two. The Teeth, their Structure, and Diseases: Mr. Bell. Physiology: Dr. Gull, Mondays, Wednesdays, Fridays, and Saturdays, at ten. Demonstrations on Anatomy in the Dissecting-room, daily: Mr. Callaway and Dr. Habershon. Demonstrations on Morbid Anatomy, daily, at three: Dr. Lloyd. Clinical Lectures on Midwifery and Diseases of Women: Dr. Lever and Dr. Oldham. Chemistry: Mr. Aikin and Dr. Alfred Taylor, Tuesdays, Thursdays, and Saturdays, at eleven. Natural Philosophy: Dr. Lloyd, Tuesdays, at seven. Moral Philosophy: The Rev. T. H. Bullock, Chaplain to the Hospital.

Summer Courses.—Demonstrations on Cutaneous Diseases: Dr. Addison, Mondays, at one. Materia Medica: Dr. Golding Bird and Dr. Owen Rees, Tuesdays, Thursdays, and Saturdays, at two. Clinical Lectures: Dr. Hughes, Dr. Owen Rees, Dr. Golding Bird. Midwifery: Dr. Lever and Dr. Oldham, daily, at a quarter to nine. Medical Jurisprudence: Dr. Alfred Taylor, Tuesdays, Thursdays, and Saturdays, at ten. Regional Anatomy: Mr. Hilton, Tuesdays, Thursdays, and Saturdays, at three. Comparative Anatomy: Dr. Gull, Wednesdays and Fridays, at ten. Ophthalmic Surgery: Mr. France, Wednesdays and Fridays, at three. Botany: Mr. Johnson, Tuesdays, Thursdays, and Saturdays, at half-past eleven.

Physical Society: Saturdays, at eight in the evening. The Clinical Wards will be opened the first week in October. Lying-in Charity: Dr. Lever and Dr. Oldham. Curator of the Museum: Dr. Birkett.

The Library, Museums, and Model-rooms, are open to the students.

Mr. Stocker, Apothecary to Guy's Hospital, is authorised to enter the names of students.

WESTMINSTER HOSPITAL SCHOOL OF MEDICINE.

The session will commence on Wednesday, October 1st, 1851, with an Introductory Lecture, at four p.m., by Mr. Holthouse.

Hospital Practice.—Consulting Physician, Dr. Bright; Physicians, Dr. Hamilton Roe, Dr. Kingston, Dr. Basham; Assistant-Physician, Dr. Woodfall; Consulting Surgeons, Mr. Guthrie, Mr. Hale Thomson; Surgeons, Mr. Lynn, Mr. Benjamin Phillips, Mr. Barnard Holt; Assistant-Surgeon, Mr. Charles G. Guthrie; Surgeon-Dentist, Mr. Clendon.

Clinical lectures will be delivered regularly, twice a week, by the physicians and surgeons. *Post-mortem* examinations will be made under the superintendence of the physicians and surgeons; on which occasions, pathological demonstrations will be given to illustrate the structural changes effected by disease.

Fees for attendance.—Medical practice: Six months, 10*l.* 10*s.*; twelve months, 12*l.* 12*s.*; eighteen months, 15*l.* 15*s.*; perpetual, 21*l.* Surgical practice: Three months, 8*l.* 8*s.*; Six months, 12*l.* 12*s.*; twelve months, 21*l.*; perpetual, 31*l.* 10*s.* Conjoint fee for the period of hospital practice required by the Royal College of Surgeons and the Society of Apothecaries, twenty-six guineas.

Maternity Charity.—Physician, Dr. Frederick Bird and Dr. W. Merriman; surgeon, Mr. Greenhalgh. Clinical lectures will be delivered by Dr. Merriman and Mr. Greenhalgh.

Lectures.—Winter Session: General anatomy and physiology, Mr. Hillman, and Mr. Brooke, F.R.S.; daily, except Saturday, at half-past eleven. Descriptive and surgical anatomy, Mr. Holthouse; daily, at three. Anatomical demonstrations, Mr. Burford Norman; the dissections will be conducted under the superintendence of Mr. Holthouse and Mr. Burford Norman. Surgery, Mr. Benjamin Phillips, F.R.S., and Mr. Barnard Holt; daily, except Saturdays, at two. Principles and practice of medicine, Dr. Hamilton Roe and Dr. Basham; daily, except Saturdays, at four. Chemistry, Harman Lewis, M.A., Trin. Coll. Cam.; Mondays, Wednesdays, and Fridays, at nine a.m. Dental surgery, Mr. Clendon; Wednesdays, at ten.—Summer Session: Materia medica and therapeutics, Dr. Basham; daily, except Saturdays, at four. Midwifery and diseases of women and children, Dr. Frederick Bird; daily, except Mondays, at two. Forensic medicine, Dr. Fincham and Dr. Tanner. Botany, Dr. Radcliffe. Practical chemistry, Harman Lewis, M.A.

General fee to all the lectures required by the Royal College of Surgeons and Society of Apothecaries, forty guineas, exclusive of practical chemistry; perpetual fee to all the lectures delivered in the school, except practical chemistry, forty-five guineas. The fees are to be paid to the Secretary of the hospital, who will issue tickets of admission to the courses, which must be subsequently countersigned by the lecturers.

Prizes and Honorary Distinctions.—*Scholarships.*—A matriculation scholarship has been instituted, the holder of which will be admitted (after examination), without fee, to the courses of lectures and hospital practice required by the College of Surgeons and Society of Apothecaries. A scholarship of the annual value of 20*l.*; and tenable for three years, will be vacant in 1854, to be awarded to the first year's student who shall most distinguish himself in a general examination. Clinical assistants, clinical clerks, and dressers will be selected from the best-qualified students, without extra fee. Prizes and certificates of honour will be awarded at the end of the session.

Further particulars may be obtained by application to the physicians and surgeons, or to the lecturers.

It has been determined by the Westminster Hospital School Committee, in conjunction with the medical officers of the hospital, and the lecturers, to institute a matriculation scholarship, the holder of which will be admitted, without fee, to the lectures and hospital practice required by the College of Surgeons and the Society of Apothecaries. The

scholarship will be awarded to the most successful competitor, after an examination in classics, mathematics, and French, under the following regulations:—Each candidate must bring a certificate of good moral conduct. No scholarship will be awarded if the knowledge of the candidates fall short of a standard satisfactory to the examiners. The successful candidate will retain the advantages of his scholarship only during good behaviour.

The following subjects are proposed for examination for the year 1851-2:—

Classics.—Greek: Xenophon, the second book of the Anabasis. Latin: Virgil, the sixth book of the Æneid.

Mathematics.—Arithmetic; Euclid, the first three books; Algebra, up to and including simple equations.

French.—The translation into English of a passage from one of the French standard authors. The examination will be held on Friday, October 3.

A scholarship of the annual value of 20*l.*, and tenable for three years, will be vacant in 1854, to be awarded to the first year's student who shall most distinguish himself in a general examination. Competitors for this scholarship will be required to be first year's students who have entered and paid the fees to all the lectures and hospital practice.

Any further information may be obtained on application to any of the lecturers, or to F. J. Wilson, Secretary of the Westminster Hospital.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL.

The winter course of instruction will commence on Wednesday, October 1, when the scholarships and prizes for the past year will be awarded.

Hospital Practice.—Physicians: Dr. Wilson, Dr. Nairne, Dr. Page, and Dr. Bence Jones, F.R.S. Assistant-Physicians: Dr. Pitman and Dr. Fuller. Surgeons: Mr. Keate, Mr. Cæsar Hawkins, Mr. Cutler, and Mr. Tatum. Assistant-Surgeons: Mr. H. Charles Johnson and Mr. Prescott Hewett.

Gentlemen becoming pupils of the hospital may attend all the lectures, and the medical and surgical practice necessary for those who desire to become members of the Royal College of Surgeons, or licentiates of the Society of Apothecaries, on paying 40 guineas at the commencement of the first year; 40 guineas at the commencement of the second year; and 12 guineas at the commencement of the third year. The payment for the year will admit the pupil to all the lectures, and to the hospital practice required, for that year only. Special entries to hospital practice, or to any separate course of lectures, may be made as heretofore, viz.:

To the practice of the physicians on the following terms:—Six months, 8 guineas; one year, or the period required by the Society of Apothecaries, 16 guineas; perpetual pupils, 24 guineas; fee to the apothecary, 1 guinea.

To the practice of the surgeons on the following terms:—Six months, 15 guineas; one year, or the period required by the College of Surgeons, 20 guineas; perpetual pupils, 50 guineas. Attendance of the physicians and surgeons daily at one o'clock. Surgical operations on Thursday.

Clinical Lectures are given by the physicians and surgeons of the hospital during the winter and summer sessions.

Ophthalmic Surgery.—Patients with diseases of the eye are treated by Mr. Tatum on Mondays and Fridays, at one o'clock.

Practical Pharmacy.—Gentlemen may be instructed in pharmacy, in the laboratory and dispensary of the hospital, on the following terms:—Six months, 12 guineas; one year, 15 guineas.

Clinical Clerks.—The pupils attending the medical practice may become, when qualified, clinical clerks to the several physicians. The pupils attending the surgical practice may become, when qualified, clinical clerks to the several surgeons.

Dressers.—Pupils entering to the surgical practice for twelve months, are allowed, when qualified, to dress the patients for three months, and perpetual pupils for six months, without additional fee. The dresser of the surgeon of the week boards at the hospital free of expense.

House-Surgeons.—The perpetual pupils are eligible to be assistant house-surgeon for six months, and house-surgeon for twelve months, (without additional fee,) when properly qualified for the office.

The Library and Reading-room are open during the greater

part of the day. Subscription for the first year, 1 guinea, and 5*s.* for every subsequent year.

The Museum is open daily to the pupils of the hospital.

Lectures:—Descriptive and Surgical Anatomy, by Mr. Prescott Hewett and Mr. Pollock.—Physiology and General Anatomy, by Mr. Athol Johnson.—Practical Anatomy: Students will be assisted in their studies, during several hours daily, by Dr. Ogle and Mr. Hornidge, under the direction of the lecturers.—Chemistry, by Henry M. Noad, Ph. D.—A commodious laboratory has been arranged, and every requisite provided to carry into full effect the new regulations of the Society of Apothecaries, which require "a specific course of instruction to be given in the laboratory, with an opportunity of personal manipulation in the ordinary processes of chemistry, and of acquiring a knowledge of the various re-agents for poisons."—Materia Medica, by Dr. Pitman.—Midwifery, and Diseases of Women and Children, by Dr. Robert Lee, F.R.S.—Theory and Practice of Physic, by Dr. Nairne and Dr. Page.—Theory and Practice of Surgery, by Mr. Tatum.—Medical Jurisprudence, by Dr. Fuller and Mr. Henry Charles Johnson.—Botany, by Mr. Henfrey, F.L.S.

Regulations respecting Students:—A register is kept, in which the names of all students in St. George's Hospital Medical School, the lectures which they attend, and the certificates which they obtain, may be registered. The fee for registration is 1 guinea.

Students who wish to be matriculated students are required to receive the entire medical education ordered by the College of Surgeons and Society of Apothecaries in the medical school of the hospital, and to be registered in the hospital medical school register. But other students are also strongly recommended to have their names registered, as the advantage is obvious in being able at any time to obtain certificates, should they be entitled to them.

The attention of students is particularly directed to the following regulations:—1. Every student must, at the beginning of every session, take out tickets from the treasurer of the hospital school, Dr. Pitman, or, in his absence, from the apothecary of the hospital, (to whom all fees may be paid,) for the lectures which he proposes to attend. After the tickets have been registered, they must be taken to the respective lecturers for their signatures. 2. All certificates must be obtained from the treasurer. 3. Towards the close of the winter and summer sessions, certificates of attendance on the lectures will be prepared for those students who are entitled to them, and will be delivered to them by the apothecary, signed by the treasurer and the respective lecturers of the hospital medical school. 4. Students are particularly requested to give in their schedules to the apothecary as soon as they procure them from the College and the Hall. 5. Certificates will not be granted to those students who neglect to comply with these regulations.

Scholarships and Prizes.—Examinations of those students who are candidates for prizes and certificates of merit will take place at the end of each course. There will be examinations for three scholarships in July, 1852, each of the value of 20*l.* and tenable for two years; the subjects of examination will be anatomy, chemistry, and materia medica. Candidates must be matriculated students, who have been studying in the hospital school for one winter and one summer session, and who can produce a testimonial, signed by the lecturers on anatomy, chemistry, and materia medica, that they have conducted themselves with propriety during their attendance in the school. A student elected to a scholarship will be required to continue his studies at the hospital during the whole period in which he holds the scholarship, unless with leave given by the medical officers to be absent; and in order to hold it for more than one year, he must produce at the end of the year a certificate of good conduct signed by at least three medical officers.

Sir Benjamin Brodie's Clinical Prize will be awarded to the matriculated surgeon's pupil of the hospital who shall have delivered to the surgeons the best report of not fewer than twelve surgical cases which have occurred in the hospital during the preceding twelve months, each case being accompanied with notes illustrative of the pathology, diagnosis, and treatment. The reports are not to be in the handwriting of the candidate for the prize, and are to be sent, sealed up, with a motto on the outside of the cover, to the junior surgeon, on or before the 15th of March; and another sealed paper, with the same motto on the outside, and with the name and address of the candidate inside, is to

be sent with them. The papers containing the names of the unsuccessful candidates will be burned unopened, and their reports will be returned when applied for.

Dr. Chambers's Clinical Prize will be awarded to the matriculated physician's pupil of the hospital who shall produce the best report of not fewer than twelve medical cases which have occurred in the hospital during the preceding twelve months. The same regulations are to be followed as in the case of the surgical clinical prize, and the reports are to be sent to the junior physician on or before the 15th of March.

The Thompson Medal will be awarded for the best clinical report of medical and surgical cases observed in the hospital during the preceding twelve months. The same regulations are to be followed as in the case of the surgical clinical prize, and the reports are to be sent to the junior physician, on or before the 15th of March.

Assistant-Surgeoncy in the Hon. East India Company's Service.—A nomination to the appointment of an assistant-surgeon in the Hon. East India Company's Service has been placed at the disposal of the governors of the hospital by the liberality of Ross D. Mangles, Esq., M.P. This appointment will be offered as a prize to the pupil of the hospital school, who, entering in October, 1851, shall be most distinguished for his general good conduct, talent, and proficiency, in 1854.

Further information may be obtained from any of the lecturers, or from Mr. Hammerton, the apothecary of the hospital, who is authorized to enter the names of students. Some of the lecturers and other gentlemen connected with the hospital receive students to reside with them.

LONDON HOSPITAL MEDICAL AND SURGICAL SCHOOL.

M I L E - E N D .

The Courses of Lectures delivered at this School are arranged in Two Sessions, a Winter and a Summer Session.

The Winter Session will commence on Wednesday, October 1st, 1851, when an Introductory Lecture will be delivered by Dr. Fraser, at half-past two o'clock. Lectures on Anatomy, Physiology, Chemistry, Medicine, and Surgery, are delivered during this Session.

The Summer Session will commence on the 1st of May, 1851. Lectures on Midwifery, Materia Medica, Botany, Forensic Medicine, and Practical Chemistry, will be given during this period.

General fee for attendance on the Medical and Surgical Practice, qualifying for the examinations at the London University, Royal College of Surgeons, and Apothecaries' Hall, and for perpetual attendance on all the lectures, 84 guineas, payable in two instalments of 42 guineas each, at the commencement of the two first sessions of attendance. Perpetual fee to the lectures alone 50*l*. Students can make special entries for lectures or practice as heretofore.

Physicians. — Dr. Cobb, Dr. Frampton, Dr. Little. Assistant-Physicians.—Dr. Pereira, Dr. Fraser, Dr. Davies. Surgeons.—Mr. Luke, Mr. Adams, Mr. Curling. Assistant-Surgeons.—Mr. Critchett, Mr. N. Ward, Mr. Wordsworth. Consulting Physician in obstetric cases, Dr. Ramsbotham.

Fees of Attendance on the Hospital Practice.—On the Medical Practice: For six months, 6 guineas; for period required by Apothecaries' Hall, 11 guineas. On the Surgical Practice and Dressing: For twelve months, including six months' dressership, 12 guineas; for eighteen months, including twelve months' ditto, 18 guineas; for three years, including twelve months' ditto, 25 guineas; for twelve months' additional dressership, during the above three years, 5 guineas; for twelve months' dressership after expiration of the above three years, 8 guineas.

The pupils enter and dress under all the surgeons. Two in rotation remain in the hospital day and night for a week, and are provided with commons.

The privilege of dressing for twelve months is given annually to three pupils of the school, each pupil being previously required to dress the out-patients for one year.

Two house surgeons are elected every six months, without any additional fee. They reside in the hospital, and are provided with commons.

Clinical Lectures.—Clinical lectures will be given by the physicians and surgeons.

Practical Pathology.—The *post-mortem* examinations take

place, as opportunities occur, at two p.m., and are superintended by Mr. Wordsworth.

Microscopical Demonstrations of Morbid Anatomy will be given by Dr. Parker.

Museum and Library.—The anatomical museum is open daily to the students, from 11 a.m. to 2 p.m. The reading room is open daily, from 10 a.m. to 4 p.m. Gentlemen who have entered to the medical or surgical practice, or to two or more courses of lectures, will be admitted without any fee to the reading room; and to the privileges of the library, on depositing 1*l*., to be returned at the termination of the period of study at the hospital. A cabinet of materia medica is open to the students.

Prizes and Honorary Distinctions.—Medals and certificates of merit will be offered for competition in all the classes.

Hospital Prizes.—Two gold medals will be annually awarded by the governors to such students, attending the medical and surgical practice, as shall have most distinguished themselves in the performance of their duties at the hospital.

Several of the lecturers receive resident pupils.

Further information may be obtained from Mr. Adams or Mr. Curling, or on application to Dr. Letheby, at the anatomical museum.

THE MIDDLESEX HOSPITAL SCHOOL OF MEDICINE.

The session will commence on Wednesday, October 1st, 1851, with an Introductory Lecture by Mr. Taylor, at half-past seven p.m.

Hospital Practice.—Physicians: Dr. Hawkins, Dr. Crawford, Dr. Seth Thompson. Physician-Accoucheur: Dr. Frere. Assistant-Physician: Dr. Stewart. Surgeons. Mr. Shaw, Mr. De Morgan, Mr. Moore. Assistant-Surgeon: Mr. Henry. Surgeon-Dentist: Mr. Tomes, F.R.S. Apothecary: Mr. Corfe.

The hospital has recently been much enlarged, and important alterations and improvements have been introduced in its internal arrangements. It now receives 285 in-patients, and contains wards specially appropriated to cases of syphilis and of cancer in the male and female, and also to patients suffering from uterine disease. 2550 in-patients were admitted during the past year. The number of out-patients during the same period amounted to 11,382.

Clinical clerks and dressers are selected by the physicians and surgeons from the most deserving pupils, without additional fee. Pupils are eligible to become dressers to the in-door patients after having practised dressing and bandaging in the out-patient room and surgery.

The house-surgeons are elected half-yearly from the dressers, and are provided with board and residence in the hospital, free of expense.

The in-patients are visited daily at one o'clock. Surgical operations are performed on Thursdays at half-past twelve.

Clinical lectures are given twice a week, or oftener, by the physicians and surgeons. These lectures are open to all pupils attending the hospital practice.

Practical instruction in minor surgery, bandaging, &c., is given by the assistant-surgeon.

The hours of lecture, &c., are so arranged as to allow as large an amount of time as possible for attendance in the wards of the hospital, and at *post-mortem* examinations, and for dissection.

The Medical and Surgical Out-patients are attended on three mornings in the week by the assistant-physician and assistant-surgeon respectively, and every opportunity is taken to render this department available to the pupils for the ready investigation of disease.

Midwifery and the Diseases of Women and Children.—Upwards of 500 cases of labour were attended under the direction of the physician-accoucheur during the last year, and the students are at all times furnished with an ample supply of cases under his superintendence. Out-patients with uterine and infantile diseases are seen by the physician-accoucheur on Wednesdays and Saturdays at twelve o'clock.

Ophthalmic Department.—Patients with diseases of the eye are attended by Mr. Moore, on Mondays, Wednesdays, and Fridays at twelve o'clock.

Dental Surgery.—Pupils receive instruction on diseases of the teeth, and the operations connected with them, on Tuesdays, Thursdays, and Saturdays, at nine o'clock, from the surgeon-dentist.

Morbid Anatomy and Pathology.—Post-mortem examinations are made by the assistant-surgeon at two o'clock.

Terms of Attendance on Hospital Practice.—Medical Practice: For three months, 6*l.* 6*s.*; six months, 10*l.* 10*s.*; eighteen months, 15*l.* 15*s.*; an unlimited time, 21*l.* Surgical Practice: For three months, 9*l.* 9*s.*; six months, 12*l.* 12*s.*; three years, 18*l.* 18*s.*; an unlimited time, 21*l.* Fee to the apothecary, 1*l.* 1*s.* Fee to the secretary, 5*s.* Fee for the entire period of attendance required by the College of Surgeons and Apothecaries' Company, (viz., eighteen months of medical and three years of surgical practice, 30*l.* This payment includes the fees of the apothecary and secretary.

Instruction in practical pharmacy, with opportunities of dispensing, is given by the apothecary. Fee for six months, eight guineas; for twelve months, twelve guineas.

Instruction in pharmacy, in the drug room, without dispensing. For three months, six guineas.

Museum.—Curator. Mr. Henry, assistant-surgeon to the hospital. The museum is open to students daily, where bones and models are supplied to them for study during the intervals of lecture. Students will have opportunities of making microscopical examinations of natural and morbid structures.

Library.—Librarian, Mr. Teague. Admission to the library and reading-room is included in the fees paid by general students. Occasional students, who desire to make use of the library, may do so on payment of half a guinea. The library has been considerably enlarged: it now contains an extensive collection of standard medical works, with the various medical periodicals.

Medical Society.—A medical society is established under regulations sanctioned by the governing body of the hospital.

The authorities of the hospital have made arrangements by which students have liberty to dine with the resident officers at the board-room table, and to take luncheon in the library. The clinical clerk and dresser of the week dine at the board-room table.

Prizes.—Examinations for honours in the various classes are held at the end of each session.

Clinical Prizes.—With a view to encourage the habit of investigating and recording at the bedside the phenomena of disease, the physicians and surgeons have instituted two prizes, of the value of ten guineas each, which will be awarded at the annual distribution, to the students who shall present the most approved reports of cases that have occurred in the hospital during the preceding winter session.

Treasurer's Prize.—The annual prize of the value of ten guineas will be presented by the treasurers of the hospital.

UNIVERSITY COLLEGE, LONDON.

FACULTY OF MEDICINE.

The session is divided into two terms, a winter and a summer term. The winter term begins on Wednesday, 1st of October, and ends on the 15th of April. The summer term begins on the 1st of May, and ends on the 31st of July. The Introductory Lecture will be delivered by Dr. Parkes, on Oct. 1st.

Frequent examinations are held in every class. Medals and certificates of honour are given in every class at the end of each term; but those pupils only who have regularly attended the examinations will be admitted to contend for them.

At the end of every session the "Longridge" exhibition of 40*l.* is awarded as a prize for general proficiency.

The payments stated below for each class are made by students nominated by proprietors: 5*s.* additional for every pound, until this extra payment amounts to 4*l.* 10*s.*, are paid by those not nominated.

A College fee of 10*s.* for one class, and 1*l.* for two or more classes, is paid by each student every session; where, however, the course is of short duration, this fee is diminished. The matriculation fee of 2*l.* relieves the student, during the whole course of his study, from the College fee.

All fees are paid at the office of the College, where the student receives his tickets, which he afterwards takes to be signed by the Professor. The office is open from 9 o'clock till 4, except on Saturdays, when it closes at 2.

The general library is open daily from 9 to 5 during the session: the medical library from 9 to 6 during the winter term, from 9 to 5 during the summer term, and from 9 to 4 during the vacations. On Saturdays the libraries close at 2.

The Museum of Anatomy and the Museum of Chemistry and Materia Medica are open daily.

Residence of Students.—Several of the Professors receive students to reside with them; and in the office of the College there is kept a register of parties unconnected with the College who receive boarders into their families; among these are several medical gentlemen. The register will afford information as to terms and other particulars.

Degrees in Medicine.—The examinations for degrees in medicine, and for honours, exhibitions, and scholarships, conferred by the University, take place annually, as follows: For matriculation, in July; for M.B., the first in August, the second in November; for M.D., in November.

The courses of the medical faculty of this College are recognised by the Universities of Scotland as academical courses.

Lectures and Hospital Practice required by the College of Surgeons and the Society of Apothecaries, under Regulations commencing October, 1849.

Classes.	1st Session.		2d Session.		3rd Session.		Fees.
	Winter Term.	Summer Session.	Winter Term.	Summer Term.	Winter Term.	Summer Term.	
Anatomy and Physiology ..	—	—	—	—	—	—	9 Perpetual.
Anatomy, with dissections ..	—	—	—	—	—	—	9 Perpetual.
Chemistry ..	—	—	—	—	—	—	4
Materia Medica ..	—	—	—	—	—	—	6 Perpetual.
Surgery ..	—	—	—	—	—	—	8 Perpetual.
Medicine ..	—	—	—	—	—	—	6 Perpetual.
Midwifery ..	—	—	—	—	—	—	3
Medical Jurisprudence ..	—	—	—	—	—	—	3
Morbid Anatomy	—	—	—	—	—	—	4
Practical Chemistry ..	—	—	—	—	—	—	3
Botany ..	—	—	—	—	—	—	2
Matriculation fee	Surgical.		Medical and Surgical.				
Hospital Practice	—	—	—	—	—	—	27
Total ..							90

Payments.—1st winter term, 53*l.*; 1st summer term, 13*l.*; first year, 66*l.*; 2nd winter term, 14*l.*; 2nd summer term, 10*l.*; second year, 24*l.* For the College of Surgeons alone, 72*l.*; for the Society of Apothecaries alone, 84*l.*

UNIVERSITY COLLEGE HOSPITAL.

Physicians: Dr. Walshe, Dr. Parkes, Dr. Garrod; Dr. Murphy, obstetric physician; Dr. Jenner, Dr. Hare, assistant-physicians. Surgeons: Mr. Quain, Mr. Erichsen; Mr. Quain, consulting surgeon to the Eye Infirmary; Mr. Durancé George, dental surgeon; Mr. Wharton Jones, ophthalmic surgeon; Mr. Marshall, Mr. Cadge, assistant-surgeons.

Terms of Admission to the Practice and Clinical Lectures.—To students who have already entered, in the medical faculty of the College, to three classes, of which the courses are of six months' duration, (two classes in which the courses are of three months' duration being considered equivalent to one of six months.)

Also to pupils who produce certificates of having attended a course of lectures of a recognised school of medicine, and during one year the practice of a recognised hospital. For perpetual admission to the medical and surgical practice, 26*l.* 5*s.*; for one year to the physicians' and surgeons' practice, 21*l.*; physicians' or surgeons' practice separately, 15*l.* 15*s.*; for six months to the physicians' and surgeons' practice, 15*l.* 15*s.*; physicians' or surgeons' practice separately, 10*l.* 10*s.*

To Pupils other than as above specified.—For perpetual admission to the medical and surgical practice, 36*l.* 15*s.*; for one year to the physicians' and surgeons' practice, 30*l.*; physicians' or surgeons' practice separately, 22*l.*; for six

months to the physicians' and surgeons' practice, 22*l.*; physicians' or surgeons' practice separately, 15*l.*

The above fees to be paid at the Office of the College.

Note.—These fees are devoted to the maintenance of the hospital, the physicians and surgeons having relinquished their proportion of them for its benefit.

Every pupil pays, in addition to the fees, 10*s.* apothecary's, and 5*s.* office fee. Physicians' assistants, house surgeons, midwifery assistants, physicians' clerks, surgeons' dressers, and ophthalmic surgeons' assistants, are selected from pupils being students of the College and of unexceptionable moral character, without additional payments. In case of the qualifications of the candidates for the respective offices being equal, preference will be given to those who have obtained the highest honours in the medical classes of the College. The physicians' assistants and house-surgeons reside in the hospital, paying for their board. The physicians' and surgeons' visits are made daily at one and two o'clock. Each of the three physicians visits his patients three times a week.

Obstetric Department.—Dr. Murphy attends three times a week to see patients affected with uterine diseases, and children; and on alternate days to receive applications from women who wish to be attended in their confinement.

Ophthalmic Department.—Mr. Wharton Jones attends three times a week to see patients affected with diseases of the eye; and will occasionally deliver lectures at the hospital on the cases under his charge.

An assistant-physician and an assistant-surgeon attend four days in the week for the care of out-patients. The dental surgeon attends every Saturday at nine a.m.

Degrees in Arts and Laws.—The examinations for degrees in arts and laws, and for honours, exhibitions, and scholarships, conferred by the University of London, take place annually as follow:—For matriculation, in July; for B.A., in October; for M.A., in June; for B.L., in June; and LL.D., in October.

The regulations of the College respecting the certificates of studentship required by the University are printed separately.

Scholarships.—Three Andrews' scholarships, viz., one of 100*l.* and two of 50*l.*, will be awarded in October next to proficient in Latin, Greek, Mathematics, and Natural Philosophy. Candidates must have been, during the academical year immediately preceding, students in the College or pupils in the school. The examination will take place between the 1st and 6th of October, and be conducted by examiners appointed by the Council. In subsequent years the scholarships will be one of 70*l.*, and two of 45*l.*

Printed copies of the regulations concerning these scholarships may be had on application at the Office.

CHARING-CROSS HOSPITAL MEDICAL SCHOOL, LONDON.

WEST STRAND, NEAR CHARING-CROSS.

Hospital Practice.—Physicians: Dr. Golding, Dr. Chowne. Assistant-physician: Dr. Rowland. Surgeons: Mr. Hancock, Mr. Avery.

Medical Practice.—Six months, 10*l.* 10*s.*; full period required, 15*l.* 15*s.*

Surgical Practice.—Six months, 10*l.* 10*s.*; full period required, 15*l.* 15*s.* Full period required by the Royal College of Surgeons and the Society of Apothecaries, to both medical and surgical practice, 25 guineas.

The physicians and surgeons visit the wards on their respective days between one and two o'clock.

The cases in the out-patients' department are seen and prescribed for at the hospital daily between twelve and two o'clock.

Clinical Lectures.—Medical and surgical clinical lectures are given weekly by the physicians and surgeons of the hospital.

Practical Pathology.—*Post-mortem* examinations are made in available cases.

The museum contains numerous instructive preparations of morbid and natural structure; together with a cabinet of *materia medica*, models, casts, drawings, diagrams, etc., for illustrating the various lectures.

Diligence and regularity of attendance on the practice and classes are expected as a preliminary qualification for the competition for prizes.

Certificates of attendance at this hospital and school qualify for examination on the respective subjects at the University of London, College of Surgeons, and Society of Apothecaries.

Free Scholarships.—Candidates for the free scholarships at this institution, are required to send in their applications and testimonials before the 1st of August in every year, the regulations respecting which are to be obtained by application to the Secretary of the hospital.

Medical Officers of the Public Services.—The medical officers of the army and navy are admitted to the practice and lectures at this hospital and school, upon presenting a recommendation for that purpose from the heads of their respective departments.

The Medals and Testimonials of Honour, Session 1851-2, are awarded in conformity with the following arrangements:—The competitors for the gold medal and also for the governors' general proficiency medal, are to be in the last session of their attendance on the medical and surgical practice of the hospital, and all the classes of the medical school, for the full period required to qualify for examination by the College of Surgeons and Society of Apothecaries. Competitors for these two medals, or for the clinical medal, are not to compete for the class medals, nor are the competitors for the gold medal and governors' general proficiency medal to compete for the clinical medal, the qualifications required for each being practically similar. Competitors for the governors' clinical medal are to have attended for the full period the medical and surgical practice of the hospital, with or without attendance on the various classes of the school. Competitors for the silver class medals and testimonials of honour of the senior classes are to be in the second or third session of their attendance in the classes for the medal or testimonials of which they are competitors. Competitors for the bronze medals and testimonials of honour of the junior classes are to have completed when the current session shall be ended one session of attendance, in the classes for the medal or testimonials of which they are competitors. In those classes of which only one session is required by the College of Surgeons and Society of Apothecaries, a silver medal is offered for competition, instead of a bronze medal.

KING'S COLLEGE.

Medical Department.—The academical year in this department is divided into two sessions; the winter session, which begins on the first of October, and terminates at the end of March; and the summer session, which begins on the 1st of May, and terminates at the end of July. Students are of two kinds, matriculated and occasional. Matriculated students are those who receive their entire medical education at King's College. They wear the College cap and gown, and enjoy certain privileges enumerated in the Calendar. Occasional students comprehend those who attend only the lectures of particular Professors.

KING'S COLLEGE HOSPITAL.

The next winter session will commence on Wednesday, the 1st of October next, with an Introductory Lecture by Professor William Bowman, F.R.S., at two o'clock precisely.

Consulting Physicians.—Thomas Watson, M.D.; Robert Ferguson, M.D. Physicians.—George Budd, M.D. F.R.S.; R. B. Todd, M.D. F.R.S. Physician for Diseases of Women and Children, and Physician Accoucheur.—Arthur Farre, M.D. F.R.S. Physician to Out-patients.—W. A. Guy, M.B. Assistant-Physician.—Geo. Johnson, M.D. Surgeons.—W. Fergusson, F.R.S.; Richard Partridge, F.R.S. Assistant-Surgeons.—William Bowman, F.R.S.; Henry Lee, F.R.C.S. Surgeon-Dentist.—S. Cartwright, jun.

Dr. Arthur Farre attends at half-past 11 on Tuesdays, Thursdays, and Saturdays.

Clinical lectures are delivered, at half-past one o'clock, on alternate Mondays, by Dr. Budd; Tuesdays, by Dr. Todd; Thursdays, by Mr. Fergusson; Fridays, by Mr. Partridge.

The physicians' assistant and clinical clerks, the house-surgeon and dressers, are selected by examination from among those matriculated students of the College who are pupils of the Hospital.—No fee is paid for any of these appointments.

The course of study required by the regulations of the

College of Surgeons and the Society of Apothecaries, comprises the following Lectures, of which the Terms are—

	Number of Sessional Courses.	Payment.
Anatomy, Descriptive and Surgical, with Dissections	3	£9 0 0
Physiology: General and Morbid Ana- tomy	1	9 9 0
Chemistry	1	7 7 0
Botany	1	3 3 0
Materia Medica	1	5 5 0
Medicine	2	7 7 0
Surgery	2	6 6 0
Midwifery	2	6 6 0
Forensic Medicine	1	3 3 0
Practical Chemistry	1	4 4 0

£61 19 0

Hospital Fees 31 10 0

£93 9 0

Students are recommended to take out a Per-
petual Ticket for Chemistry, and for Materia
Medica, by paying the additional sum of } 3 3 0

£96 12 0

This payment may be made either in one sum upon matriculation, or in two equal sums; the one at the commencement of the winter session, October 1st, and the other, after the Christmas vacation, not later than the 21st January. The following fees must also be paid at the time of matriculation:—Matriculation fee, 1*l.* 1*s.*; library fee, 1*l.* 1*s.*; subscription to the scholarship fund, 1*l.* 1*s.*; cap and gown, 1*l.* 10*s.*; calendar, 2*s.* 6*d.*: total, 4*l.* 15*s.* 6*d.* The fees for admission to the laboratory class of Analytical Chemistry are, for one month, 4*l.* 4*s.*; for three months, 10*l.* 10*s.*; for six months, 18*l.* 18*s.*; for nine months, 26*l.* 5*s.* Fee for the medical tutor, to resident students, 2*l.* 2*s.* for each academic year; to non-resident students, 3*l.* 3*s.* All resident students are required to attend the medical tutor during their first year. The fees for perpetual admission to every course, (except the class of Analytical Chemistry,) including the hospital, amount to 107*l.* 2*s.*

Hospital Fees.—Perpetual admission to the Medical and Surgical Practice:—For matriculated students of King's College, 31*l.* 10*s.*; for pupils who are not matriculated students, 36*l.* 15*s.* Medical Practice:—Three months, 6*l.* 6*s.*; six months, 10*l.* 10*s.*; twelve months, 15*l.* 15*s.*; eighteen months, 15*l.* 15*s.*; perpetual, 21*l.* Surgical Practice:—Three months, 10*l.* 10*s.*; six months, 15*l.* 15*s.*; twelve months, 21*l.*; twenty-one months, 21*l.*; perpetual, 26*l.* 5*s.* Registration fee, (to be paid to the Secretary at King's College Hospital,) 10*s.* 6*d.*

ENDOWMENTS AND PRIZES IN FAVOUR OF MEDICAL STUDENTS.

1. *Scholarships*,—given annually.—One of 40*l.* for students of the third and fourth year, tenable for three years; one of 30*l.*, for students of the second year, tenable for two years; and three of 20*l.*, for students of the first year, tenable for two years.

2. *Leathes' Prizes*.—The interest of 300*l.*, bequeathed by the late Mr. Leathes, is applied in the purchase of a Bible and prayer book, as yearly prizes, to two medical students, who shall be found most worthy of the same, for their proficiency in religious knowledge, and their general conduct.

3. *Warneford Prizes*.—The interest of 1000*l.* given by the Rev. Dr. Warneford, is expended in the purchase of two medals, and of books to be given annually to two medical students who shall most distinguish themselves at an examination consisting of questions in—1. Two branches of medical science taught in the college, to be selected by the candidates. 2. The Holy Scriptures. 3. Butler's Analogy. —The first prize is of the value of 25*l.*, and the second of 15*l.* Matriculated students only can become candidates for these prizes and scholarships. The examination for the Warneford and Leathes prizes takes place in October, and for the scholarships after the winter session.

4. *Daniell Scholarship*.—This scholarship has been founded in honour of the late Professor Daniell, and is open to every student of the college. It is of the annual value of 20*l.*, tenable for two years; and is given every second year for the best series of researches in chemistry made in the laboratory of the college since the last award.

5. *Prizes, and Certificates of Honour*, are awarded in the different classes, according to fixed regulations.

6. *Clinical Prizes and Certificates of Honour* are likewise given for proficiency in subjects taught at the hospital.

Associates of King's College.—This distinction is conferred at the recommendation of the Professors, on such students as, having completed with distinction four years of study, are approved by the Principal.

Degrees.—Students of this College are admitted to degrees in arts and medicine, and for the honours, exhibitions, and scholarships conferred by the Senate of the University of London. By a regulation of the University of Edinburgh, three out of the four years of study required by that University for its degree of M.D. may be passed at King's College.

Residence of Students.—Students may reside in the college; and some of the professors receive pupils into their houses. The parents or guardians of students coming to King's College are earnestly requested to communicate with the dean of the medical department before placing them in lodgings.

Dining Hall.—There is a dining hall in the college, for the accommodation of the resident students, and for such other students as may desire to avail themselves of it.

Further particulars may be obtained from the King's College Calendar (which may be procured at the Secretary's Office, price 2*s.* 6*d.*, or sent by post, 3*s.*;) or by application to Professor Guy, the dean of the medical department, or to J. W. Cunningham, Esq., Secretary. The dean of the medical department attends in the Marsden Library every morning from a quarter past ten to eleven o'clock.

THEATRE OF ANATOMY AND MEDICINE, 1, GROSVENOR-PLACE,

ADJOINING SAINT GEORGE'S HOSPITAL.

Hospital Practice.—Table of fees for attendance upon the Medical and Surgical Practice of St. George's Hospital:—Medical practice, six months, 8*l.* 8*s.*; twelve months, or time required by examining boards, 16*l.* 16*s.*; perpetual, 25*l.* 4*s.* Surgical, 6 months, 15*l.* 15*s.*; twelve months, or time required by examining boards, 21*l.*; perpetual, 52*l.* 10*s.* Apothecary's fee for students entering to the medical practice, one guinea.

All students entering to the hospital practice are entitled to attend the clinical lectures there delivered; and also to become house-surgeons and dressers when qualified. The library and reading room are open to all students of the Hospital upon payment of the usual fee.

General fee to the whole of the courses required by the Royal College of Surgeons of England, and the Society of Apothecaries, including one course of practical chemistry, forty-two guineas; half of which may be paid on the entrance of pupils, and the remaining half in January at the commencement of the second division of the course.

Medals or prizes, and honorary certificates, will be awarded in each class, and publicly presented on Saturday, May 1st, 1852, at half-past two.

Clinical Prizes.—Prizes will be awarded by the lecturers of this school, for the best reports of medical and surgical cases occurring in the wards of St. George's Hospital; the competition for which will be open to all the students of the hospital. Printed regulations relative to these prizes may be obtained on application at the school. The microscope will be used to illustrate particular subjects in the lectures upon anatomy, chemistry, and botany; and microscopical specimens will be exhibited daily in the dissecting room. The dissecting room and museum are open to the students during day-light, where their studies will be superintended by the lecturers on anatomy, and by the anatomical tutors, from ten to four o'clock. Further particulars respecting the school may be obtained at the theatre, 1, Grosvenor-place, or at the residences of the different lecturers.

HUNTERIAN SCHOOL OF MEDICINE, 1, BEDFORD-STREET, BEDFORD-SQUARE,

ESTABLISHED IN 1822, BY THE LATE MR. DERMOTT.

The Introductory Address will be delivered by Dr. Robert Barnes, October 1st, at 3 p.m.

For all the lectures required by the Royal College of Sur-

geons, Apothecaries' Hall, &c., 33 guineas. Hospital Practice, both Medical and Surgical, together with the above lectures, 58 guineas. The different courses of lectures will be illustrated by preparations, recent specimens of diseased structure, diagrams, fresh botanical specimens, and microscopes, with anatomical and pathological drawings. There will also be an ample supply of midwifery patients, not less than 500 cases annually. Instruction on Clinical Medicine will be given by Dr. Aldis; and Lectures on Clinical Obstetrics by Dr. R. Barnes. The laboratory is completely fitted up for Analytical Chemistry, containing apparatus and re-agents similar to those employed in the Giessen Laboratory. Medical officers of the Army and Navy, and the East India Company's Service, and Missionaries, are permitted to attend gratuitously the whole of the public lectures delivered at this School. Assistant Navy surgeons can prosecute private courses of Operative Surgery, and receive private tuition upon Regional Anatomy, preparatory to their examination for full surgeoncy, in accordance with the regulations of the Admiralty.

House-pupils.—Resident house-pupils are free to all the lectures delivered in the establishment, and have ample opportunities for acquiring a thorough knowledge of every branch of the Profession. They have also the choice of attending the Western, Farringdon, and Surrey Dispensaries, and the Metropolitan Free Hospital, all which institutions are recognised.

Out-door and In-door Apprentices have opportunities for acquiring theoretical and practical knowledge in every branch of the Profession. Their indentures are so arranged as to serve for passing the examinations, both at the College of Surgeons and Apothecaries' Hall; and the full curriculum of study guaranteed for the degree of Doctor of the University of London, the London College of Physicians, and the diploma of the College of Surgeons.

A gratuitous course of lectures on some branch of Medicine or Surgery will generally be delivered in each summer session. Mr. Morison, son of Sir Alexander Morison, kindly delivered a course of lectures on Insanity, during the session of 1847-8, and this is the first medical school in England in which a distinct course of lectures on the same important subject has ever been delivered.

Prospectuses of the School, and any further information, may be had by application to Dr. Aldis, 1, Chester-terrace, Chester-square; or at 28, Bedford-square, or to any other of the lecturers.

NEWCASTLE-UPON-TYNE COLLEGE OF MEDICINE AND PRACTICAL SCIENCE.

MEDICAL DEPARTMENT.

The lectures will be delivered in accordance with the regulations of the University of London, the Royal College of Surgeons of England, the Worshipful Company of Apothecaries, and the Pharmaceutical Society of Great Britain.

The Inaugural Address will be delivered by Sir John Fife, in the lecture-room of the College, (the foundation-stone of which was recently laid by the Venerable Archdeacon Thorp, D.D., Warden of the Durham University, on Wednesday, Oct. 1, 1851, at eight o'clock p.m. :)—Anatomy, General, Microscopic, and Descriptive, John Scott Sanderson, M.D. M.R.C.S. L. and Edin., and Wm. R. Shiell, M.R.C.S. Physiology, George Robinson, M.D., daily at eight o'clock a.m.; fee four guineas. Surgical Anatomy and Demonstrations, T. A. Furness, M.R.C.S., J. B. Fife, M.R.C.S., and T. Smith Rowe, M.D., M.R.C.S., on Monday, Tuesday, Wednesday, Thursday, and Friday, at three o'clock p.m.; fee, three guineas. Principles and Practice of Physic, R. M. Glover, M.D., F.R.S. Edin., and G. Robinson, M.D., Physicians to the Eastern Dispensary, on Monday, Tuesday, Wednesday, Thursday, and Friday, at five o'clock p.m.; fee, three guineas. Principles and Practice of Surgery, Sir John Fife, F.R.C.S., H. G. Potter, M.R.C.S., F.L.S. F.G.S., Surgeons to the Newcastle Infirmary, W. H. Fife, M.R.C.S., on Monday, Wednesday, and Friday, at eight o'clock p.m.; fee three guineas. Principles of Chemistry, W. H. Dixon, late of the Royal College of Chemistry, London, on Monday, Tuesday, Wednesday, and Thursday, at seven o'clock p.m.; fee four guineas.

Hospital Practice.—The Newcastle Infirmary contains 170 beds. Clinical lectures are regularly delivered. Accord-

ing to the last Report, 1426 in-patients, 1782 out-patients, and 1599 casual patients were attended at this Institution. Medical and Surgical Practice, twelve months, seven guineas; perpetual, seventeen guineas. An extensive library, open to the students attending the Infirmary. The Museum of the College will be open daily, for the use of students. Conservators, the lecturers on anatomy, and Demonstrators.

Perpetual ticket to all the lectures, qualifying for the diploma of the College of Surgeons, and the licence of the Apothecaries' Company, (exclusive of Practical Chemistry,) forty guineas. The book of registration will be closed on the 21st of October, and on the 14th of May. Further particulars may be learned from any of the lecturers, and tickets obtained from the Secretaries, Eldon-square.

CHATHAM-STREET SCHOOL OF MEDICINE, MANCHESTER.

The lectures given at this school will comprise complete courses of instruction in all the sciences relating to medicine and surgery.

The school offers the great desideratum of the presence of demonstrators in the dissecting-room, whose special office will be to direct the pupils in their dissections.

The chemistry courses will be illustrated by an extensive exhibition of experiments; and for the greater convenience of teaching by illustration, arrangements have been made for the lectures to be delivered chiefly in the laboratory. A summer course of analytical chemistry will be given, and the pupils will then have the opportunity of making themselves practically familiar with the details of chemical analysis.

A complete course of instruction in microscopy will be given, and the pupils practised in the application of the microscope to anatomical, physiological, pathological, and diagnostic uses.

The connexion of the different lecturers with the various hospitals and dispensaries will be the means of affording extensive opportunities to the pupils of prosecuting their practical studies, and for the teaching of auscultation and the modern improvements in diagnosis.

The school presents the advantage of a complete system of instruction on the diseases of children, both by a course of lectures on this specialty in the lecture room, and by clinical illustrations in the wards of the hospital.

Lectures on ophthalmic and operative surgery will be given during the summer months by the surgical and anatomical lecturers.

The museum has been greatly increased, and now contains an extensive series of anatomical and pathological preparations, casts, drawings, and diagrams. The lecture theatre and dissecting room have been enlarged during the recess, and especial care has been taken to perfect the lighting and ventilation of the latter.

In accordance with the curricula of the various universities and medical corporations, which grant degrees in medicine and surgery, and of the Apothecaries' Society, the session is divided into two terms, viz., the winter and summer terms.

The winter term will commence on Wednesday the 1st of October, when an Introductory Lecture will be delivered by Dr. Thomas H. Watts, at 11 a.m.

Lectures on anatomy, physiology, chemistry, medicine, and surgery, will be given during this term.

The summer term will commence on the 1st of May, during which lectures on midwifery, materia medica, forensic medicine, botany, practical chemistry, pathology, ophthalmic, and operative surgery, will be delivered.

The school also affords opportunities for private dissection during the summer, to medical men in practice, who may desire to continue their studies in surgical anatomy.

Lectures on the various subjects included in the term "Medical Science," will be given as follow:—Descriptive and Surgical Anatomy, by A. W. Dumville, M.R.C.S.—Practical Anatomy, with Superintendence of Dissections, by Armstrong Todd, B.A., M.B., and Charles T. Bennett, M.R.C.S.—General Anatomy and Physiology, by J. Stuart Wilkinson, M.D.—The Principles and Practice of Medicine, by Thomas H. Watts, M.D.—Clinical Medicine, by M. A. Eason Wilkinson, M.D.—The Principles and Practice of Surgery, by George Southam, M.R.C.S.—Diseases of Infancy and Childhood, by Schæpf Merei, M.D.—Materia

Medica and Therapeutics, by S. B. Bennett, M.D.—Obstetric Medicine, and Diseases of Women and Children, by James Whitehead, M.D.—Pathology, by S. B. Bennett, M.D., and Thomas H. Watts, M.D.—Forensic Medicine, by J. Aikenhead, M.D.—Chemistry, by Mr. Daniel Stone.—Practical Chemistry and Pharmacy. In the summer course, the laboratory operations are conducted by the students, under the immediate superintendence of Mr. Stone.—Botany, by William Jepson, M.D.

It is intended to admit, on the payment of a small fee, to the private dissecting room during the summer months, members of the Profession and others who may feel desirous of prosecuting their studies in surgical anatomy and operative surgery.

Connected with the school is a valuable museum, and an excellent chemical laboratory. Examinations of the classes will be regularly held by the lecturers.

At the end of each session, prizes will be given to those students who exhibit the greatest proficiency in their studies.

For particulars respecting fees apply to the lecturers at the school; or to the registrar, A. W. Dumville, Esq., of Ardwick Green.

SHEFFIELD MEDICAL INSTITUTION.

The Introductory Address will be delivered by W. Jackson, Esq., F.R.C.S., on Wednesday evening, October 1st, 1851, at seven o'clock.

Lectures.—Winter session commences October 1st, 1851. Descriptive and Surgical Anatomy, Mr. Gregory and Mr. Skinner.—General and Morbid Anatomy, Pathology, and Physiology, Dr. I. C. Hall and Dr. Elam.—Practical Anatomy and Demonstrations, Mr. E. Jackson, Mr. Allanson, Mr. Barber, and the Prosector, daily.—Principles and Practice of Medicine, Dr. De Bartolomé.—Principles and Practice of Surgery, Mr. W. Jackson, F.R.C.S., and Mr. Porter.—Chemistry, Mr. Haywood.

Summer session commences May 1st, 1852. Botany, Dr. I. C. Hall, F.L.S., and Mr. Jackson.—Materia Medica and Therapeutics, Mr. H. J. Hunter.—Midwifery and Diseases of Women and Children, Mr. S. Parker. Pupils of this class will be provided with cases when fully qualified to attend them.—Medical Jurisprudence, Mr. Barber.—Microscopical Anatomy, Dr. Elam. Practical Chemistry, Mr. Haywood. Clinical lectures will be delivered during each session, on the medical cases in the Infirmary, by Dr. de Bartolomé, and on the surgical cases by Mr. Henry Jackson.

The microscope will be used to illustrate particular subjects in the lectures on Anatomy, Chemistry, and Botany; and microscopical specimens will be exhibited to the class.

The dissecting room is open to students during daylight.

SHEFFIELD GENERAL INFIRMARY.

Physicians: Dr. Thompson, Dr. Branson, Dr. De Bartolomé. Surgeons: Mr. Overend, Mr. Henry Jackson, Mr. S. Gregory. House Surgeon: Mr. Law.

Medical Practice, one year, 10*l.* 10*s.*; perpetual, 15*l.* 15*s.* Surgical Practice, one year, 10*l.* 10*s.*; perpetual, 21*l.*

Upwards of four thousand patients are annually attended at the hospital.

General fee for the whole course, (exclusive of Practical Chemistry,) required by the London University, the Royal College of Surgeons, and the Apothecaries' Company, 42*l.*, one-half of which at least must be paid on the entrance of the pupil, the other half at the commencement of the second winter session.

SYDENHAM COLLEGE, BIRMINGHAM.

The winter session will commence on Wednesday, the 1st day of October, and will terminate on the last day of March. The summer session will commence on the 1st day of May, and terminate on the last day of July.

Anatomy, Physiology, and Pathology, John Boon Hayes; Anatomy—Descriptive and Surgical, George Elkington, Frowd Jones, and John Boon Hayes; Principles and Practice of Medicine, Bell Fletcher, M.D., Physician to the Birmingham General Hospital; Principles and Practice of Surgery, Alfred Baker, Surgeon to the Birmingham General Hospital; Midwifery and the Diseases of Women and Children, Francis Elkington, M.D., M.R.C.S., Senior Medical Officer to the Lying-In Hospital; Therapeutics, and the treatment

of disease, James Russell, M.D., Physician to the Birmingham General Dispensary; Materia Medica and Pharmacy, John Bassett; Chemistry—Theoretical and Practical, Alfred Hill; Botany—systematic and structural, Frederick Westcott, As.L.S.; Forensic Medicine, William C. Orford, Surgeon to the Birmingham General Dispensary.

The students will have the use of a reading-room. They will also have free access to the museums of anatomy, physiology, and pathology; as well as those of chemistry and materia medica. The diagrams, models, and plates, illustrative of the various courses of lectures, may be used by them, under certain rules, with which they will be made acquainted. In addition to the obstetric preparations in the museum, the collection belonging to the lying-in hospital will be made accessible to the students, under suitable regulations. The dissecting-rooms will be open from 8 in the morning until 5 at night, and the pupils will have the benefit of a constant superintendence in their dissections. Clinical courses will be given by those lecturers who are attached to the various public institutions of the town.

In order to give as full a detail as possible of the English Universities and Schools, we have been compelled to omit, in the present Number, the Rules and Regulations of the Army, Navy, and East India Company's Departments, and also the Scotch, Irish, and French Universities and Schools, which will appear next week.

MEDICAL NEWS.

OBITUARY.—Drowned at sea, at midnight, on the 22nd July, Dr. Briscoe, of the 59th Regiment, in consequence of the wreck of the Pasha, one of the Oriental Steam Navigation Company's fleet.—On the 10th inst., at Youghal, Roger Green, M.D.—Early in this month, G. Turton, Esq., surgeon, of Sheffield.—On the 18th inst., at Cheltenham, William Briggs, M.D., late of Ambleside, formerly of Liverpool, and also of Kendal.

DEATH OF DR. BADELEY, OF CHELMSFORD.—This sad event, which has created a painful sensation in the neighbourhood where Dr. Badeley resided, took place about one o'clock on Monday afternoon. The cause of this unlooked-for occurrence is thus stated:—On Sunday afternoon the deceased was afflicted with a severe attack of the toothache, and it continued without intermission all the following night. About four o'clock on Monday morning he went down into his study for the purpose of taking something to alleviate the pain, and, unfortunately, he inadvertently partook of some morphia, (no doubt in mistake for laudanum,) and his untimely decease was the result. Medical men were rapidly in attendance, but their combined efforts to save his valuable life proved abortive. Dr. Badeley was brother to the eminent barrister. He was a highly esteemed member of the Profession, a Fellow of the Royal College of Physicians of some standing, and was the last Harveian Orator. He leaves behind him a family of, we believe, ten children, besides a very numerous circle of friends.

NAVAL APPOINTMENTS.—Acting assistant-surgeon, Jacob E. Dyas, (1851,) to the Dido, 18, at Sheerness.

ACCORDING to the latest intelligence from Jamaica, the cholera is still prevalent in that island. There must be some special causes to favour the evolution of epidemic disease, or else this fearful malady would not linger so long in these districts. Many months have elapsed since it first broke out in the island, and thousands have perished; nevertheless, every packet brings the painful intelligence, "cholera still lingers in the island of Jamaica." It should be seen to, and that speedily.

THE LATE DR. KIDD was elected a student of Christ Church College, Oxford, from the Westminster-school, in 1793.

TO CORRESPONDENTS.

M. D. will much oblige by forwarding his name and address, in order to the publication of his valuable paper.

COMMUNICATIONS have been received from—
Dr. R. G. MAYNE; QUOUSQUE TANDEM; Mr. THOMAS BARRON, of Longton; Mr. G. W. PRETTY, of Fressingfield; Mr. WM. PARKER; Mr. CAVE BROWN, of Tamworth; Mr. THOMAS GUTTERIDGE, of Edgbaston; Mr. JOHN M'ELHERAN, of Manchester; Dr. BARCLAY, of St. George's Hospital; THE FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW; Mr. THOMAS WICKSTED; Dr. EDWIN MORRIS, of Spalding; Mr. GEORGE BRUSICK; Dr. SEATON; Dr. J. P. GILDEMEESTER; A SUBSCRIBER OF THREE YEARS' STANDING; Mr. R. C. TODD, of the 71st Highland Light Infantry; R. A. L.; OUR IRISH, INDIAN, AND PARIS CORRESPONDENTS; Dr. SNOW BECK; Mr. HENRY SMITH; Dr. T. H. BARKER; Mr. WARD, of the London Hospital; Dr. KIDD; THE SECRETARIES OF ST. GEORGE'S AND ST. MARK'S HOSPITAL; Dr. F. HAWKINS.

A SESSIONAL SYNOPSIS OF THE CLASSES AND PROFESSORS IN LONDON AND PROVINCIAL MEDICAL SCHOOLS.

	Anatomical Demonstrations.	Anatomy, Descriptive and Surgical.	Structural and General Anatomy and Physiology.	Chemistry.	Materia Medica and Therapeutics.	Theory and Practice of Medicine.	Principles and Practice of Surgery.	Midwifery, and the Diseases of Women and Children.	Botany.	Medical Jurisprudence.	Comparative Anatomy.
Bartholomew's School and Medical College.	Mr. Holden and Mr. Coote.	Mr. F. C. Skew, F.R.S.	Mr. Paget	Dr. Steinhilber, LL.D., F.R.S.	Dr. Leith Roupell, F.R.S.	Dr. George Burrows, F.R.S.	Mr. Lawrence, F.R.S.	Dr. West	Dr. Farre, F.L.S.	Dr. Baly, F.R.S.	Mr. McWhinnie
Charing-cross Hospital.	Mr. Hird and Mr. E. Canton.	Mr. E. Canton	Mr. Hird.	Mr. H. H. Lewis, M.A.	Dr. Steggall and Dr. Wallshire	Dr. Chowne and Dr. Rowland	Mr. Hancock	Dr. Chowne	Dr. E. Smith.	Dr. E. Bickett	
Hunterian Institute of Medicine and Surgery.	Mr. E. J. Chance.	Mr. E. J. Chance.	Mr. J. Chipendale	Mr. Ashley	Dr. G. Smyth	Dr. C. J. B. Aldis	Mr. Riadore	Dr. R. Barnes and Dr. Manson.	Mr. C. P. Johnson.	Dr. Manson	
Guy's Hospital School.	Dr. Hahershon and Mr. Callaway.	Mr. Hilton and Mr. Bickett	Mr. Hilton and Dr. Gull	Mr. Aikin and Dr. Taylor	Dr. G. Bird and Dr. O. Rees	Dr. Addison, Dr. Babington, and Dr. Barlow	Mr. B. Cooper	Dr. Lever and Dr. Oldham	Mr. Johnson	Dr. Taylor	Dr. Gull
King's College.	Mr. Lee, Mr. Salter, and Mr. Wood.	Prof. Richard Partridge, F.R.S.	Dr. R. B. Todd, F.R.S., and Mr. Bowman	Dr. W. A. Miller and Mr. J. F. Hardwick.	Dr. J. F. Royle, F.R.S.	Prof. G. Hudd, M.D., F.R.S.	Prof. W. Ferguson, F.R.S.	Prof. A. Farre, M.D., F.R.S.	Prof. E. Forbes, F.R.S., F.L.S.	Prof. W. A. Guy, M.D.	T. R. Jones, F.R.S.
London Hospital School.	Mr. Ward	Mr. Adams	Dr. Carpenter, F.R.S.	Dr. Lethby	Dr. H. Davies	Dr. Little	Mr. Curling, and Mr. Critchett.	Dr. Ramsbotham	Mr. Bentley	Dr. Ramsbotham and Dr. Lethby	Dr. W. B. Carpenter, F.R.S.
Middlesex Hospital School.	Mr. T. Nunn	Mr. Moore	Mr. C. De Morgan	Mr. T. Taylor and Mr. C. Heisch	Dr. Stewart	Dr. Crawford and Dr. Thompson	Mr. Shaw	Dr. Freere	Mr. Bentley, F.L.S.	Dr. Goodfellow	Mr. Waterhouse.
School adjoining St. George's Hospital.	Mr. G. E. Jenkins, Mr. Lane, and Mr. Godrich.	Mr. Lane and Mr. Jenkins	Mr. Lane, Mr. Jenkins, and Mr. J. R. Lane.	Mr. Rodgers	Dr. Lankester, F.R.S., F.L.S.	Dr. F. B. Daniel, and Dr. Sibson.	Mr. Pilcher, and Mr. S. M. h.	Mr. Bloxam	Dr. Lankester, F.R.S.	Mr. Warder	
St. George's Hospital School.	Mr. Athol Johnson, Mr. Pollock, Mr. Ogle, and Mr. Hornidge.	Mr. Prescott Hewett and Mr. Pollock	Mr. A. Johnson	Mr. Noad.	Dr. Pitman	Dr. Nairne and Dr. Page	Mr. Tatum	Dr. Pitman.	Mr. Henfrey, F.L.S.	Dr. Fuller and Mr. H. C. Johnson	Mr. A. Johnson.
St. Thomas's Hospital School.	Mr. Rainey and Mr. Bristowe.	Mr. Clark	Mr. Grainger	Dr. Leeson, and Dr. Gladstone	Dr. Risdon Bennett.	Dr. Barker	Mr. Green and Mr. South	Dr. Waller	Mr. Bristowe	Dr. Barker	Dr. E. Mayson
University College Medical School.	Mr. G. V. Ellis and Mr. Briggs	Mr. Ellis	Dr. Sharpey, F.R.S.	Mr. Graham, F.R.S.	Dr. Garrod	Dr. Walshe	Prof. Erichsen	Dr. Murphy	Dr. Lindley, F.R.S.	Dr. Carpenter	Dr. Grant, F.R.S.
Westminster Hospital School.	Mr. B. Norman.	Mr. Holthouse	Mr. Hillman and Mr. Brooke, F.R.S.	Mr. H. Lewis, M.A.	Dr. Basham	Dr. Roe and Dr. Basham	Mr. B. Phillips, F.R.S., and Mr. E. Holt	Dr. F. Bird	Dr. Radcliffe	Dr. Fincham and Dr. Tanner	

PROVINCIAL SCHOOLS.

Bristol Medical School.	Mr. Pritchard, Dr. Swayne, Dr. Britton, and Mr. Neild	Mr. Pritchard and Mr. Neild	Dr. Britton	Mr. Harapath		Dr. Budd and Dr. Stanton	Mr. Clark and Mr. Pritchard				
Leeds School of Medicine		Mr. Price, Mr. W. N. Price, and Mr. E. G. Wheelhouse	Mr. Nunneley, Mr. Ikin, and Mr. Hey	Mr. Morley, Mr. Scattergood, and Mr. E. Joy	Dr. Clark	Dr. Chadwick and Dr. Heaton	Mr. Hey and Mr. Garlick	Mr. Smith and Mr. Braithwaite	Dr. Heaton	Dr. Pyemont Smith	
Manchester School of Medicine and Surgery		Mr. W. Smith	Mr. Turner	Mr. F. C. Calvert	Dr. Alusworth	Dr. Browne	Mr. Jordan	Mr. Heath	Mr. Just and Dr. Hardy		
Queen's College, Birmingham	Mr. D. Bolton	Mr. W. Sands Cox, F.R.S.	Mr. Langston Parker	Mr. Shaw	Dr. S. Wright and Mr. G. B. Knowles	Dr. John Eccles and Dr. James Johnson	Mr. W. Sands Cox, F.R.S.	Mr. Sam. Barry	Mr. G. B. Knowles, F.L.S.	Dr. J. Birt Davies	Prof. Parker
Newcastle-upon-Tyne College of Medicine	Mr. T. A. Furness, Mr. J. B. Fife, and Dr. T. S. Rowe.	Dr. J. S. Sanderson, and Mr. W. R. Shiell	Dr. J. S. Sanderson, and Mr. W. R. Shiell	Mr. W. H. Dixon	Dr. C. Cogswell.	Dr. Glover and Dr. Robinson	Sir John Fife, Mr. Porter, and Mr. Fife.	Dr. Dawson	Mr. Watson, and Mr. Gibson.	Dr. Bramwell	Dr. Sanderson and Mr. Shiell

ORIGINAL LECTURES.

INTRODUCTORY LECTURE

DELIVERED AT

THE OPENING OF THE SESSION OF THE
UNIVERSITY COLLEGE, LONDON.

By Dr. E. A. PARKES,

Professor of Clinical Medicine at University College, London, and Physician
to University College Hospital, etc. etc.

THERE are some comparisons and similes which so recommend themselves by their intrinsic truth and aptness, that they can never grow trite and old. Such an one is that which compares life to a journey, which may be longer or shorter, smooth or rugged, strewn with flowers or desolate of verdure, smiled on by the sun or snitten by the storm, but which in every case passes over regions hastily explored and dimly remembered, towards other and unknown tracts which are terminated by an inevitable goal. At times in this passage the traveller pauses, casts back a glance over the countries he has passed, surveys his errors and his wanderings, and, from the experience he has gained, directs more surely his future course, and shuns more perfectly coming dangers. As life passes away, and as surrounding objects less obscure its final close, these pauses grow more frequent, and bear a deeper lesson. The retrospect, if it is sadder, is more extended; the anticipation, if it is less hopeful, is more true. Men and things are weighed in a finer balance, and are assayed at a truer value. The traveller commences to perceive more clearly the objects for which this journey has been imposed on him, and to recognise more fully the direction in which his future course must tend.

Such a pause may well be supposed to take place when a young man has passed the earlier period of his life, and sees opening before him his future lot. Then is crossed the Rubicon which divides the sweet and careless pleasures of youth from the stern career of manhood. The passage at the time may be little heeded, but in after years the grown man often looks back to it, and wonders that he should lightly have passed over a transition so important. For the period when we commence what is to be the occupation of our lives, is no common period, and is fraught with no common consequences. At that time are laid the foundations of social position, and the first stones of worldly success. At that time, also, the mind begins to receive its final training, and to assume its determinate direction. From the intellectual circumstances which then surround us, we can, in the majority of cases, never afterwards detach ourselves. Even, if at an after period, we abandon the path we have entered and adopt another, the intellect can never entirely free itself from those potent influences which moulded it into form. The impressions which it received when it was soft and ductile, may be obscured, but can never be effaced by those to which it is subsequently exposed, when age has rendered it less eager to receive, and less tenacious to retain. Habits of thought once put on are not easily laid aside, and the original bias impressed upon the perception and the judgment, makes itself felt at every moment from the starting place to the goal.

It is well then, on all accounts, that those who are about to step across the threshold into the active and tumultuous arena of the world, should ask themselves, What are the purposes of the calling they are about to undertake, and what are the means it possesses for accomplishing its ends?

The aim and purpose of the Profession of Medicine hardly require to be described. As long as this world is peopled by beings, erring in mind, enfeebled in body, and in whose frames lurk the germs of ultimate decay, so long must exist an order of men, who are called upon by the necessities of their fellow-beings to determine the means by which those elements of disease and death may be best neutralised or kept at bay. The man disabled by disease, or stricken down by accident, cries imperatively for succour; it is not in man's nature to hear that cry unmoved; and in all times and among all nations, the attempt has been more or less rudely made to answer it.

But, can this appeal be answered? Is this mitigation of human sufferings possible? Are the means at our disposal

equal to so great an end? A noble purpose is not only frustrated, it may be falsified by an imperfect instrument. It might be an angel's province to lighten the burdens of an imperfect nature, and to mitigate the calamities which desolate a world. But it would be the office of a demon to engender hopes in that which has no power of performance, and to inspire faith in that which has no warranty of truth.

There are only two modes in which we can test the pretensions of a science which claims to be true. We may examine into its method, and repeat its experiments, and see how far the one is correct, and the other accurate; or we may accept it on the evidence of its results. The trust of the mass of the people in medical science is based on a recognition of its utility. It is a faith which has been deeply rooted on the experience of successive generations, and on the evidence of repeated success. It has not originated from any exact knowledge of the system believed, but from the conviction that a want has existed, and has been supplied. Yet, owning this source, it is not less to be accepted as real and substantial evidence in support of that in which it trusts.

But, what method is adopted by the practitioners of medicine in the performance of the duty which has been imposed on them, and which has been assumed by them. We know that there is only one condition on which any knowledge is possible; that, in all cases, isolated phenomena must be first noted, and then by the combination of these scattered links the whole chain must be constructed. Does medicine conform to this rule? Is it a science of observation? Does it note phenomena and trace their sequences, and form by induction, general formulæ to express them? It does so most undoubtedly. In proof of this, I need only refer to that eloquent exposition of this subject which two years ago our Professor of Medicine addressed to us from this place, and in which the true basis of pathology was so emphatically announced. From the days of Hippocrates and of Aretæus, down to those of Sydenham and of Louis, the men who have stamped the impress of their genius visibly on Medicine, have been those who have the most closely observed and interpreted Nature. We now pursue the path which Hippocrates commenced. The links which we observe are the phenomena of disease,—the chain that we construct is the theory of pathology. To do this, we call in the aid of every collateral science which can serve us. We call on anatomy, and on physiology, and on chemistry, to fix our standard of health, to furnish us with implements of research, and to explain to us the healthy action of those portions of the frame which we see imperfect and diseased. Every day we improve our knowledge of healthy action, and our means of detecting the deviations from it. Whatever phenomena of pathology may yet be obscure, we seek to render clear; whatever may yet be confused, we seek to reduce into order. Not only metaphorically, but literally, we weigh the symptoms of disease in the balance, prove them in the test-tube, measure them with the tape, listen to them with the stethoscope, and define and magnify them with the lens.

Is it not at once evident that this method is the correct one? In order to cure diseases, must we not first learn to recognise their symptoms, and to interpret as accurately as may be the conditions which these symptoms symbolise? Is it not in proportion to the precision and certainty with which the signs of disease are indicated and interpreted, that the treatment expedient for each condition can be determined? No other method than this is even conceivable. Its very announcement commands assent to its principles. It may extend and perfect its modes of investigation, but its fundamental basis must ever remain unaltered.

But when, by means of observation, the facts of pathology have been collected,—when anatomy and physiology have been called upon to aid us in gathering these facts and to assist us in explaining them, medicine does not abandon the path she has entered. In seeking for remedies for these pathological conditions we rely still on experience; we conform still to the conditions of all knowledge, and remain, as before, only the interpreters of Nature. Therapeutical knowledge is acquired only by observation; we know what will cure only by knowing what has cured.

Our whole method of cure may be comprised under two general rules, the first of which expresses the very philosophy of therapeutics. When we have detected any pathological condition, we endeavour to trace its causes, and, having found them, to determine by experiment how they may be removed; or, if the causes are irremovable or undiscover-

able, we endeavour by experiment to find out what will palliate or remove their effects. In searching for the causes of disease we look for aid to almost every science; in seeking for the remedies we do not disdain suggestion from every source. We reject no measure which can be *proved* to exert a beneficial influence, and we absorb into our system every plan, however proposed, which can demonstrably add to its utility. The regulation of the food which enters into the body, of the atmosphere which surrounds it, the introduction of substances into it, the application of substances to it,—heat, light, electricity, mechanical appliances, the actions of the body, and even the actions of the mind—are sought to be made available. In all cases, the measures, however proposed, are only tentative till confirmed by experience. The supreme judgment upon their degree of utility must be passed by experience and be attested by evidence. The kind of evidence necessary to prove a therapeutical fact, is the same as for all facts. When a sequence has been observed a certain number of times, we presume that it will occur again, and that there is some intimate connexion between the antecedent and the sequent. Doubtless, on account of the great number of circumstances which have to be eliminated, there is more difficulty in ascertaining a therapeutical fact, than in some other cases; but it is clearly quite possible to obtain this with as much certainty as in any science, by multiplying the observations under different conditions. Nor is there so much difficulty in doing this as some have supposed. That it has been done to a considerable extent, and in a manner sufficiently accurate to allow us to apply it to practice, is not only a fact which in this place I conceive I am justified in assuming, but which is assumed by all who attempt to teach, or to learn, or to practise the art of curing.

As therapeutical knowledge is thus founded on observation, it assumes as real and substantial a place in the temple of the sciences as chemistry or astronomy. That one medicine will act on the stomach, another on the skin; that opium will deaden pain; that aconite will numb sensation; that alcohol will excite the heart; that digitalis will depress it; that such vomiting, sweating, deadening, numbing, excitation or depression, are useful in certain given conditions; or, to come more closely to actual instances, that iron will cure anæmia, or quinine ague,—that cod-liver oil is useful in phthisis, iodide of potassium in syphilitic periostitis, hydrocyanic acid and nitrate of silver in gastrodynia, or turpentine in certain hæmorrhages,—that a certain manipulation is necessary in hernia, or a particular operation if this manipulation be unsuccessful,—that fractures require certain mechanical appliances, and ulcers certain applications according to their kind, are absolute facts, as capable of proof as that water is composed of oxygen and hydrogen, or that the earth moves round the sun.

Therefore, as these and many other therapeutical facts of diet, of regimen, or of medicine, are truths, it is impossible that any discovery can ever destroy their truthfulness. It might lessen their utility, as furnishing something which would supply their place, but their character as facts *cannot* be destroyed. If we were now to discover some mode of treating ague so superior to quinine, as to lead to the disuse of this remedy, it would still remain a truth, that quinine will cure ague. If any system of therapeutics should hereafter supersede our method, this can only be done by showing that the evidence in its favour is more extended and more complete. The argument of the homœopathist should be, not that medicine is incompetent, for this position is untenable, but that his method is more competent,—not that we do not work cures, but that he works more cures.

It may be demanded, however, admitting the accuracy of our method and the power of our remedies, this power is actually sufficient to cope with the numerous ills that flesh is heir to. To this it may be replied, that there is hardly any disease for which we have not some useful rules for treatment, and hardly any bodily condition which we have not attempted to benefit with more or less success. If these therapeutical rules are not sufficient, *we know of nothing that can supply their place*. The question is not between our system and some other, but between our system and inaction. If this system of cure, which is built upon the same foundation as all inductive science,—which is impregnated with the very genius of Bacon,—which gave, indeed, long before that great observer was born, an exemplification of that very method of observation which he recommended,—if this is worthless, then the

ground is struck away from under the feet of all remedial science; disease and death must exist without an attempt being made to arrest their progress; men will groan unheeded, or will pour out their complaints to those who answer them merely with tears of impotence; and the most glorious privilege of man,—a privilege often abused, often neglected, but still not forfeited, will be taken away, viz., the power which has been mercifully given to us of being able to contend with evil, and from it to bring forth good.

But, it may be asked, and the question is one to which it is necessary to give a careful consideration, if our method is thus the only one, if we do thus possess therapeutical power, and are thus able to prove this power by evidence; if, in short, we do all which in this state of knowledge physicians ought to do, to cure diseases, how is it, that certain erroneous systems of treatment arise from time to time, and are looked upon with favour by some portion of the public, although we can find nothing in them which we may wisely adopt? How is it, that by the side of what we consider the only true art, certain pretenders should place themselves? In one word, how is it, that the domain of legitimate medicine should be invaded by quacks?

In answering this question, it is not necessary to allude to the more obvious causes of quackery, which are operative on the quack himself. I may omit all consideration of the temptations which the lust of riches, or the desire of notoriety place in the way of an unscrupulous man. These causes of quackery are, if I may use the term, subjective and internal, and as long as dishonesty exists in the world, men will be found who, for the sake of gain, will pretend to powers which they do not possess. But, unless there were something external to himself which aided him, the assertions of a charlatan would meet with no regard. What is it, then, in the public mind, which so fertilizes this weed, that under various forms, and with numerous external changes, it yet springs perennially from the soil, and displays its fatal blossoms by the side of the healing plant?

The most obvious objective cause of quackery is ignorance,—incapacity for estimating evidence,—undue credulity. Confident assertions of any kind will always meet with ready believers. As men grow wiser and learn how to weigh evidence, they grow more sceptical. Therefore we find, in the history of medicine, that in former and ruder times there was infinitely more quackery, of the worst kind, than exists now. We hear it said, that “never was quackery so rampant as now;” but this is a mistake. The golden age when quackery was not, exists only in mythology; and if that golden age can ever be, we must seek it in the light of future civilisation, and not in the obscurity of the past.

Another cause of quackery lies deeper. I need not explain to you, that our art is imperfect from the necessary incapacity of human knowledge and the inherent weakness of the human frame, and also from the errors of those from whose necessities our art arose. Impatient, however, of unavoidable failures and of necessary delays, demanding greater performances than any power can execute, the public subject themselves continually to the imposition of those who unscrupulously promise what, in reality, no power can perform. An advanced education only can remove this source of quackery, and teach men, not only to show gratitude for wisely exercised powers, but to practise submission to inherent and inevitable evils.

But, thirdly, there is a tendency in our mental constitution which, although implanted there for the wisest purposes, can yet, by excess and misdirection, give rise, as in all similar cases, to a certain degree of evil. I mean the disposition inherent in all, in a greater or less degree, to seize eagerly any new idea,—to welcome with pleasure any alteration of the beaten track,—in a word, to be attracted by novelty. In some minds this disposition is excessive. The ballast and the rudder seem alike wanting, and their course is altered with every shifting wind. In many cases we see not only individual minds, but the aggregate mind of a nation exhibiting this propensity in an extreme degree. When we are surrounded by striking objects, and are too much impressed with the consciousness of continual and mighty changes, we at length come to demand such changes as a necessity. The mind craves for any aliment which will gratify its morbid longing. Do we not see this at the present day in that mighty Republic which has been so fed with the marvels of a new world, that it has become gluttonous of novelty and of change? This is a condition of mind which is only evil because it is an exaggeration of good; it belongs to

an intellectual, though not to the *most* intellectual age, for its judgment is deficient, although its apprehension is so keen. In medicine, we observe its moderate action daily; and this action is good, for it leads to experiment and to progress, but when it wants the correction of previous knowledge and a calm reflection, it tends inevitably to quackery.

Another and a deeper aid to quackery can yet be observed. Those who look into the workings of the popular mind, are aware, that, according to the age and country, there is almost always floating about some great truth; dimly seized it may be; receiving it may be, many wrong applications; associated with many errors, but yet a truth—eternal and indestructible. In obedience to a truth of this kind, the human mind has always, and perhaps never more than now, desired to recognise simplicity amidst complex elements; to include, under one universal formula, all minor laws; to trace out, amidst infinite diversity, the presiding unity; and to converge all the forces of the universe towards one omnipotent and universal cause.

To this desire for simplicity and generalisation, the dogma invented by Hahnemann, immediately applies itself. All the facts of therapeutics are sought to be expressed by one great formula. The public do not know, and, without being told, cannot be expected to know, that this dogma, which seems to satisfy a want, does so only in appearance,—that such simplicity is at present impossible,—that the so-called homœopathic law is a law without examples and without proof,—that, in fact, the doctrine "*similia similibus curantur*" is no grand generalisation, but is merely the degenerate successor of abortive forerunners, and the erroneous antithesis of an ancient dogma, "*contraria contrariis curantur*," equally impotent and equally incapable with itself. But that the homœopathic formula should meet with a certain amount of favour was to be expected. It has been received, not on its own merits, but because it was thought to accord with what every one feels to be true. When the public have recognised that it does not so accord,—that it is a hypothesis and not a generalisation,—a guess and not an induction,—a phantom and not a reality, then the dogma of Hahnemann will pass into the same oblivion which overshadows its numerous predecessors. On the other hand, the doctrine of "*infinitesimal doses*," an absurdity so great that it might have been supposed incapable of maintaining its ground for a moment with an intelligent and a refined people, has so far maintained its ground, because it chimes in with another general belief. The popular mind is now beginning to recognise around it the continual working of great powers. The splendid researches of our men of science are dimly reflected and partly distorted in the mirror of popular belief. The forces which can traverse matter, which can produce not only appreciable but extraordinary effects without appearing to disturb and waste the particles of the matter they pass through, present themselves to many as instances of power almost disjointed from substance. From the phenomena of electricity, of magnetism, or of light, it appears to many but a single step to the recognition of immateriality and abstract force. Consequently, to a person in whom this frame of mind has been formed, and who has not exactly defined the meaning of the term "*infinitesimal*," it may appear a parallel fact, that effects should be produced by homœopathic doses. The friction of amber calls forth a latent force. Why, it is asked, may not the division and trituration of matter make manifest powers of another kind which may be useful in disease? This is, again, nothing but ignorance misapprehending and misapplying truth, and seeing analogies and resemblances where none exist. The arguments against infinitesimal doses should be directed to show, that this idea of the development of force is a mere conjecture, until proof be given of the reality of the development; that the statement, that the division of matter can evolve remedial forces, is supported by no analogous physical facts, and is strongly opposed by many; and, above all, that such pretended manifestation is entirely unattested by any *trustworthy* evidence derived from the phenomena of disease. No doubt, certain recoveries do follow homœopathic treatment. But in these cases, drugs are unnecessary; and the healing force of nature is sufficient, while the globules, powerless alike for good or evil in themselves, satisfy the patients' distinctive desire to do something towards their cure.

Although, therefore, there is no truth in homœopathy, I think we can see how it may borrow a false light from what are truths; and, seeing this, we may make more allowance for persons who are deceived by it. We perceive that that por-

tion of the public—not, after all, a large one—who have looked with favour upon the dreams of Hahnemann, are not necessarily dupes or knaves, but, possibly, only partial and erroneous thinkers.

As there is nothing in nature that has not its own utility, so we may draw from quackery a great lesson: that, as novelty may too much attract, and as the prevailing opinions of the day may too much influence us, as shown but too often in the history of our art, so nothing can preserve medicine from these influences but a full recognition of its own origin, and a constant employment of the method which has made it what it is. We should resort on every occasion to that observation which is the ground-work of science,—we should strive to perfect our evidence, to admit nothing, to refuse nothing, but on sufficient testimony. In this way only can the Profession keep itself free, from the more insidious forms of quackery, and preserve the unstable minds among the public from mistaking the *ignis fatuus* which floats over some marshy and dangerous spot where no sure footing is, for the safe and guiding light which points to security and life.

It has been said, by some who appear not to have seen fully the exact bearing of the case, that if *we* appeal to experience, so also do quacks, and are therefore entitled to as much credit as we are. But there is all the difference in the world between true and false evidence. If I am a chemist or a physiologist, I do not receive without due care and investigation statements made by individuals of whose competency I have no proof. It is not the same thing to me whether a fact is stated by a Graham, or a Sharpey, or a Carpenter, or by a subaltern of science. Am I, as a surgeon or a physician, to forego this privilege of selection? It is monstrous to suppose, that the statements of an educated practitioner, and of a man who lives by palming fictions on the public, are of equal value. By experience in medicine, we mean the collections of facts which are capable of proof, and not an agglomeration of statements which are heedlessly proclaimed by incapacity, or wantonly manufactured by fraud. Is it impossible to ascertain whether a statement of therapeutics be true or not? If it be so, then indeed we may abandon as an impossibility the attempt to relieve in any way the sufferings of humanity.

I have thus alluded in the most general terms to the method by which diseases are sought to be recognised and to be cured. But the aims of medical science do not stop at individual and at developed diseases. We find that both individuals and societies are liable to errors which nurse the diseases which destroy them. It too often happens that we find ourselves called upon to treat, not the whole disease, nor its greater part, but only its termination and final phase.

Therefore, one great object of medicine is to point out what are the conditions of health, and how deviations from these conditions, (when carried beyond the compensating powers of Nature,) are inevitably followed by disease. From the days when the profound and subtle mind of Hippocrates first gave form and coherence to therapeutical science, down to modern times, to the days when Fracastoro pointed out the causes of the terrible fevers which then devastated Italy, or, when Hoffmann wrote his treatise, "*De septem leges sanitatis*," or later still, to our own days of Sanitary Reform, to Farr and Chadwick, Guy and Southwood Smith, physicians have ever recognised the grand truth, that foresight and wise precaution can *prevent* the diseases which no science and no skill can *cure*. It is not for me now to enter into the causes which have oftentimes prevented this truth from being presented with sufficient energy, or received with due alacrity. Suffice it to say, that to proclaim it is a solemn duty, and to receive it is a binding obligation. To point out to individuals that the great rule of health is, that every organ shall be exercised, that none shall be overdone, that excess must pay its penalty, and vice receive its punishment, is not more our duty, than it is to urge upon the State that protection to life does not mean simply, protection from the hands of violent men, but from the actions of heedless ones; that protection to property should not be simply protection to lands, and goods, and money, the property of the rich, but also protection to health and labour, the property of the poor.

There is no fact more cheering in the present day, than that a deep sense of the necessity of removing the causes of disease has been roused in the mind of this great nation, and has commenced to be acted upon by its Government. It remains for the Medical Profession still to press forward this movement,—more fully to define its objects and specify

its direction, and thus in time to remove as much as possible all causes of disease but those which arise within the individual himself, and which self-government alone can remedy.

Such are the aims of the Medical Profession. To cure the disease that has been produced; to prevent the disease whose latent causes are ready for development. In accomplishing these objects the Profession, no doubt, commits errors, for it is fallible,—and overlooks truths, for it is human. But that its aims are worthy, and its method of pursuing them scientifically true, cannot be gainsayed. Whoever, then, is commencing this Profession to-day, let him be certain that, if he cultivate it in a proper spirit, he will never repent the step he has taken. He will find this Profession always laborious, often disappointing, sometimes distressing; but yet the excellence of its purpose compensates for all imperfections, and consoles for every failure. It is a Profession which deals with subjects the most interesting, and with sciences the most attractive. So vast is its range, that it offers new points of cultivation to all who seek for them, and industry and honesty never fail to add their contribution to its progress and improvement. Doubtless, the pursuit of it will give no worldly status; but a worldly status would add nothing to its honour, and not much to its reward. In their early career its cultivators often find their social progress slow and tedious; but perhaps there is no other Profession which ultimately gives a competence to so many of its members. But its greatest recompense is, that it lies within ourselves so to practise it, that while it shall gratify every intellectual and moral principle, it shall repress every worldly and selfish feeling. There is no Profession which gives to its members so immediate and direct an opportunity of doing good. In its beneficent working for the relief of the body, it has even been used by the Divine Author of our faith as the type of his own ministry towards the human soul. Let us try to realise this highest conception of our calling, and to render ourselves worthy of this august reference. Then, as we pass through life's journey, and from time to time note our progress and survey our position, we shall have the happiness of feeling, that a noble and an unselfish purpose may perhaps have partially compensated for the errors that we cannot but have committed, and may have sanctified the good of which we have been the humble instruments.

ORIGINAL COMMUNICATIONS.

ON THE EFFICACY OF LARGE AND FREQUENT DOSES OF QUININE

IN

ARRESTING THE COURSE OF CONTINUED FEVER.

By ROBERT DUNDAS, M.D.

Physician to the Liverpool Northern Hospital;
Formerly Medical Superintendent (for twenty-three years) of the
British Hospital, Bahia.

EARLY in the present year, I delivered a series of lectures on questions connected with the Brazils, and on the diseases of persons returned to Europe after long tropical residence. In the course of these lectures, I laid down certain new doctrines on the pathology and treatment of tropical fevers, embracing likewise continued fever as it appears in this country, and which I consider to be essentially the same in its nature as the fevers of tropical countries, and curable by the same agents.

As the treatment which I recommended has been tested at the Northern Hospital of Liverpool, as well as lately at the Liverpool Fever Hospital, and elsewhere, I am anxious to submit my views more generally to the Profession, in order that their truth and value may be proved on a still larger field, and under every variety of circumstance.

TYPHUS FEVER OF EUROPE.

Acting on my conviction of the essential identity of the remittent and intermittent fever of the tropics with the typhus of Europe, and being aware of the specific action of quinine in every stage of the former diseases, I have for some time resorted to its administration in the ordinary typhus of this country, in all its stages, and commonly with

the happiest results. In typhus, as in the remittent and intermittent of hot climates, the treatment by quinine will be successful in proportion to its early administration; also, as in the tropical fever, the doses should be large—ten or twelve grains,—and repeated at intervals not exceeding two hours. Three or four doses will, in most cases, be sufficient to exert the specific influence of the medicine, which is displayed by dizziness of the head and tinnitus aurium, or in the rapid subsidence of all the urgent symptoms. In the latter event, three grains of quinine, or some vegetable bitter infusion, should be administered three times a-day, and the patient supported with good beef-tea or other light nutriment, and wine, if necessary. Should the urgent symptoms return, the large and repeated doses of quinine must be again resorted to. Stops should be avoided, and purgatives also, unless obviously indicated; but an emetic of tartarised antimony, when the *prima via* is loaded, will often prove useful at the commencement, and seems to render the system more obedient to the specific influence of the remedy. Should the urgent symptoms persist, notwithstanding the administration of four or five doses of quinine; or should dizziness of the head and tinnitus aurium supervene, the medicine must be discontinued; and, after an interval of six or seven hours, small and repeated doses of tartarised antimony should be resorted to, until full vomiting is induced. The patient should then be allowed to rest for twenty-four hours, when the quinine should be recommenced as before. If the symptoms still resist, the remedies may be repeated in succession, as above stated, for a period of four or five days; and, unless the beneficial effects are broadly marked within that time, we can no longer reasonably hope for success from this treatment, and it must be abandoned. Still, in the great majority of cases of uncomplicated typhus, taken at the commencement, complete and rapid success may be calculated on; and, in all, the diseased chain of actions will almost invariably be broken—no unimportant advantage in the treatment of any malady. In the advanced periods of the disease, the results will be much less certain; but, in all stages, the large doses of quinine may be safely resorted to, and will commonly calm the patient, cool his skin, allay the headache, and reduce the frequency, and improve the character of the pulse. It must, however, be borne in mind, (as I have elsewhere pointed out,) (a), that any vital organ being seriously involved will prove a disturbing cause to the curative powers of the remedy, which are clearly exerted on the nervous system, through which the blood and secretions are favourably modified, and often with marvellous rapidity.

In the history of typhus in this country, numerous incidental notices will be found, such as the following on the epidemic of 1819:—"The disease has simulated the recurrent type; the paroxysms were marked by distinct, and often violent rigors, which were succeeded by intense heat, and increased vascular activity, terminating occasionally in profuse sweating, but more commonly in a gradual subsidence of the exacerbation, without any relaxation of the surface. The paroxysms showed no obedience to periodicity; in some cases recurring in a few hours, and, in others, only after the lapse of as many days." (b) Now, here we are presented, clearly and distinctly, with the history of an irregular intermittent or remittent fever; yet, strange to say, this idea seems never once to have crossed the mind of the observer.

As I well know, by experience, how distasteful an array of cases commonly proves, I shall only relate two or three; but these are well adapted to illustrate, beyond all rational doubt, the justness of the principles and the efficacy of the treatment which I have just inculcated. The cases are divested of all minute detail, as I am anxious to place the broad facts clearly before the Profession, so that they may be easily impressed on the memory, and in order that they may be submitted to large and careful experiment. The two cases now to be related were received into the Liverpool Northern Hospital, one under myself, the other under my colleague, Dr. Scott. The notes were taken by our intelligent house-surgeon, Mr. Evans, and are given in his words:—

"Case 1.—Cornelius Vincent, aged 26, was admitted October 2, 1850, into Ward No. 12, under Dr. Dundas.

"October 3.—He had been ill ten days. Present state:

(a) In a work now in the press.

(b) Sheppard.—*Edinburgh Medical and Surgical Journal*, Vol. XV.

Severe headache; anxious countenance; slight delirium; skin hot and dry; tongue black, dry, and furred; teeth covered with sordes; thirst; urine scanty and high-coloured; bowels open; pain of abdomen on pressure; pulse 100; respirations 28.

"*R. Disulphas quinæ, gr. xxx. Divide in doses iij., quarum capiat unam secunda quaque horâ.*

"October 4.—*Convalescent.* The pain in the head and the delirium have ceased; the abdomen is less tender; the heat of skin diminished; the tongue clean and moist; pulse 90; respirations 24.

"*R. Infusi quassia, ℥iii., ter in die.*

"No further treatment was resorted to, and from this date he rapidly gained strength, and was discharged well on 11th October.

"It is the ordinary rule not to admit cases of typhus into the Northern Hospital, but to send them to the Fever Hospital. The above case, however, having been reported to my colleague, Dr. Scott, he resolved to give the treatment by quinine another trial. An opportunity presented itself in a few days.

"*Case 2.*—Edward Donald, aged 23, was admitted on 25th October, 1850, into Ward 14, under Dr. Scott. He had been ill eight days. Present state: Great anxiety of countenance, and high delirium; dry pungent skin; tongue dry, and coated with dark fur; sordes about the lips and teeth; great thirst; urine scanty and high coloured; bowels open; abdomen tumid, and tender on pressure; pulse 108; respirations 30.

"*R. Disulphas quinæ, gr. xxx. Divide in doses iij., quarum capiat i. secunda quaque horâ.*

"October 26.—*At the morning visit, he was found reading a book in bed!* All the formidable symptoms of yesterday have disappeared. No further medical treatment was resorted to in this case, and he was discharged well on the 5th November."

The same treatment has been adopted in several other cases of fever admitted into the Northern Hospital, and with equally good success. In one case, that of Ann Dobbin, one of the hospital nurses, the effect was highly instructive. Attacked with well-marked typhus, she was treated for three or four days on the ordinary routine system, by purgatives, salines, and diaphoretics. Under this treatment, she daily became worse; the cerebral disturbance, lumbar pains, heat of skin, and thirst became gradually more intense, the pulse more frequent, the tongue dry and brown, and sordes began to appear about the teeth and lips. Ten grains of quinine were now given every two hours, with the result, after the sixth dose, of arresting all the unfavourable symptoms. The pulse calmed down; the tongue became moist and clean; the sordes disappeared; the heat of skin, thirst, cerebral and lumbar pains, all moderated, and she rapidly improved without any further medical treatment beyond the administration of a little wine.

The following valuable communication from Mr. Eddowes, the highly intelligent House-surgeon of the Liverpool Fever Hospital, requires no comment.

(Copy of Letter from Dr. Dundas to Mr. Eddowes.)

"Canning-street, Sept. 13, 1851.

"My dear Sir,—As I understand from our House-surgeon, Mr. Weaver, that you have lately tested, in the fever cases at the Fever Hospital, the plan of treatment which I have recommended in my lectures, and carried into practice at the Northern Hospital; and as I am about to submit this important question to the consideration of my professional brethren, I would feel greatly obliged if you would favour me with the results, briefly, of your experience of this plan of treatment in the typhus fever, as it appears in your hospital. I remain, &c.,

"ROBERT DUNDAS.

"To W. Eddowes, Esq.,
House-surgeon, Fever Hospital, Liverpool."

:(Copy of Mr. Eddowes' Reply to Dr. Dundas.)

"Liverpool Fever Hospital, Sept. 17, 1851.

"Dear Sir,—I most willingly furnish you, in a brief manner, with the results of the fever cases where I have administered quinine.

"I have used it, during seven weeks, in every case of typhus, giving five grains every three hours; and the success has been most marked.

"The day but one after its administration generally finds

the patient better; the petechiæ gradually fade, and the fever leaves its unhappy victim.

"In diet, I give milk, arrow-root, and beef-tea; also wine, if necessary.

"The superiority of your plan of treatment consists, I believe, in the simple fact, that it either *cuts the fever short, or prevents the accession or increase of the more formidable symptoms*; while, in the ordinary treatment, (the *médecine expectante*,) the physician only interferes when death is on the point of claiming the sufferer for his own.

"The cases in which I have used the quinine have been eruptive typhus,—not a single case of typhoid fever.

"The quinine frequently excites vomiting of a grass-green liquid; but I do not discontinue it on that account.

"If I have been too brief in the foregoing outline, I shall be happy to furnish any further particulars. I remain, &c.

"To Dr. Dundas." "W. EDDOWES.

I have subsequently had two interviews with Mr. Eddowes at the Fever Hospital, when he kindly permitted me to verify the results of the practice by a personal examination of his patients; at the same time declaring, in emphatic terms, his sense of the importance of my system, and of its vast superiority over all others heretofore resorted to in the treatment of typhus fever.

It will be remarked, that the improvement in the patients at the Fever Hospital was generally apparent only on the third day from the commencement of the remedy; whilst, in my own patients, the improvement is generally established within the first twenty-four hours. Mr. Eddowes, however, it will be observed, did not push the remedy to its full extent. He administered only five grains every three hours, instead of ten grains every two hours, as I have recommended; and this, I believe, will satisfactorily account for the slight difference in the results. He at the same time informed me—and allowed me to state the fact—that, from the high price of quinine, and the large number of patients in hospital, he was induced, by motives of economy alone, to try first the effect of the smaller doses. As regards the question of economy, very properly adverted to by Mr. Eddowes as a public officer, I am satisfied that if the plan of treatment in typhus, now laid before the Profession, be adopted by public institutions, its superiority to all those systems hitherto practised will be at once manifested; and not alone in the economy to human life and suffering, but—what is scarcely less esteemed in this economical age—by the vast pecuniary gain to the public, from the rapidity and certainty with which typhus may be arrested—*CURED, malgré Pitcairn*—and the patient thus restored to his ordinary occupation, ceasing to be a burden on the funds of the community.

Yet, we are told, on high authority, that "in the continued fevers of this country, we believe it (bark) might with great safety be erased from the list of remedies altogether." (a) Another author of acknowledged eminence, Dr. Pereira, in his standard work on *Materia Medica*, lays down that, "in febrile conditions of the system, attended with a hot and dry skin, and a furred and dry tongue, tonics act as local irritants and stimulants, and add to the severity of all the morbid symptoms,"—p. 208; and he illustrates his doctrine by the action of disulphate of quina in fever! Again, Dr. Watson, deservedly one of the highest (as well as the most recent) authorities in medicine, adopts, in its fullest extent, the well-known maxim of Pitcairn,—"*You may guide a fever; you cannot cure it.*"

When these high-vouched theories are measured by the facts which I have just stated, all of which have also been observed by others, I feel convinced that, however distinguished the names which have sanctioned these doctrines, they will be found to be utterly unfounded. So fatal, indeed, are they, that, when we take into account the extent and mortality of fever in all its forms, in every clime, and in every class, I question whether their application to the actual treatment of human disease will not outweigh, in danger to health and life, all the advantages to be derived from the more enlightened views of modern medicine.

The cases which I have related, even if they stood alone, which they do not, would afford cogent evidence, not only in support of the treatment adopted, but of the truth of the doctrine on which such treatment is founded,—viz., the essential identity of the typhus of this country with the intermittent and remittent of the tropics, modified by climate

and numerous other influences. In fact, I believe that the history of fever must, and will ere long, be rewritten.

The power of quinine in controlling the remittent and intermittent fever, (and the yellow fever also, as stated by Dr. Blair,) is now a well-established and important fact; although I totally dissent from the received doctrine of its specific action on the *several specific poisons* which originate these fevers. Moreover, I have demonstrated, that, in sufficient doses, it displays an equal power in subduing the supposed animal poison of the typhus fever.

The action of quinine is clearly not that of a tonic, in the ordinary sense of the word; its action is obviously on the nervous power, whose functions it favourably and rapidly modifies, when depressed or exhausted by any of the numerous moral or physical agencies which act in causing fever, and thus it restores to the organic nervous system its normal influence over the animal fluids and vital phenomena. Hence the curative powers of quinine in fever, and in many other apparently dissimilar maladies.

Liverpool, Tuesday, 30th Sept.

On my return from London last night, I found a letter from Dr. Goolden, the talented physician of St. Thomas's Hospital, indicating the highly favourable results in his experience of the curative powers of quinine, as laid down above. He has kindly promised me a detail of facts, and I greatly regret that the time agreed on for forwarding this communication will not allow me at present to avail myself of them. In my work, now passing through the press, I have entered more fully on the subject of fever, and I gladly seize this early opportunity of expressing my obligations to Dr. Leslie, now of Rio, and for many years my house-surgeon at the Bahia Hospital, for numerous valuable suggestions on the present and other medical questions.

CRIME AND INSANITY;

THEIR

CAUSES, CONNEXION, AND CONSEQUENCES;
HOW DISTINGUISHED AND HOW TREATED BY
HUMAN LEGISLATION.

By C. M. BURNETT, M.D.

GENERAL OBSERVATIONS.

If political economists are to be believed, or the authorities they quote have any claims upon our confidence, the situation of this country and other great and civilized communities at the present time, as they stand related to crime, is more deplorable and more alarming than at any former period of the world's history. This is a fact built upon the highest statistical evidence. It cannot be gainsayed, it must not be overlooked. Crime has increased 300 per cent. upon the population of this country alone in the last thirty years.

If pathologists or registrars-general are to be credited, the increase of insanity, though that term is circumscribed to embrace only such cases as have been legally attested, and thus forms a very imperfect proof of the real amount of the population so affected, is sufficiently great to attract the attention of the least observant, and to excite the fears of the most unsuspecting philanthropist.

It is impossible that a more practical or a more momentous inquiry could engage the attention; nor are the difficulties that surround it lessened by the reflection, that some of the greatest minds have been occupied in investigating the true causes of crime, and in devising the best means for its arrest.

I can hardly expect, in the present day, that my suggestions will be received with any more chance of success than attended others. It was said by a celebrated French writer, that Diogenes combated vice with ridicule, and we laugh at him; Socrates assailed it with the weapons of reason, and it cost him his life; Timon attacked it with sourness and asperity,—he ceased to be dangerous, and he was treated as a misanthrope. These master-minds failed to accomplish their end, by omitting to treat the subject practically. Their warning is valuable.

In broaching a subject, therefore, in which the interests, the happiness, and the liberty of the community are so gravely and largely involved, no apology is needed on the score of its having been often and amply discussed; for, it may reasonably be doubted whether there is not yet much

matter, either closely connected with, or directly bearing upon it, that, hitherto, has been either untouched or undetermined. Every question that trenches upon the civil rights, or liberty of the subject, in these days of onward and rapid movement, is fraught with so much interest, and received with so much suspicion, that it cannot be unprofitable to inquire, not only into the causes that have operated most extensively to bring the human mind into that condition which leads to crime and insanity, but to view these mental conditions in their moral relation to the Deity, or their social relations to man, to take them in connexion with the physical organization through which they are manifested, and to ascertain how far they have been lessened, arrested, or promoted by human government or human legislation. In this way we shall be enabled to place this great question upon a more extended basis, and I hope, by so doing, to be able to show there is yet very much to be done by man, for the suppression of crime, as of insanity. I hope to be able to point to those errors of omission and commission, the remedying of which must assuredly lead to a more sound, consistent, and extended system of legislation upon a subject that, as regards the magnitude and graveness of the consequences can hardly be exceeded in importance by any other. Before, however, I go on to speak more particularly upon these separate points into which I propose to divide the subject, a few general observations will here help to unfold it to the mind of the reader, and to show up the great principles that command attention, the disregard of which has been so fatal to the human family.

Among the causes that have conduced to bring crime and insanity forward so much more rapidly than might have been anticipated from the advancement of civilization, must be comprehended those that usually accompany and impair the the noblest institutions, viz., a neglect of the public hygiene, the giving way to excesses in diet, the inordinate use of intoxicating beverages, and all those habits which excite those feelings which lead to luxury, and eventually lay the foundation of abnormal structures, and morbid cerebral phenomena.

The attention paid by the early nations of mankind to these points, forms a striking contrast to the almost total neglect and indifference with which the more advanced and cultivated nations nearer to our own time have regarded them. The dissertation of Hippocrates on ancient medicine, serves to show, that at the time he lived, which was that of the Peloponnesian war, the mind had been drawn to the choice and admixture of food, and the relative quantities required by different temperaments, for the preservation of health. But the early history of the Egyptians supplies us with many facts, that prove these people to have been most rigidly attentive to these points, and that both the quantity and the quality of what was either eaten or drunk, were prescribed by laws which extended even to the King; and there is little doubt, that the practice of eating in common and by prescribed rules, which was introduced by Rhadamanthus and by Minos into Crete, and by Lycurgus into Laconia, took their origin from Egypt, as they were probably those which, more than any others, contributed to preserve the dynasties of these eminent people through so many centuries of prosperity and happiness. These points demand more attention from modern legislators than they are inclined to give them, and, though all must see how impossible it would be to return to such a state of things after luxury and voluptuousness had taken fast hold of a nation, yet, in speaking of the causes which have led to crime and insanity, we cannot omit to notice the importance that should be attached to public hygiene—to the food and beverage—in arresting or promoting that condition of the body, and particularly of the cerebral organisation which leads to these fatal consequences. We cannot look to the ceremonial laws of the Jews, and remember that Moses, who was learned in all the wisdom of the Egyptians, was the person appointed to draw up those laws, without concluding, that this great legislator saw how imperative it was that some restriction should be placed upon the food of the Israelites after they ceased to be miraculously fed, and that some attention should be paid to habits of cleanliness, if those people were to be kept from the pollutions of sin and crime. He accordingly incorporated certain restrictive laws upon these points, and invested them with a religious character, as being the most likely means to insure attention to these points.

It may not be practicable, or even possible, to place such restrictions upon those nations so far enlightened and advanced as our own; but it is indisputable that, short of this, much might be done in this way to intercept the rapid and onward march of crime in this and other countries, and that, if not checked, will speedily be advanced beyond all human power to control. Even the voluptuous Romans paid much attention to the cleanliness of their cities, as is attested by monuments which the long lapse of time has not obliterated. Self-denial in the use of intoxicating liquors may not rank among our national virtues; but, when we behold insanity in some of its less terrible forms, fastening its fangs upon almost every class, and even family into which we are divided, we are strongly reminded of the wisdom and forethought of that sage heathen, who, when asked why he was so moderate in the use of wine, replied, "That I may never stand in need of the reason of another." How many there are in this country who do stand in need of the reason of another, and what calamitous consequences take their rise from such causes, will be for our consideration.

It is not a little surprising that, at this advanced period in the natural and social history of man, no attempt should have been hitherto made to define the true position which crime holds in relation to insanity, or to show in what respect they are to be considered practically as pathological degrees of the same morbid cerebral action. Failing to regard crime in this light, as one of the stages in the progress of that disease which, in its commencement, was coincident as it is synonymous with the fall of man, we have been contented to view its multitudinous phases and its varied and graduated degrees of aggravation simply in a kind of experimental light, or, as the expounders of the law express it, in the light of common sense. So that, at the present day, we have, as might have been expected, by following such a course, to contend with these great evils in a more complicated and difficult shape, and to contemplate the remedies that have been applied to stem the torrent of their course, as those remedies have been proposed by the sages of expediency or the sciolists of common sense. Feeble and incompetent as these remedies must, under such circumstances, appear, when contrasted with the formidable power they are arrayed against, we have here an obvious reason why, up to the present period of civilisation and national progress, the Legislature of this country has failed to supply the community with any legally defined rules, beyond that simple scale of degrees comprehended in such terms as felony, which would empower the judicial bench to dispense justice. The evil consequences of this unsettled state of things are not a few, and among them is that monstrous negation comprised in the judicial charge where the jury is called upon to give their verdict, after the Judge has told them, what he is constantly obliged to do, viz., that legislation is silent upon the all-important point to be determined, and that there is no law by which they can decide the point, if they are not disposed to follow his judgment. Whereas, if the great principles on which crime depends, were more clearly defined and determined by the Legislature, some of the greatest difficulties now obstructing the course of justice would be removed.

The great cause of crime has, from the fall of man, so effectually secured its progressive development, that it was found necessary, from the earliest period, to adopt some method by which its march could be stayed. And we do well to observe attentively the importance of this fact, and in connexion with it, the course pursued by the Deity towards the attainment of this object; for, if that course was dictated by the Divine mind, the Divine law must have been a transcript of that mind; and it is indisputable it must be the right one, however inexorable or impracticable it may appear to be when contrasted with the pseudo-merciful and mistaken policy of human judicature. Nothing is more certain than that, where crime has been attempted to be subdued, in exact proportion as the Divine law has been acted upon and carried out, has the progress of that crime been arrested or weakened. It admits not of any doubt, that the principles of the Divine legislation, as they have been unfolded and revealed by God to man, are as unalterably fixed as the laws of the physical universe, and if so, they cannot be defied or undervalued with impunity. We do well to ponder this fact, for in it is contained the secret of our most successful achievements in the suppression of crime, if we act up to it; or of our most signal failures, if we pass over it.

The increase of civilization, among all those nations of

the world where its progress can be traced, has ever been attended by progressive modifications and expansions of the theory of legislation. One of the most prominent features in these more recent alterations, bearing upon the punishment of crime, has had for its object the attainment of a point which has, in a great measure, struck at the principle. However anxious legislators may be to lessen human suffering, when justice demands it for the perpetration of crime, they should ever bear in mind, that, in altering the means, no consideration will exculpate from overlooking the end. We cannot fail to notice, in the carrying out of the legal polity of the Hebrew nation, there were many ways in which the life of the offender was taken, not one of which was particularly commanded to be enforced; while the great principle of taking the life of the murderer, the idolater, the adulterer, &c., was never lost sight of, the marks by which such crimes might be distinguished, being laid down with unmistakeable clearness. Man has, from a very early period of his career, made laws, and taken measures more or less successful, from time to time, in combating the advances of crime; and not the least practical or important will be the attempt to ascertain how far the many human codes, propounded by the different legislators of mankind, have corresponded with the principles contained in the Divine law, or have been successful in accomplishing the object for which they were instituted.

We shall be required, then, to take a closer view of the causes of crime than that which would refer them to the principle of evil inherent in the nature of man, and we shall be able, by this course, to show, that both crime and insanity are greatly dependent for their progress and aggravation upon the course and conduct of those placed, by the wise and merciful Disposer of all events, in situations of authority and trust, which they have either neglected or betrayed. We shall be able to show, that both these conditions of the mind among the many and diversified causes from which they spring, are greatly fostered and aggravated in those who are the subjects of them, by the operation of partial and unjust laws, over which they can exercise no control. It is only necessary to glance at the unequal and degrading character of the Game-laws, the Poor-laws, or the Gabelle-laws of our own country, to detect in these alone sufficient injustice to provoke crime and insanity. But when to these causes we add the unequal pressure of taxation, the unfair and disheartening operation of municipal law, the selfish and tyrannical systems of ecclesiastical polity, the hopeless and the heartless injustice of our courts of judicature, we must, indeed, be judicially blind not to behold, in all these causes, a frightful source of crime, and a fearful looking for of its expansion to the most appalling degree, which, however inexcusable it may be in those that commit them, will most assuredly and inevitably recoil upon the heads of those who have been chiefly instrumental in withholding justice. It is impossible to overlook the unfairness and duplicity with which those chargeable with crimes are treated when brought before the bar of human justice; how easily the heaviest offences against the Majesty of God, and the laws and interests of society, are overlooked or bailed, or acquitted upon pleas which, if they really exist, are degrading and dishonourable to the Legislature of the country. A very superficial insight into the history of the ancient and heathen nations, now low in the dust, must remind us most forcibly how greatly the leading principles of their polity, unenlightened and limited as they were, are contrasted with those that now reign in the nations of the world. The selfish and aggrandizing thirst for gold was not then universal among all ranks above the lowest as we now witness it. The love of pleasure had then infected only a small number of individuals; and as long as virtue and justice remained, the Cretans and the Spartans amidst the most unparalleled difficulties existed as nations over many centuries of years. As those high principles declined in them, their power left them, and they were swept into the gulf of time by those very nations to whom they refused to extend these great principles.

When we come to notice that part of the subject that bears more upon the legislative treatment of crime and insanity, we shall find that the grand method of combating them has been greatly defeated, not only by begging the principle, but by neglecting to furnish any definite standard on which such laws could be erected, as might lead to practical ends. There are, perhaps, no two words made use of to express the meaning of certain acts committed by man

as he stands related to his fellow, or to the community at large, that can be said to have so conventional or so arbitrary a meaning as those of "crime" and "insanity;" and if this observation is true, as we limit these terms to the mere breach of human laws, whether social or public, it becomes still more so if we attempt to restore to them a more extended and correct meaning, by viewing them in relation to the Deity. Man has, however, not only sought to narrow the sphere over which crime may be said to exert its influence upon the human race, and by a systematic perversion of its obvious interpretation, tried to weaken the effects intended to be accomplished for its arrest, but he has, in a great measure, succeeded in removing from its category all those offences committed against the Creator, which, in effect, bear the highest significance, and are, and ever have been, the most fruitful cause of the most degenerate and hopeless conditions into which the human mind can fall. The very highest of all crimes, which all those nations, recovered from heathen darkness, could be guilty of, viz., those which man committed against his Maker, unhappily took the lead of all others, as they were alike the greatest in enormity and the parent of them all. And it will be found, as we proceed, that it was to the neglect of those precepts, which went to place man in a true relation to the Author of his existence, we must attribute the rapid advancement of the very worst offences committed by him towards his fellows. The remedies appointed by the Creator, as those best calculated to weaken the destructive influence of sin upon the human mind, will claim our special attention. The value of these remedies, however they have been overlooked or underrated by man, can admit of no dispute, when it is remembered they issue from the unfathomable depths of Divine knowledge, and are alike built upon the events of the future, as they are upon the past history of mankind. They must embrace, therefore, an aggregate amount of knowledge, which no created being could possibly possess. Among these remedies, the different forms of punishment bore, in many instances, a peculiar relation to the Jewish nation, and it will be right to consider in what degree we are justified, under the light and teaching of the Christian dispensation, in superseding those punishments by others of our own suggestion, or of entirely suspending them upon the popular plea, that they were abrogated by that dispensation. The crimes committed against the sovereignty of God had their special and most severe punishments marked out for them; and it is not easy to tell why it was, that the punishments appointed and enforced by God himself for this description of crime, were, as respects human jurisdiction, so soon disregarded and eventually discontinued, unless it was, that the great enemy of God and mankind saw that this was the most effectual means for advancing his power. And this would seem to be implied in the fact of the acknowledgment and worship of the One only true God being the prominent and fundamental object of the Mosaic polity, and, as a consequence, the adoration of other gods, being placed first on the list of crimes, as the highest offence which man could be guilty of towards his Maker. The Jewish polity, as Michaelis justly observed, was enforced chiefly by temporal sanctions; and this was singularly judicious, for temporal blessings and evils were at that time the common and prevailing incitements to idolatry; and by thus incorporating them in the Hebrew constitution as rewards to obedience, and punishments for disobedience, they became strong motives to continuance in the true religion, instead of encouragements to idolatry. But the crimes committed by the Jewish people against God, constituting the first and most important division of the Decalogue, were practically as binding upon all other nations, who assumed to base their laws upon the leading principles of the Mosaic code, as they were upon the Jews. Indeed, there is much historical evidence to show, very early after the Gentile nations received the privileges of the Gospel, and even before the Gospel was delivered, that vague and traditionary accounts of the Divine law having reached them; their legal and criminal codes became enlarged, so as to incorporate in them the leading principles of that law. And, according to some of our legal antiquaries, the ancient Saxon constitution, first introduced by Alfred into this country, was derived from the laws of Moses; and it would thus appear, that in adopting the principles, and in some instances the details of those laws, we have fallen into the error that marked the course of the Jewish polity most strikingly, as that polity drew towards its close, in failing to

regard and punish as crimes those great sins denounced so strongly in the first of the Divine tables. The consequences that followed this neglecting, on the part of the Jewish nation, during the latter period of its existence, to stamp with the severest punishment those sins committed against the high majesty of Heaven, were no less than its total overthrow. And we cannot avoid the conclusion that the gradual advancement of crime in the several nations of the world, is to be attributed to the fact of their having narrowed up the sphere over which crime may be said to range, and excluded virtually all those that relate more immediately to God, by removing them beyond the sphere of human punishment.

[To be Continued.]

OBSERVATIONS ON NITRATE OF SILVER STAINS OF THE CONJUNCTIVA.

CASE OF ABSOLUTE BLACKNESS.

By JAMES VOSE SOLOMON, M.R.C.S.

Surgeon of the Birmingham Eye Infirmary.

THE application of a solution of nitrate of silver, if long and injudiciously applied to the conjunctiva of the eye, produces a discoloration which is indelible. The sclerotic conjunctiva becomes of a dusky brown, or of an olive colour; the palpebral linings, more particularly of the lower lid, assume a brownish or livid hue, or, as will be presently shown, become black; the sulcus between the inferior lid and globe is more deeply dyed than the other parts. In the majority of cases the conjunctiva of the superior lid retains its natural colour. In a few rare instances the salt becomes incorporated with ulcers of the cornea, forms a subchloride of silver, and perpetuates one or more black lines in their cicatrices.

A still more uncommon, and I believe hitherto unrecorded change of colour, consists in absolute blackness of the conjunctiva, an instance of which, the only one that has ever come under my notice, is probably of sufficient interest for publication in your journal.

Case.—A young woman, aged 29, came from a small town in Radnorshire to consult me for a dimness of vision.

Both corneae were extensively covered by opacities, which were irregularly streaked with black lines. The caruncula lachrymalis and tarsal borders were of a jet-black colour, giving the appearance, at a cursory glance, of soot or dirt settled on those parts. The palpebral conjunctivæ were smooth, and in colour not quite so black as their margins. The sclerotic conjunctiva presented a deep olive colour. I found on inquiry, that she had, at one time, suffered from strumous ophthalmia, for the cure of which a strong ointment and some drops had been prescribed and freely used. These applications were continued for three or four months.

The black streaks which traversed the corneal opacities, and the olived sclerotic conjunctiva, decisively indicated the nature of the other discolorations.

There is a much greater susceptibility to these stains in some individuals than in others. They are more common to adults than children; possibly because ophthalmic disease among the latter is for the most part either of the strumous or purulent kind, in both of which the surface of the eye and its appendages are continually bathed in secretion.

If we excise a portion of discoloured sclerotic conjunctiva, a white cicatrix is formed, indicating that the sclerotic maintains its natural colour.

At present we are unacquainted with any means for removing the stains under consideration. Our obvious duty is to prevent their occurrence by vigilant attention and care. This may be accomplished by prescribing the preparations of nitrate of silver in short and intermitting courses, and by frequently noting the condition of the lining membrane of the inferior palpebra. In public ophthalmic practice, it would be well if the solution were not dispensed in larger quantities than two drachms at one time.

Since writing the above, a man 60 years of age, who has been all his life a martyr to rheumatism, has become my patient at the Eye Infirmary. The right globe is collapsed: the left eye retains some vision; it has been repeatedly inflamed; the iris is of a dull leaden colour, and convex

towards the cornea; the pupil is puckered, adherent to the lens, and filled within a third of its area by opaque lymph (artesia iridis imperfecta). Near the centre of the cornea is a leucoma.

Fifteen or eighteen months ago, he for the first time consulted a surgeon, who prescribed caustic drops, which he has ever since applied. The conjunctiva of the inferior palpebral sinus is of a greenish black colour. The inner surface of the superior lid has lost somewhat of its natural polish; a few black dots assume an arborescent shape near the superior punctum; a light-brown and well-defined narrow stripe extends along the concave aspect of its tarsal cartilage.

I have cited this case, to show the impropriety of allowing patients to use the preparations of lunar caustic *ad libitum*; and as an interesting example of how well the superior lid escapes serious change of colour, even in the very worst and most neglected cases. It also illustrates the destructive character of uncontrolled rheumatic ophthalmia.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

Saturday, October 11.—MEDICAL SOCIETY OF LONDON. Subject:—Dr. E. Murphy, "On the Duration of Pregnancy." Eight o'clock.

THE MEDICAL TIMES.

SATURDAY, OCTOBER 4.

PRIZES TO MEDICAL STUDENTS.

THE present season offers an appropriate occasion for some remarks upon a system which largely obtains in our Universities and schools,—a system introduced with the best intentions, but fraught, we believe, with most mischievous results,—namely, that of giving prizes.

In the first place, as between school and school. Saint Hildegunde and Saint Genéviève are two rival establishments, both old, both rich, and both ambitious; the hospitals are good in both, but the one numbers two or three hundred students,—the other two or three dozen. The prospectuses from both are sent throughout the provinces, with a circular, requesting that every publicity should be given of their respective advantages to the parents of medical youth. Gold medals and other trinkets, books and scholarships, are held up alluringly, and the fond parent thinks how he would congratulate himself, what pride it would afford him, were his boy to return home laden with spoil. Suppose that two students, A and B, go respectively from the same town to the two schools. A, from St. H's, returns with a few honorary certificates, the third best man of three hundred. B comes back from St. G's, the bearer of medals, the best man of the three dozen. The name of B is held up to reverence; the county papers teem with eulogies. "The talented son of our highly-respected townsman, Mr. Brown, greatly distinguished himself at the London College," &c. Is such humbug to be tolerated? Can we say that poor A has been fairly treated? He may possess twice the power of mind, and have shown twice the industry that B has shown, but have had a hundred-fold the opposition to encounter. Such prizes, we regret to say, are put forth as sheer advertisements, and are disgraceful to the schools from whence they emanate. The only fair system would be, for the prizes to be contended for at some Central Board, such as the College of Surgeons, by examinations open to the students of all London. Then, indeed, he who came out first in the list might have reason to

pride himself upon his distinctions for the year. Scholarships are undoubtedly good things, because they enable a student to prolong, at a slight cost, his education in town. But the class prizes, those of Surgery, and Anatomy, and Medicine, etc., do not work so well. That they should be honest and fair tests of the average talent of the year, all should be compelled to enter into the lists and do their best; but it is well known how very few even compete; three or four generally constitute the average number. But, it will be asked, If a student wish to carry off the prize in Surgery, in Anatomy, or in Medicine, must he not live in the wards or in the dissecting-room, that he may prepare himself well for the trial? By no means. Let him shut himself up in his chamber; take down from his shelves South's translation of Chelius, Druitt's Surgery, Watson's Lectures on Physic, or Quain's Anatomy. Let him never miss a lecture, but take copious notes, and cram them of an evening; and if he have a good memory, and a ready pen, he will stand an excellent chance of gaining his end. This effort of the mind may not be wholly without good effect; it may cultivate the memory, and teach the student to compare, combine, and arrange what he has learnt; it will oblige him, too, to study his own language, and the use of the pen; but, at the same time, it involves no small sacrifices. That which he learns, but little practical and soon to be forgotten, is acquired at the cost of much time, which might be more profitably passed in those parts of the establishment where he would successively see the body in its normal state, the effect of disease upon the living frame, and the morbid changes exposed in the examination after death. That these subjects be profitably studied, there is demanded, not a brief and Herculean application of the mind in a special direction, as in working for a prize, but constant and daily attendance, from week to week, and from month to month, that the student may ever be present to watch with his own eyes, and argue upon with his own mind, those phenomena whose course he cannot regulate, but whose phases he must learn. This, the great end of his coming to a London Hospital, he sacrifices for the sake of gaining a few paltry books, and a paragraph in a newspaper.

Considering, then, the questionable advantage to the student in this "training for prizes;" the uncertainty of the test of talent afforded by the system as between school and school, or even as between students of different years in the same school; the unfair advantage which may be taken of its results over some less successful fellow-practitioner, when the two men are fighting their way into practice in some provincial little Pedlington, where the system is not understood;—we are of opinion, that it would be greatly to the advantage of the Profession, were the pruning-knife to be very liberally applied.

Another evil of the present day deserving reproof, is the wholesale system of advertisement. We cannot help thinking of Mr. Squeers, in "Nicholas Nickleby," when perusing some of the interesting placards emanating from the Medical schools: "In the delightful hospital of St. Genevieve, youth are boarded, washed, clothed, instructed in their profession, and furnished with pocket-money, for the sum of — per annum."

Let us ask, how this would sound from Oxford, whose institutions we in many respects seek to follow: "The master of All-Souls expects his young friends on the 16th instant. A limited number of boarders can be received. Prizes, scholarships, and fellowships offered at the end of each term to successful competitors."

In one of these huge placards to which we allude, the eye

is at once caught with the large black letters forming the words which set forth the chief attractions of the Institution :—

ADMISSION FEE ; SPECIAL ENTRIES ; LIBRARY, MUSEUM, AND MICROSCOPICAL ROOM ; LABORATORY ; PHYSICAL SOCIETY ; EXAMINATIONS ; CHRISTMAS RECESS ; SCHOLARSHIPS AND ANNUAL PRIZES !!!

And for all this, payment, perhaps, may be made "by instalments"—something in the tally line :—

"Fresh fish from Helicon—who'll buy, who'll buy?
The precious bargain cheap! In truth, not I!"

Apart from the disreputability of such placards, which are only fit to be placed side by side with Solomon's "Balm of Gilead," Moses and Son's "exhibition of goods at the Minorities," or Mr. Sheriff Nicoll's advertisement of "registered shirts," we ask, is it fair to put such temptations in the way of young men, who should come to town to learn how to cure disease, and not to carry off prize-books. Seriously, is it honest to society to send these men forth with gold medals and books which must positively be pushed into their hands? The system may answer in a mercantile point of view, but alas for professional dignity! alas for the noble old institutions, which have certainly fallen into very bad society! and yet more so still for the students in Medicine and in Surgery, who, however they may be misled, while young, by such advertisements and professions, cannot fail, sooner or later, to find out the errors of the system, and to regret the time which has been so greatly misspent! Let not students deceive themselves. In after-life, when their "medals" have become rusted, and their "certificates of merit" moth-eaten, the diligent man, who was never so decorated, will surpass them in the race!

We believe that no prizes are given away at Guy's Hospital, and but few at University College; and yet these establishments turn out men of education and experience. Look at the last examination-list of the University of London. Whence came the first-class men? From the prize-surfeited establishments? No, indeed; from no such quarter.

OUR RELATIONS WITH THE HOMŒOPATHISTS.

THE importance which the question of the relations between regular medicine and homœopathy has assumed, determines us seriously to address our readers on the subject. We propose to amplify and illustrate the Brighton Resolutions, and, as clearly and succinctly as we can, to discuss the nature and attitude of Homœopathy, and the position of the Regular Practitioner in reference to it. Our first article upon the subject will appear next week.

Apropos to this subject, the Council of the Medical Society of London have summoned a Special General Meeting, to be held on Friday, October the 10th, at eight o'clock p.m., for the purpose of taking into consideration the following Resolutions :—

"1. That the practice of homœopathy, or the prescribing medicines in what are called 'infinitesimal doses,' under a pretence that they are useful in the cure of disease, is founded in palpable error, is a delusion on the part of the practitioner, a deception on the public, and manifestly dangerous to its welfare.

"2. That the Fellows of the Medical Society of London cannot honourably hold any Professional communion with homœopaths.

"3. That, consequently, any Fellow of this Society who shall hereafter practise homœopathy, or who shall knowingly meet in consultation any professed homœopathist, will thereby render himself unworthy of the Fellowship of this Society."

We are glad to see the Medical Societies moving in

this matter. We trust that the example of the Provincial Medical Association will be everywhere followed, and that a *unanimous* condemnation of the doctrines of the Homœopaths will be decided upon. We hear that a movement is taking place in the Medical and Chirurgical Society in the same direction. The medical corporations, especially the Colleges of Physicians and Surgeons, should not be quiescent; but, if they will not lead the general opinion of the Profession, they should at least follow the example set them by more energetic institutions.

At St. Bartholomew's, also, the students have called a meeting, for the purpose of proposing that the portrait of Mr. Kingdon, which now hangs in the library, be removed. The seniors of the Profession may take example, and do likewise.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Clinical Observations on Diseases of the Genito-Urinary Organs. Part I. Gonorrhœa and its Consequences. By HENRY JAMES JOHNSON, formerly Lecturer on Anatomy and Physiology, and Senior Assistant-Surgeon to St. George's Hospital.

Gonorrhœa and its Consequences! Surely we have heard that title before. To be sure. Thus is named Mr. Borlase Childs' book, published in 1843. When Day and Martin's blacking was all the vogue, two individuals took premises near the original establishment, and procured cards of precisely similar pattern. The second blacking-shop thrived wonderfully, until an injunction was obtained in Court against the issue of prospectuses so obviously calculated to mislead. Surely Mr. Johnson might have found some other title than that which was already the personal property of another. But we presume the excuse will be found in his Preface, page 5, where we see reported, on another matter, the apology of Sir Fretful Plagiary, "Childs and I hit upon the same title, but, confound the fellow, he got the start of me."

The book contains 105 pages of "gonorrhœa," 219 pages of "consequences," and a short appendix upon Gonorrhœa in the Female. The style is clear, and the descriptions often graphic. Mr. Johnson has evidently seen many cases of the disease in its primary form. We breathed freely, when, upon opening the book, we found no historical wish-wash to nauseate the palate. Let those, however, who are simple enough to believe that gonorrhœa and syphilis are *advantages of the moderns*, enjoy their creed, and sigh for the golden days gone by.

There does not appear to us much novelty in the volume. Does any man in his senses believe that gonorrhœa is a discharge of semen? Are there many individuals in the world who are not familiar with the disease? Mr. Johnson enumerates three forms, acute or virulent gonorrhœa, mild or chronic gonorrhœa, and gleet. The author, taking the bit between his teeth, canters through the symptoms of these complaints, giving on the road a parting kick at the dead lion, John Hunter. "Unfortunately, the work of John Hunter on the venereal reflects no credit on his memory. Conceived in an unphilosophical spirit, it displays the worst faults both of his reasoning and style."—P. 17. Why revive this oft-told tale? We want to hear something new, especially respecting the treatment of this disease.

Is there, the author asks, such a thing as syphilitic gonorrhœa? In answer to which question, he relates two cases, and declines offering a *positive opinion on their nature*. Perhaps some might consider this proceeding satisfactory: we do not.

Among the causes of gonorrhœa are enumerated, leucorrhœa, the menstrual secretion, local excitement, etc. For the peace of families we had better admit these and fifty other causes, including "the foul water-closet." They can do no harm. Undoubtedly, circumstances which we cannot exactly comprehend, and must not always investigate, give rise to gonorrhœa where we should least expect it. The cases related, pp. 32, 33, 34, are interesting and worthy of perusal. But women tell strange tales, and he who, after contracting gonorrhœa, still believes in the purity of his fair companion, is generally either a philosopher or a fool. Mr.

Johnson relates the case of an old baronet in a northern county, addicted to port-wine and gout, which seems an instance of rheumatic inflammation of the urethra; but these old baronets are sometimes sad dogs. The case would have had more weight had the gentleman been of sober habits.

We object most distinctly to the introduction of names of patients, even in a note. It is not very hard to guess who is meant by Prince G—, p. 107. Let there be no such scandal; for books circulate, and are read by all sorts of persons, who may make unpleasant use of the information they contain.

We hoped to find some novelty in the plan of treatment; but have been greatly disappointed. If a patient apply with clap at any hospital,—where, as a rule, he enjoys the advantage of the youthful student's first essay,—the following course is pursued:—Some aperient medicine is given; the patient receives directions to live abstemiously, walk but little, and to drink neither beer nor wine. In the course of a few days he takes copaiva, and is frequently told to use a mild injection. This appears to be Mr. Johnson's *rational* mode of treatment. Certainly it is very good—perhaps the best that we know of, and it sometimes cures a patient, if the disease do not run itself out beforehand; for, let it be remembered, six weeks is an average time for a mild form of gonorrhœa to exhaust itself.

Of all the remedies for incipient gonorrhœa, Mr. Johnson prefers injections; but he very properly condemns those of great strength. In acute gonorrhœa he suggests bleeding from the arm, although he has never seen a case where it was necessary. Leeches on the penis, cupping on the perineum, etc., might be called for to arrest particular symptoms, but they are not commonly needed. If blood is to be taken from a patient suffering from incipient gonorrhœa, it had best be abstracted from the arm. Such cases do occur among the plethoric and intemperate. When the inflammation has subsided, Mr. Johnson treats the discharge with cubebæ or copaiva. According to our experience, when inflammation has subsided, the discharge ceases, and the patient gets well.

Are we to enumerate herpes and eczema of the prepuce as consequences of gonorrhœa? Chronic inflammation of the testis, with fungous protrusion of the tubuli semeniferi may occur in one who has had orchitis; but we have witnessed the disease far more commonly in young subjects of scrofulous habit, and have often traced it to the deposit of tubercle.

The ill effects of the practice of strapping the testicle, as suggested by Dr. Fricke, of Hamburg, and extensively practised, both in this country—where we believe it was introduced by Mr. Borlase Childs—and in France, by M. Ricord—in all, save the very acute forms of orchitis, with most singular and marked beneficial effect, we must attribute to Mr. Johnson being unfortunate in the cases which have fallen under his notice. Perhaps he may succeed better by-and-bye. The strapping process requires care; but there is nothing which gives a patient so much ease, or which causes such rapid disappearance of inflammatory induration. As to belladonna and mercurial plasters, in simple cases they are not needed.

Scattered among the remarks about bubo, are some cases of iliac abscess: the two are not in any way connected.

Mr. Johnson is evidently profoundly ignorant of his subject, when he pronounces acute gonorrhœal ophthalmia a bugbear. Indeed, he confesses that he has *not* seen much that corresponds with the terrible descriptions upon record. If this be an honest confession of ignorance, we regret that he has written a chapter upon what he knows nothing. We recommend him to attend for a few months at the Royal Ophthalmic Hospital, and if then he denies the existence of acute gonorrhœal ophthalmia, as described by authors, we shall look upon him as a curiosity.

The chapter on Gonorrhœal Inflammation of the Synovial Membranes wants novelty. The same may be said of "Gonorrhœa in the Female." The glands which often become inflamed and suppurate in the labia of females who have not been habituated to sexual intercourse, were long ago described in Weber's edition of Hildebrandt's Anatomy. Mr. Johnson should refer to the work.

Mr. Johnson's style, however, is both graphic and amusing; and the book contains a great quantity of very useful information. It may be perused by many with advantage. The scissors and paste-box have not been used; and Mr. Johnson has written the results of his own experience, which has led him to very fair conclusions.

On Bubo. By JOHN L. MILTON, M.R.C.S.

The author's object is to show, that "bubo is curable in most cases without surgical interference, and in all without cutting or disfiguring the patient;" and we fully agree with him.

The remedy upon which Mr. Milton relies is tartar emetic, given in grain doses every second hour, until a marked effect is produced upon the inflammatory swelling. This mode is very efficacious; but many patients, we think, would prefer the bubo to the medicine.

Mr. Milton, moreover, is of opinion, that, when tartar emetic fails to check suppuration, punctures, not leading directly to the sac, should be substituted for incisions, and thus deformity and the exposure of a large suppurating surface to the air be prevented.

Our readers are probably aware, that a large proportion of venereal buboes, even those which have suppurated, disappear under proper general treatment, combined with rest, without surgical interference; that those which burst heal readily like any other abscess, provided the patient's health be good; and those which are opened by vertical incision heal very readily. But surgeons are slow in opening a bubo without a reason, partly because it may disappear without such a measure, and partly because all abscesses which burst of themselves, as a rule, do better than those opened by the knife. Nevertheless, we cordially offer Mr. Milton our thanks for his well-written and very excellent and useful pamphlet.

RULES AND REGULATIONS

OF

EXAMINING MEDICAL BODIES

IN

ENGLAND, SCOTLAND, IRELAND, FRANCE.

SESSION 1851—1852.

ENGLAND.

ROYAL COLLEGE OF CHEMISTRY, OXFORD-STREET.

The Chemical Instruction in this Institution consists of—

1. A course of Practical Analysis in the Laboratory.
2. A series of Lectures on General Chemistry.

1. *Practical Analysis in the Laboratory.*—The Laboratory instruction is necessarily adapted to the previous knowledge of the student. The course usually commences with experimental exercises, calculated to make the pupil acquainted with the *general* properties of the simple substances. The next subjects of his study are the *analytical* properties of the elements, and of their most important compounds. The knowledge thus acquired is subsequently put into practice in the performance of a series of analyses, so arranged as to lead the student, step by step, from the simplest to the most complicated cases, both of qualitative and quantitative analysis. The fundamental studies in Practical Chemistry are the same for all pupils, however different the future pursuit may be to which the knowledge obtained will be applied. It is only after having mastered the most important methods of distinguishing, separating, and estimating chemical substances, and, after having acquired sufficient skill and practice in experiment, that the course of each student diverges into some special line. This will of course vary with his abilities and his ultimate objects. Each laboratory-student works independently; there are no classes. All operations are superintended by the Professor and his assistants. A table, with drawers, cupboards, and shelves, is appropriated to every pupil. The Institution supplies gas, fuel, and reagents. Larger and more expensive instruments, such as air-pumps, thermometers, barometers, condensers, large evaporating dishes, &c., may be had on loan from the College. The student has to provide himself only with the apparatus specified in a list to be had at the College; he is, moreover, expected to find his own materials for original investigations.

2. *Course of Lectures on General Chemistry.*—This course consists of about one hundred lectures, illustrated with experiments; it embraces an exposition of the theory of Chemical Science, and a full account of the individual substances, with especial consideration of the processes sub-

servient to the arts and manufactures. These lectures are intended to form a complement to the practical instruction in the laboratory.

Regulations regarding Attendance, Fees, &c.—The collegiate year is divided into two sessions, each of twenty weeks; the winter session commencing in the first week of October, and terminating in the third week of February; the summer session beginning in the second week of March, and ending with the month of July. The attendance is from nine in the morning till five in the afternoon, except on Saturdays, when the laboratories are closed at two o'clock. The course of lectures extends over two sessions; it commences in the third week of October, and continues, interrupted only by the fortnight's vacation in March, to the end of July. The lectures are delivered every Monday, Wednesday, and Friday, from ten to eleven o'clock.

The following is the scale of fees:—For students working every day during the session, 15*l.*; four days in the week, 12*l.*; three days, 10*l.*; two days, 8*l.*; one day, 5*l.* When the pupil leaves the Institution, he receives a Certificate of Attendance, stating the length of time he has been a laboratory-student, and specifying the number of days, weekly, on which he has worked in the College. If his skill in chemical analysis be of a sufficiently high order, he receives also a Testimonial of Proficiency. To entitle a pupil to this honorary testimonial, he must have conducted, in the laboratory of the college, at least one original chemical investigation which has been deemed worthy of publication in the Journal of the Chemical Society, and in the Reports of the Institution. A pupil who has received this testimonial, is considered capable of conducting a series of chemical analyses.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST. BROMPTON.

Physicians: Hamilton Roe, M.D.; Theophilus Thompson, M.D., F.R.S.; George Cursham, M.D. Assistant-Physicians: Richard Payne Cotton, M.D.; Richard Quain, M.D.; John Hutchinson, M.D.

Pupils are admitted to the hospital practice. Fees for six months, 5*l.* 5*s.*; perpetual, 10*l.* 10*s.* Clinical lectures are delivered during the session by the above-named medical officers. Two clinical assistants reside in the hospital. Pupils are eligible to these appointments, which are held for six months. The resident medical officer receives two dispensary pupils. Further particulars may be learned from the resident medical officer at the hospital.

QUEEN'S COLLEGE, BIRMINGHAM.

Winter Session.—General and Surgical Anatomy, Professor Sands Cox, F.R.S., F.R.C.S., and Senior Surgeon of the Queen's Hospital.—Descriptive Anatomy, Physiology, and Comparative Anatomy, Professor Langston Parker, F.R.C.S., and Surgeon of the Queen's Hospital.—Medicine, Professor John Eccles, M.D., Physician to the General Hospital; Professor James Johnson, M.D., (Cant.) F.R.C.P., Lond., and Senior Physician of the General Hospital.—Surgery, Professor Sands Cox, F.R.S.—Chemistry, Professor George Shaw, Esq., Fellow of the Royal Botanical Society of Edinburgh, and Member of the Chemical Society of London.—Anatomical Demonstrations, Mr. David Bolton, M.R.C.S.

Summer Session.—Materia Medica and Therapeutics, Professor S. Wright, M.D., D.C.L., LL.D., F.A.S., Physician to the Queen's Hospital, and Senior Physician to the General Dispensary; Professor G.B. Knowles, F.L.S., F.R.C.S., and Surgeon of the Queen's Hospital.—Midwifery, Professor Samuel Berry, M.R.C.S., Surgeon to the Magdalen Asylum.—Forensic Medicine, Professor John Birt Davies, M.D., M.R.C.P., Lond., and Senior Physician of the Queen's Hospital.—Botany, Professor G. B. Knowles, F.L.S.

Regulations of the Attendance of Students at Lectures.

A book is kept by each Professor, specifying the times of attendance of each student; such book is laid before the Council at their monthly meetings.

Previously to the commencement of every lecture, the Professor calls over the names of the students.

Each Professor keeps a register of the time of commencement and duration of each of his lectures; such register is laid before the Council at each monthly Board.

The professors, tutors, and masters, forward to the warden seven

days before the end of each term, their registers of attendance, or a terminal report of the attendance, conduct, and progress of each student in their respective classes, from which details a general Report is drawn up by the warden, and submitted to the Council; and copies of the reports on each student are forwarded by the warden to the parent or guardian of each student.

Fees for Three Years' Course: Resident and Non-Resident Students.—The composition fees to be paid by resident or non-resident students, for the three years' course of study, required by the Royal College of Surgeons of England and the Society of Apothecaries, amount to 42*l.* (exclusive of colleges fees, 5*l.* per annum). The payment may be made at once, or in two equal sums, viz., 21*l.* on matriculation, and 21*l.* twelve months afterwards.

College Expenses—Resident Students.—The college expenses, including commons, chamber-rent, and servants' wages, but exclusive of the annual college fee of 5*l.*, will not exceed 50*l.* for the three terms. The students breakfast in the hall at seven a.m., have refreshments at twelve, dine at five p.m., have coffee at eight p.m. The payments to be made by three instalments, viz., 18*l.* on the 1st of October, 18*l.* on the 1st of January, and 14*l.* on the 1st of May. Every student will be expected to provide himself with chamber linen, a large and small silver fork, and a tablespoon and teaspoon.

THE QUEEN'S HOSPITAL, BATH-RROW.

Fees for Admission to the Hospital Practice and to the Clinical Lectures.—Resident and non-resident students may compound for three years' medical and surgical practice on payment of 21*l.*

One physician and one surgeon attend daily at nine o'clock.

The physicians' clerks and surgeons' dressers are selected according to merit from the students, without any additional fee, and hold office twelve months.

Clinical Lectures.—Clinical lectures are delivered by Drs. Birt Davies, Samuel Wright, David Nelson, and Messrs. Sands Cox, G. B. Knowles, and Langston Parker.

Junior Department of Medicine and Surgery.

The Council, deeply impressed with the importance of improving the preliminary education of their students in medicine, have established a junior department of the College, in order to afford students entrusted to their care the advantage of receiving instruction in Latin, Greek, and mathematics, (with the modern languages and sciences,) from tutors of University education, carefully selected for their abilities and acquirements.

As the Society of Apothecaries in London requires the production of indentures from candidates of their having served an apprenticeship of five years previous to examination; and as candidates for their certificates must have attained the full age of twenty-one years; and as the course of study in the Senior Department of the Queen's College occupies not less than three years for its completion; it is evident that medical students at the Queen's College should be at least two years in the Junior Department, and should qualify themselves for being advanced to the Senior Department at the age of eighteen.

The most important and valuable privilege of receiving indentures without premium, is offered to students by Professor Sands Cox, F.R.S.

Detailed information in reference to the rules and regulations of the Junior and Senior Departments of the College, the Fellowships, the Warneford Scholarships, the Warneford Prizes, the Prizes of the Professors, Tutors, and Masters, may be obtained from the College Calendar.

REGULATIONS OF THE ARMY MEDICAL DEPARTMENT, 13, ST. JAMES'S PLACE.

A candidate for an assistant-surgeoncy in the army is required to fill up a blank form of certificate, which may be obtained at the office by written application to the superintendent, specifying by whom he is recommended, his Christian and surname at full length, with the course of study he has pursued. The candidate is, in addition, to sign and forward the following declaration:—

"I [Christian and surname at full length]— years of age, a candidate for employment in the medical department of the army, do hereby attest my readiness to engage for general service, whether at home or abroad, and to proceed on duty immediately on being gazetted. I declare my age not to exceed twenty-six years, that I am unmarried, and that I labour under no mental or constitutional disease, nor physical disability, that can interfere with the most

efficient discharges of the duties of a medical officer in any climate." [Signature.]

In selecting from among the candidates for the medical department of the army, a preference is given to those who can fill up all the blanks in the printed form; but the name of no gentleman can be placed on the list who does not possess the diploma of either of the Colleges of Surgeons of London, Edinburgh, or Dublin, and who cannot produce the following testimonials:—Eighteen months' attendance at an hospital of celebrity, where the average number of in-patients is not less than 100; twenty-four months' anatomy; twelve months' practical anatomy; twelve months' surgery, or (what is preferred) six months' surgery and six months' military surgery; eight months' clinical surgery, a complete course of two or three lectures during the week; twelve months' practice of physic, or six months of practice of physic, and six months of general pathology; eight months' clinical lectures on ditto, the same as required in surgery; twelve months' chemistry; six months' practical chemistry; three months' botany; four months' materia medica; three months' practical pharmacy, or apprenticeship; five months' natural history; five months' midwifery; five months' natural philosophy.

The candidates must be unmarried, not beyond twenty-six years of age, nor under twenty-one years.

Candidates who have had a university education, and have the degree of A.B. or A.M., as well as that of M.D., will be preferred; but a liberal education, and a competent knowledge of the Greek and Latin languages, are indispensably requisite in every candidate; and the greater the attainments of the candidates in various branches of science, in addition to competent professional knowledge, the more eligible will they be subsequently deemed for promotion in the service; for selections to fill up vacancies will be guided more by reference to such acquirements, than to mere seniority. Before promotion from the rank of assistant-surgeon to any higher rank, every gentleman must be prepared for such other examination as may be ordered before a board of medical officers.

Although the British schools are specified, it is to be understood, that candidates who have received regular education in approved foreign universities or schools will be admitted to examination.

With the exception of practice of physic and clinical medicine by one teacher, candidates must have attended separate lectures for each branch of the science. The certificate of each teacher of practical anatomy must state the number of subjects or parts dissected by the pupil. Certificates of lectures and attendance must be from physicians or surgeons of the recognised Colleges of Physicians and Surgeons of the United Kingdom; or of foreign universities. A certificate that the candidate is acquainted with the art of cupping is required.

Diplomas, tickets of attendance on lectures, and certificates of regular attendance, by each Professor or lecturer, must be lodged at the office for examination and registry, at least one week before the candidate appears for examination, and likewise certificates of moral conduct and character, one of them by a clergyman, and that of the parochial minister, are desirable. Baptismal certificates are required at the same time; if the parish register cannot be resorted to, an affidavit from one of the parents, or some parents who can attest the fact, will be accepted.

All communications to be forwarded "unsealed," under cover, to "the Right Honourable the Secretary at War," with the words "Army Medical Department" at the corner.

Although, in the examination of candidates, gentlemen are expected to be qualified in every branch of study required, they are requested to be particularly conversant in the knowledge of—1. Tropical diseases, and the diseases to which soldiers are most liable. 2. Military surgery, and works on the habits of soldiers and rules of the service. 3. "Cullen's Nosology," being that adopted in all returns and reports. 4. "Willan's Classification of Cutaneous Diseases." 5. The latest authors on the diseases of the eye. They are expected readily to translate a passage from a Greek or Latin author; to be conversant with Baillie and the later authors on morbid anatomy; with Cullen's, Mason Good's, and Gregory's "Practice of Physic," the latter giving an account of tropical diseases, and those most commonly met with in the army; with the works of Hunter, Hennen, Dr. John Thomson, Guthrie, Samuel Cooper, Millengen, Ballingall, Marshall, and Baron Larrey, on "Military Surgery;" with the works of Chisholm, Bancroft, Lind, Blane, Burnett, Johnstone, and Annesley, on "The Diseases of Warm Climates;" but Baillie's "Morbid Anatomy," Hennen's and Ballingall's "Military Surgery," third edition, with his valuable work on "Medical Topography," Guthrie on "Gunshot Wounds" and on the "Eye," and Gregory's "Practice of Physic," should form part of the baggage of every military surgeon.

Candidates, after passing their examination, will not have any leave of absence granted, but will be stationed at Chatham for two or three months, previously to being gazetted; and on their conduct there will depend their obtaining their commissions. Hearing and vision must be good; short-sighted persons are inadmissible.

NAVY MEDICAL DEPARTMENT.

The Right Honourable the Lords Commissioners of the Admiralty direct, "that no person be admitted as an assistant surgeon in the Royal Navy, who shall not produce a certificate from one of the Royal Colleges of Surgeons of England, Edinburgh, or Dublin, or from the Faculty of Physicians and Surgeons of Glasgow, of his fitness for that office; nor as a surgeon, unless he shall produce a diploma or certificate from one of the said Royal Colleges or Faculty, founded on an examination to be passed subsequently to his appointment of assistant-surgeon, as to the candidate's fitness for the situation of surgeon in the Navy; and in every case the candidate producing such certificate or diploma, shall also undergo a further examination before the Director-General of the Medical Department of the Navy, touching his qualifications in all the necessary branches and points of medicine and surgery for each of the steps in the naval medical service." These regulations and directions will be strictly adhered to; and further, that previously to the admission of assistant-surgeons into the Navy, it will be required that they produce proof of having received a preliminary classical education, and that they possess in particular a competent knowledge of Latin; also,

That they are of good moral character, the certificate of which must be signed by the clergyman of the parish, or by a magistrate of the district.

That they have served an apprenticeship, or have been engaged for not less than six months in practical pharmacy.

That their age be not less than 20 years nor more than 24 years; and that they are unmarried.

That they have actually attended an hospital in London, Edinburgh, Dublin, Glasgow, Aberdeen, or Manchester, for two years subsequently to the age of 18, in which hospital the average number of patients is not less than 150.

That they have been engaged in actual dissections of the human body twelve months: the certificate of which from the teacher must state the number of subjects or parts dissected by the candidate.

That they have attended lectures, &c., on the following subjects at established schools of eminence, by physicians or surgeons of the recognised colleges of physicians and surgeons, in the United Kingdom, for periods not less than hereunder stated; observing, however, that such lectures will not be admitted if the teacher shall lecture on more than one branch of science, or if the lectures on anatomy, surgery, and medicine, be not attended during three distinct winter sessions of six months each:—

Anatomy, 18 months; or general anatomy, 12 months, and comparative anatomy 6 months. Surgery, 18 months(a); or general surgery, 12 months, and military surgery 6 months. Theory of Medicine and practice of ditto, 6 and 12 months(a); if the lectures on the theory and practice of medicine be given in conjunction, then the period required is 18 months. Clinical lectures (at an hospital as above,) on the practice of medicine 6 months(a); on the practice of surgery 6 months. Chemistry, 6 months; or lectures on chemistry, 3 months, and practical chemistry, 3 months. Materia Medica, 6 months; Midwifery, 6 months, accompanied by certificates stating the number of midwifery cases personally attended. Botany, 6 months; or general botany 3 months, and medical botany 3 months.

In addition to the tickets for the lectures, certificates must be produced from the professors, &c., by whom the lectures were given, stating the periods (in months) actually attended by the candidates. The time also of actual attendance at an hospital or infirmary must be certified; and the tickets as well as certificates of attendance, age, moral character, &c., must be produced by the candidate immediately on his being desired to appear for examination.

Although the above are the only qualifications which are absolutely required in candidates for the appointment of assistant-surgeon, a favourable consideration will be given to the cases of those who have obtained the degree of M.D. at either of the Universities of Oxford, Cambridge, Edinburgh, Dublin, Glasgow, London, or Aberdeen; or who, by possessing a knowledge of diseases of the eye, and of any branch of science connected with the

(a) 6 Months' lectures on Pathology, if given at a University where there may be a Professorship on that branch of science will be admitted in lieu of 6 months' lectures on the practice of medicine.

profession, such as medical jurisprudence, natural history, natural philosophy, &c., appear to be more peculiarly eligible for admission into the service, observing, however, that lectures on these or any other subjects cannot be admitted as compensating for any deficiency in those required by the regulations.

By the rules of the service, no assistant-surgeon can be promoted to the rank of surgeon until he shall have served three years, (one year of which must be in a ship actually employed at sea,) and can produce a diploma from one of the before-mentioned Royal Colleges, or the Faculty of Physicians and Surgeons; and it is resolved that not any diploma or certificate of examination from either of the aforesaid Royal Colleges shall be admitted toward the qualification for surgeon, unless the diploma or certificate shall be obtained on an examination passed after a period of not less than three years' actual service, observing that no one can be admitted to an examination before the Director-General for surgeon unless, as herein before mentioned, he can produce a diploma, together with the most satisfactory certificates that he has performed, on the dead body, under the superintendence of a professor or teacher of known eminence, all the capital operations of surgery, and is perfectly competent to perform any operation with skill and dexterity, and thoroughly acquainted with the anatomy of the parts involved in such operation; without which qualification, no one hereafter can be promoted to the higher branches of the service; and whenever assistant-surgeons already in the service (whose professional education may not be in accordance with the above) obtain leave to study previously to their passing for surgeon, they will be required, on their examination, to produce testimonials of their having availed themselves of the period of leave to complete their education agreeably to these regulations generally.

It is also to be observed, that candidates who may be admitted into the Naval Medical Service must serve in whatever ships, etc., they may be appointed to; and that, in the event of their being unable to do so from sea sickness, their names cannot be continued on the Naval Medical List, nor can they, of course, be allowed half-pay.

EAST INDIA COMPANY'S SERVICE.

REGULATIONS FOR THE ADMISSION OF MEDICAL GENTLEMEN.

Age.

The assistant-surgeon must not be under twenty-two years, in proof of which he must produce an extract from the register of the parish in which he was born, or his own declaration, and other certificates, agreeably to forms to be obtained in the office for cadets and assistant-surgeons, East India House:

Qualification in Surgery.

The assistant-surgeon, upon receiving a nomination, will be furnished with a letter to the Court of Examiners of the Royal College of Surgeons, to be examined in surgery, and their certificate will be deemed a satisfactory testimonial of his qualification; but should the assistant-surgeon be previously in possession of a diploma from the Royal College of Surgeons of London, or of the Colleges of Surgeons of Dublin or Edinburgh, or of the College and University of Glasgow, or of the Faculty of Physicians and Surgeons of Glasgow, either of them will be deemed satisfactory as to his knowledge of surgery, without any further examination. He is also required to produce a certificate, from the cupper of a public hospital in London, of having acquired, and being capable of practising with proper dexterity, the art of cupping.

Qualification in Physic.

The assistant-surgeon will also be required to pass an examination by the Company's Examining Physician in the practice of Physic, in which examination will be included as much Anatomy and Physiology as is necessary for understanding the causes and treatment of internal diseases, as well as the art of prescribing and compounding medicines; and Dr. Scott will then require him to produce satisfactory proof of his having attended at least two courses of lectures on the practice of physic; and, above all, that he should produce a certificate of having attended diligently the practice and clinical instruction of the physicians at some general hospital in London for six months; or at some general hospital in the country (within the United Kingdom) for six months, provided such provincial hospital contain at least, on an average, 100 in-patients, and have attached to it a regular establishment of physicians as well as surgeons. No attendance on the practice of a physician at any dispensary will be admitted.

The assistant-surgeon is also required, as a condition to his appointment, to subscribe to the Military or Medical Retiring

Fund at his respective Presidency, and also to the Military Orphan Society, if appointed to Bengal.

The assistant-surgeon is required, by Resolution of Court of the 21st May, 1828, to apply at the Office for Cadets and Assistant-surgeons for his orders for embarkation, and actually proceed under such orders within three months from the date of being passed and sworn before the Committee for passing Military Appointments; he will then be furnished with an order to obtain the certificate of his appointment, signed by the Secretary, for which he will pay a fee of 5*l.* in the Secretary's office.

Assistant Surgeons' Certificates.

General Cautions.

1st. Notice is hereby given, that should it be discovered at the time the assistant surgeon is appointed, or at any subsequent period, that his appointment has been obtained by purchase, or agreement to pay any pecuniary or valuable consideration whatsoever, either directly or indirectly, when the appointment is completed, the assistant surgeon will not only be dismissed, and rendered ineligible to hold any situation in the East-India Company's service, under the Court's resolution of the 9th August, 1809, but all the parties concerned in procuring the appointment surreptitiously, or in disposing of, or receiving the same under such circumstances, will subject themselves individually and collectively to a criminal prosecution for a misdemeanour, under the Act of the 49th of George the Third, cap. cxxvi.; and the Court of Directors of the East India Company do hereby declare, that they will prosecute any person or persons who shall hereafter be detected in such illicit traffic.

2nd. The assistant surgeons are desired to present themselves to Mr. T. R. Clarke, clerk for passing cadets and assistant surgeons, at the East-India House, with their certificates, as underneath, properly filled up and signed, by ten o'clock in the morning, or as soon after as possible, in order that they may have their nominations prepared against the Committee meet, or the nominating Director arrives—in failure of which they may have to wait for several hours, or to come another day.

SCOTLAND.

THE EDINBURGH MEDICAL SCHOOL.

THE Edinburgh Medical School consists of two great departments, namely, that conducted by the medical professors of the University, and that by a body of teachers termed extra-academical. The lecture-rooms of the extra-academical teachers are in the immediate vicinity of the University; the Royal Infirmary, which includes a medical and a surgical department, is common to both, clinical lectures being delivered there on medicine and on surgery by University professors, and also, on both subjects, by members of the extra-academical part of the school. Any fellow of the Royal College of Physicians, or of the Royal College of Surgeons of Edinburgh, may become an extra-academical lecturer, provided he is able to satisfy the College to which he belongs, by the test of a special examination, that he is competent to teach the subject on which he proposes to lecture. All the courses required for the diploma of the Edinburgh College of Surgeons have usually been given in the extra-academical part of the school; last year, however, there was no lecturer on the institutes of medicine, and we do not observe any lectures on this subject announced for the approaching session. The fees for the extra-academical courses are somewhat less than those for the corresponding courses in the University; and the student, whose limited means require that he should be economical, may take the institutes in the University, and all the rest of the courses required for a surgeon's diploma or the apothecaries' license, in the extra-academical part of the school. The student who proposes to graduate at the University of Edinburgh must take all the requisite tickets in the University, the only exception being practical anatomy, which, when taken along with hospital attendance, counts without any University courses in that year, as one of the four "*anni medici*" necessary to the candidate for an Edinburgh degree. Though there is a certain degree of rivalry between the University and the extra-academical lecturers, we have not described Edinburgh as having two schools of medicine, but as having one school including two distinct departments,—because, as all the institutions connected with medical education are on one narrow spot, the student has it in his power to study in both branches of the school at once, selecting from each the

teachers of the greatest celebrity in any one of the required kinds of medical knowledge. The rivalry just referred to is one of the excellencies of the Edinburgh school, as when a professor becomes less efficient his place is sure to be supplied by some younger competitor without the walls of the University.

UNIVERSITY OF EDINBURGH.

STATUTES OF THE UNIVERSITY RELATIVE TO THE DEGREE OF M.D.

Sect. I. No one shall be admitted to the examinations for the degree of Doctor of Medicine who has not been engaged in medical study for four years, during at least six months of each, either in the University of Edinburgh, or in some other University where the degree of M.D. is given; unless, in addition to three *Anni Medici* in a University, he has attended, during at least six winter months, the medical or surgical practice of a general hospital, which accommodates at least eighty patients, and during the same period a course of practical anatomy; in which case, three years of University study shall be admitted.

Sect. II. No one shall be admitted to the examinations for the degree of Doctor who has not given sufficient evidence,—

1. That he has studied, once at least, each of the following departments of medical science, under professors or teachers of medicine, in this or in some other University, as already defined, viz.:—

Anatomy, Chemistry, Materia Medica and Pharmacy, Institutes of Medicine, Practice of Medicine, Surgery, Midwifery and the Diseases peculiar to Women and Children, General Pathology, and Practical Anatomy (unless it has been attended in the year of extra-academical study allowed by Sect. I.); during courses of six months. Clinical Medicine, that is, the treatment of patients in a public hospital, under a professor of medicine, by whom lectures on the cases are given: during courses of six months, or two courses of three months. Clinical Surgery, Medical Jurisprudence, Botany, Natural History (including Zoology): during courses of at least three months.

2. That in each year of his academical studies in medicine, he has attended at least two of the six months' courses of lectures above specified, or one of these and two of the three months' courses.

3. That, besides the course of clinical medicine already prescribed, he has attended, for at least six months of another year, the medical or surgical practice of a general hospital, either at Edinburgh or elsewhere, which accommodates not fewer than eighty patients.

4. That he has attended, for at least six months, by apprenticeship or otherwise, the art of compounding and dispensing drugs at the laboratory of an hospital, dispensary, member of a surgical college or faculty, licentiate of the London or Dublin Society of Apothecaries, or a professional chemist or druggist.

5. That he has attended, for at least six months, by apprenticeship or otherwise, the out-practice of an hospital, or the practice of a dispensary, or that of a physician, surgeon, or member of the London or Dublin Society of Apothecaries.

Sect. III. No one shall obtain the degree of Doctor who has not studied, in the manner already prescribed, for at least one year previous to his graduation, in the University of Edinburgh.

Sect. IV. Every candidate for the degree in Medicine must deliver, before the 31st of March of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine,—

1. A declaration, in his own handwriting, that he is twenty-one years of age, or will be so before the day of graduation; and that he will not be then under articles of apprenticeship to any surgeon or other master.

2. A statement of his studies, as well in literature and philosophy as in medicine, accompanied with proper certificates.

3. A Medical Dissertation composed by himself, in Latin or English; to be perused by a professor, and subject to his approval.

Sect. V. Before a candidate be examined in Medicine, the Medical Faculty shall ascertain, by examination, that he possesses a competent knowledge of the Latin language.

Sect. VI. If the Faculty be satisfied on the point, they

shall proceed to examine him, either *viva voce* or in writing; first, on Anatomy, Chemistry, Botany, Institutes of Medicine, and Natural History, bearing chiefly on Zoology; and, secondly, on Materia Medica, Pathology, Practice of Medicine, Surgery, Midwifery, and Medical Jurisprudence.

Sect. VII. Students who profess themselves ready to submit to an examination on the first division of these subjects, at the end of the third year of their studies, shall be admitted to it at that time.

Sect. VIII. If any one, at these private examinations, be found unqualified for the degree, he must study for another year two of the subjects prescribed in Section II., under Professors of Medicine, in this or in some other university, as above defined, before he can be admitted to another examination.

Sect. IX. Should he be approved of, he will be allowed, but not required, to print his thesis; and, if printed, forty copies of it must be delivered before the 25th day of July to the Dean of the Medical Faculty.

Sect. X. If the candidate have satisfied the Medical Faculty, the Dean shall lay the proceedings before the *Senatus Academicus*, by whose authority the candidate shall be summoned, on the 31st of July, to defend his Thesis; and, finally, if the Senate think fit, he shall be admitted, on the first lawful day of August, to the degree of Doctor.

Sect. XI. The *Senatus Academicus*, on the day here appointed, shall assemble at ten o'clock, a.m., for the purpose of conferring the degree; and no candidate, unless a sufficient reason be assigned, shall absent himself, on pain of being refused his degree for that year.

Sect. XII. Candidates for graduation shall be required to produce evidence of their having conformed to those regulations which were in force at the time they commenced their medical studies in a university.

Note.—Candidates who commenced their studies before 1825 will be exempted from the fourth year of attendance, (Sect. I.,) from the additional hospital attendance, (Sect. II., Art. 3,) from the necessity of a year's study in Edinburgh, (Sect. III.,) and from any attendance on Clinical Surgery, Medical Jurisprudence, Natural History, Military Surgery, Practical Anatomy, Pathology, and Surgery distinct from Anatomy. Those who commenced between 1825 and 1831 will be exempted from attendance on General Pathology, and also on Surgery distinct from Anatomy. Those who commenced between 1825 and 1833, will be required to attend only two of the following classes, viz.: Clinical Surgery, Medical Jurisprudence, Natural History, Military Surgery, and Practical Anatomy. And those who commenced before 1833 will be exempted from the attendance specified in Sect. II., Arts. 4 and 5.

N.B.—The attendance on Midwifery in a university (Sect. II., Art. 1) is required of all candidates.

The session will be opened on Monday, November 3, at two o'clock p.m., when an address to the students will be delivered by the Very Rev. John Lee, D.D., principal.

The classes for the study of medicine will be opened as follow:—

Medicine.—Dietetics, Materia Medica, and Pharmacy, Dr. Christison, Tuesday, Nov. 4, at nine; Chemistry, Dr. Gregory, Tuesday, Nov. 4, at ten; Surgery, Prof. Miller, Tuesday, Nov. 4, at ten; Institutes of Medicine, Dr. Bennett, Tuesday, Nov. 4, at eleven; General Pathology, Dr. Henderson, Tuesday, Nov. 4, at eleven; Clinical Surgery, Monday and Thursday, Prof. Syme, Thursday, Nov. 6, at twelve; Clinical Medicine, Tuesday and Friday, Drs. Alison, Christison, and Bennett, Friday, Nov. 7, at twelve; Anatomy, Prof. Goodsir, Tuesday, Nov. 4, at one; Natural History, Prof. Jameson, Thursday, Nov. 6, at two; Midwifery and Diseases of Women and Children, Dr. Simpson, Tuesday, Nov. 4, at two; Practice of Physic, Dr. Alison, Tuesday, Nov. 4, at three.

Royal Infirmary, at noon, daily: Practical Anatomy, under the superintendence of Prof. Goodsir; Practical Chemistry, under the superintendence of Dr. Gregory; Analytical Chemistry, under the superintendence of Dr. Gregory.

Regulations, &c., as to Attendance at the Royal Infirmary.—The dates of issuing tickets to students are—1st November, 1st February, 1st May, and 1st August. It is required that the Album be signed at the following periods:—In the course of the third or last week of December or April; the last week of February; the last week of May; the last week of November. To these periods of registration the managers

request the particular attention of the students attending the Infirmary, as no certificates of regular attendance can be given to those who fail to comply with this regulation. Sums payable by students, including janitor's fees:—Perpetual ticket, 12*l.* 17*s.*; annual, 5*l.* 7*s.* 6*d.*; half-yearly, 3*l.* 5*s.*; quarterly, 1*l.* 13*s.*; certificate of attendance, 5*s.*

During the summer session, lectures will be given as follows:—Military Surgery, by Sir George Ballingall; Clinical Medicine; Clinical Surgery, by Prof. Syme; Comparative Anatomy, by Prof. Goodsir; Anatomical Demonstrations, by Prof. Goodsir; Practical Chemistry and Pharmacy; Practical Anatomy.

Matriculation.—Every student in the faculties of arts, law, and medicine, before entering with any professor, must produce a matriculation ticket for the ensuing session. Tickets will be issued at the Matriculation-office, in the College, every lawful day, from ten till four o'clock. Enrolment in the general album is the only legal record of attendance in the University, except in the case of students of divinity, who are required to enrol at the theological library before applying for tickets from professors in the faculty of theology.

Library.—The library will be open for the purpose of giving out books to students, either on loan or for reference, in the hall appropriated for that purpose, every lawful day during the winter session, from ten o'clock a.m. till four o'clock p.m., except on Saturdays, when it will be shut at one o'clock precisely. Every student applying for books must present to the librarian his matriculation ticket for the session, with the ticket of at least one professor. Every book taken out must be returned within a fortnight, uninjured.

Botanical Garden.—The botanical garden is about half-an-hour's walk from the College. The lectures on botany are delivered there in the summer at 8 a.m. The garden is open to the pupils from an early hour in the morning until 6 p.m.

Natural History Museum.—Admission to the college museum is free to the students of the natural history class. Others pay one shilling for each visit; but season-tickets may be procured from Messrs. Maclachlan and Stewart, by producing an order from Professor Jameson. The price of the season-tickets is ten shillings and sixpence each.

Anatomical Museum.—The very valuable anatomical museum is open to the students of the anatomy class. Others require to procure an order from Professor Goodsir.

Dispensaries and Maternity Hospital.—The Maternity Hospital is situated in the Canongate. The fee for attending it for six months is 1*l.* 3*s.* The Royal Dispensary is situated in Richmond-street. Medical students are allowed to attend the patients and to prescribe for the patients, under the superintendence of the physicians and surgeons of the institution. The fee for this privilege is 3*l.* 3*s.* for six months, and 1*l.* 1*s.* for every subsequent month; or 2*l.* 2*s.* for the first three months, and then 1*l.* 1*s.* for each subsequent month. Students are also permitted to attend the laboratory of the Dispensary, where they have ample opportunities of compounding medicines, preparing prescriptions, and performing many of the minor operations of surgery. The terms of attendance are, for one month, 1*l.* 1*s.*; for two months, 2*l.* 2*s.*; and for six months, 4*l.* 4*s.* The New Town Dispensary is situated in Thistle-street. The regulations regarding pupils are similar. The Eye Dispensary is situated in the Lawnmarket. It is open upon Mondays, Wednesdays, and Fridays, from one to two o'clock. Students are admitted to watch the practice, the fee being one guinea for three months. The Minto-house Hospital and Dispensary likewise permits the attendance of pupils.

Societies Connected with the University.—The following society have accommodation for their meetings in the college buildings:—*Hunterian Medical Society*, instituted in 1824, meets every Wednesday during the winter session, at 8 p.m., for the discussion of medical subjects. Entrance fees, 1*l.* 1*s.*; and 10*s.* annually are paid for two succeeding years. The following societies do not meet in the University, but are intimately connected with the Edinburgh school:—

Anatomical Society.—The meetings are held in 13, Queen-street, on the first and third Tuesdays of the month.

Obstetrical Society.—Meets on the second and fourth Tuesdays of the month.

N.B. Information relative to the curricula of study for degrees, examinations, etc., may be obtained on application to the Secretary, at the College.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

Abstract of the Regulations relating to Admission to the Fellowship.

No one can be elected a fellow of the College till he has obtained the degree of Doctor of Medicine. His petition, according to one of the annexed forms, must be presented at a meeting of the College, after the fee shall have been lodged in the treasurer's hands; and if a graduate of any university in Great Britain or Ireland, the motion for his admission may be determined by ballot at the first quarterly meeting of the College thereafter—a majority of three-fourths being necessary to carry it in the affirmative.

Graduates of foreign universities must previously submit to an examination before the examiners of the College, which shall consist:—

1. Of a dissertation in English, on some subject in the practice of physic selected by the examiners, to be written by the candidate in an apartment of the College hall, under the superintendence of the examiners.

2. Of a *vivâ voce* examination in English, chiefly on symptomatology, pathology, and therapeutics of diseases; but in part, also, on certain topics in anatomy, chemistry, botany, and physiology, to be intimated to the candidate fourteen days before the date of his examination; and,

3. The examiners may institute such examination as they may consider advisable, for satisfying themselves that the candidate has received a competent education.

The mode of election of a non-resident is the same as that of a resident fellow. In his petition he engages, if he come to reside in Edinburgh, to fulfil the whole conditions which the College does or may require of resident fellows; but another ballot must take place before he is admitted to that grade by the College.

The fees for a resident fellowship amount to 130*l.*, and for a non-resident 80*l.*, both inclusive of the stamp-duty to Government.

Fees.—The fee to be paid by a resident licentiate is 100*l.*; by a non-resident, 55*l.*, exclusive of any tax payable to Government now existing, or which may hereafter be imposed, and must be lodged with the treasurer previously to the presenting the petitions. Every resident fellow pays an annual subscription of 1*l.* 1*s.* to defray the College expenses.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.

Schools of Medicine.—1. Every candidate for a surgical diploma must have followed the course of study to be specified afterwards in a university, or in an established school of medicine, as defined below, or in a provincial school specially recognised by the College. 2. Under the title, "established school of medicine," are comprehended the medical schools of those cities of Great Britain and Ireland in which diplomas in surgery are granted, and such foreign schools as are similarly circumstanced in the countries in which they exist.

Qualifications for Teachers.—1. The following classes of persons shall be entitled to give lectures, which may be attended as part of the course of study:—1st. In the Universities of Great Britain and Ireland, in University College and King's College, London, in Queen's College, Birmingham, and in the Queen's Colleges of Cork, Belfast, and Galway, in Ireland, the Professors of those Institutions. 2nd. In Edinburgh, Resident Fellows of the Royal College of Physicians of Edinburgh, and Fellows of the Royal College of Surgeons of Edinburgh, whose lectures have been sanctioned by the College to which each lecturer belongs. 3rd. In London, Fellows and Licentiates of the Royal College of Physicians of London, and Fellows and Members of the Royal College of Surgeons of England, whose status as teachers has been admitted by that College. 4th. In Dublin, Fellows of King's and Queen's College of Physicians in Ireland, and fellows of the Royal College of Surgeons in Ireland. 5th. In Glasgow, fellows of the Faculty of Physicians and Surgeons of that city. 6th. In recognised provincial schools, teachers whose status as such has been admitted by the College on special application.

2. The College will not recognise any course of lectures delivered subsequently to 1st May, 1839, by a professor or teacher who lectures upon more than one of the branches of instruction included in their curriculum; nor will they recognise any course of lectures delivered by a professor or teacher who, in addition to the said course, lectures upon a branch of instruction, medical or general, not included in the curriculum, unless such professor or teacher shall have obtained special leave from the College to do so.

3. Notwithstanding the above regulation, the teaching of two branches, as in the following instances, may be undertaken by one individual without disqualification being incurred, viz., anatomy and practical anatomy; chemistry and practical chemistry; prac-

tice of medicine and clinical medicine; practice of surgery and clinical surgery; mathematics and mechanical philosophy; and, for the present, clinical medicine or clinical surgery may be taught in conjunction with any one of the other courses of education prescribed by the curriculum, by a physician or surgeon qualified according to the regulations of the College, and attached to a public hospital of the size which those regulations prescribe.(a)

Course of Study.

1. *Preliminary Instruction.*—Every candidate for the diploma of the Royal College must, either previously to or during his medical education, have received regular instruction in the elements of mathematics, and must have subsequently attended a course of mechanical philosophy of at least three months' duration, and of not fewer than sixty lectures. He must also have been well instructed in the Latin language.

2. *Professional Instruction.*—The candidate must have been engaged in attending the following separate and distinct courses of lectures during a period of not less than twenty-seven months, in which must have been included three winter sessions of six months' duration each:—Anatomy, two courses, six months(b) each; Practical Anatomy, twelve months; Chemistry, one course, six months; Practical Chemistry, one course, three months, the number of pupils in each class being limited to twenty-five; or Analytical Chemistry, one course, three months; Materia Medica and Pharmacy, one course, six months; Institutions of Medicine or Physiology, one course, six months; Practice of Medicine, one course, six months; Clinical Medicine(c), one course, six months, or two courses, (b) three months each, during the period of his attendance at the hospital where they are delivered; Principles and Practice of Surgery, two courses, (b) six months each; or, Principles and Practice of Surgery, one course, and Military Surgery, (d) one course, (b) six months each; Clinical Surgery, (c) one course, six months, or two courses, (b) three months each, during the period of his attendance at the hospital where they are delivered; Midwifery and Diseases of Women and Children, one course, three months; Medical Jurisprudence, one course, three months. Besides the above-mentioned courses of lectures, the candidate must have attended a course of instruction in practical pharmacy, at the laboratory of a surgeon or apothecary; or of a chemist and druggist recognised by the college on special application; or of a public hospital or dispensary; and he must produce evidence that he has been engaged in compounding and dispensing medicines for the space of six months. Those who produce certificates of having been, for the space of at least two years, private pupils or apprentices to regularly licensed medical practitioners, keeping laboratories for dispensing medicines, shall be held qualified in this branch of instruction.

3. The six months' courses delivered in Edinburgh must consist of not fewer than 110 lectures, with the exception of clinical medicine, clinical surgery, and military surgery. The three months' courses must consist of not fewer than sixty lectures. Two London courses of three months each, on any of the above subjects, will be taken as equivalent to one six months' course.

4. The candidate must also have attended, for twenty-one months, a Public General Hospital containing at an average eighty patients.

5. The following order of study is recommended as a guide to the student, though not absolutely enjoined:—

First Year.—Anatomy, Chemistry, Mechanical Philosophy, if not previously attended,—Practical or Analytical Chemistry, either in this or the second year. Second Year.—Anatomy, Practical Anatomy, Institutions of Medicine or Physiology, Surgery, Materia Medica and Pharmacy, either in this or the third year, Hospital. Third Year.—Practice of Physic, Clinical Surgery, Practical Anatomy, Practical Pharmacy, Hospital. Fourth Year.—Surgery or Military Surgery, Midwifery and the Diseases of Women and Children, Clinical Medicine, Medical Jurisprudence, Hospital.

6. The College strongly recommend to students to avail themselves of any opportunities which they may possess of attending

(a) In making the above concession respecting clinical medicine and clinical surgery, the College wish it to be understood, that this is done rather in consideration of the present state and arrangements of existing schools, than from their entertaining any doubt that the teaching of either of those branches, in addition to his hospital duties, would afford ample occupation for a teacher.

(b) The two courses must not be simultaneous.

(c) Clinical Medicine and Clinical Surgery must not be attended at the same time.

(d) The course of Military Surgery must be delivered by a professor of that branch in a university; or by a lecturer who, in addition to the other requisite qualifications, has served in the medical department of the army or navy; and the course must be of at least six months' duration, and comprehend not fewer than sixty lectures.

lectures on Botany, Natural History or Natural Science, Comparative Anatomy, and Pathological Anatomy, in addition to the courses of lectures which are absolutely required by the above regulations.

Exemptions.—Candidates who have commenced attendance on their medical classes, or at an hospital containing at least eighty beds, or who have entered into indentures of apprenticeship to a regular surgeon previously to the following dates, are entitled to the exemptions which are specified;—29th September, 1838.—1. From more than four sessions' attendance on a school of medicine. 2. From more than eighteen months of hospital attendance. 3. From more than six months of practical anatomy. 4. From the necessity of producing a certificate of age. September, 1833.—5. Also from practical pharmacy. 1st August, 1831.—6. Also from medical jurisprudence.

Examinations.—1. The days of examination are the first and third Tuesdays of every month. 2. No candidate will be admitted to examination before the termination of his last year's course of study. 3. Applications for examination must be made to the President at least two days previously to the day of examination. 4. Every candidate, on applying to the President, will be required,—First, To produce satisfactory evidence of his having attained the age of 21 years; and, secondly, To present a tabular statement, (for which a printed form will be furnished by the Conservator,) exhibiting the full amount of his professional education, as well as a separate list of all the classes, hospitals, and dispensaries, attended during each session of his studies. If he have been an apprentice, he shall also insert the name of his master, the date of his indenture, and the length of time for which he was bound. This statement, accurately filled up, must be attested by his signature.

Fees Payable by Candidates.—1. For a Diploma, ordinary candidates pay the sum of 7*l.* 5*s.* After the 17th April, 1850, ordinary candidates will pay 10*l.* [Apprentices of Fellows of the Royal College, bound for the freedom, pay 25*s.*; their other apprentices pay 2*l.* 16*s.* 6*d.* Assistant-Surgeons in the Navy, having previously obtained certificates from the College, pay 2*l.* 11*s.* 6*d.* Surgeons in the Navy, having obtained certificates from the College, pay 15*s.* 6*d.*] 2. For the Certificate of Qualification to act as Assistant-Surgeon in the Navy.—Candidates not having paid for any previous qualification pay 4*l.* 19*s.* 6*d.* 3. For the Certificate of Qualification to act as Full Surgeon in the Navy.—Assistant-Surgeons, who have already obtained certificates from the College pay 3*l.* 8*s.* 6*d.*; and those who have previously obtained the diploma of the College pay 2*l.* 17*s.* 6*d.* The sums stated above include all fees of every kind, and the officer is prohibited from receiving any.

ARMY MEDICAL APPOINTMENT.

The Royal College of Surgeons of Edinburgh are about to recommend one of their licentiates to the Director-General of the Army Medical Department, as a candidate for a medical appointment in the army. The recommendation will be given after comparative trial of merit, by such methods as the Board appointed to conduct it shall deem expedient. The trial may relate to any or all of the usual subjects of medical study; but it is especially necessary that the candidates should be well versed either in Comparative and Minute Anatomy, or in Zoology and Botany, these being prescribed by the Army Board as a condition of the recommendation. Each candidate must produce his diploma as licentiate, before the 1st February, 1851, to the Secretary of the College, together with a letter from the Secretary, or other accredited officer of the Army Medical Board, stating that he has conformed to the course of study prescribed by the Board.

MEDICAL SCHOOL, SURGEONS' HALL, EDINBURGH.

Winter Session, 1850-51.—The following courses of lectures on Medical Science, and all those delivered in the University, qualify for examination for the diploma of the Royal College of Surgeons. All the courses are for six months, if not otherwise specified. Classes open on Wednesday, November 6:—Chemistry, 10 a.m., Dr. George Wilson and Dr. Anderson; Surgery, 10 a.m., Dr. R. J. Mackenzie and Mr. Spence; Natural Philosophy, 12 noon, George Lees, LL.D.; Clinical Medicine, (Royal Infirmary, Tuesdays and Fridays, commencing Tuesday, Nov. 12,) 12 noon, Dr. A. Halliday Douglas; Clinical Surgery, (Royal Infirmary, Tuesdays and Fridays, commencing Tuesday, Nov. 12,) 12 noon, Dr. Dunsmure; Anatomy, 1 p.m., Mr. Struthers; Materia Medica and Dietetics, 2 p.m., Dr. Douglas Maclagan; Midwifery, 2 p.m.,

Dr. Campbell; Practice of Physic, 3 p.m., Dr. Alexander Wood; Analytical Chemistry, Practical Chemistry, (three months course,) 9 a.m. till 4 p.m., Dr. Wilson and Dr. Anderson; Practical Anatomy, 9 a.m. till 4 p.m., Mr. Struthers, assisted by Dr. A. Struthers; Anatomical Demonstrations, 4 p.m., Mr. Struthers; Royal Infirmary, at noon daily.

Fees.—For the first of each of the above courses, 3*l.* 5*s.*; for the second, 2*l.* 4*s.*; perpetual, 5*l.* 5*s.*; with the following exceptions:—Natural Philosophy, Practical Chemistry, and Practical Anatomy, 3*l.* 3*s.*; Anatomical Demonstrations, 2*l.* 2*s.*; Practical Anatomy, with Demonstrations, 4*l.* 4*s.*; Analytical Chemistry, 2*l.* a month, or 10*l.* for the winter session. Royal Infirmary: Perpetual ticket, 12*l.* 17*s.*; annual, 5*l.* 7*s.* 6*d.*; half-yearly, 3*l.* 5*s.* 6*d.*; quarterly, 1*l.* 13*s.*; Edinburgh Maternity Hospital, six months, 1*l.* 3*s.*

During the summer session, the following three months' courses will be delivered:—Natural Philosophy, Medical Jurisprudence, Midwifery, Operative Surgery, Practical Anatomy, with Demonstrations, Practical and Analytical Chemistry.

MARISCHAL COLLEGE AND UNIVERSITY, ABERDEEN.

REGULATIONS FOR GRANTING MEDICAL DEGREES.

Curriculum.—1. Four years of attendance on medical classes, of which two years may be passed at a recognised medical school; but two must be passed in a university, and one of them, at least, in this university. The attendance, in each year, must embrace not fewer than two medical classes of six months each, or one of six months, with two of three months each; but it will be held equivalent to one of these four years of attendance, first, in a master of arts, to have attended one medical class while passing through the curriculum of arts; or, secondly, in any other candidate, to have attended a medical class in each of two years, along with classes in the curriculum of arts. The attendance must include the following classes, each for a course of six months:—Anatomy, Practical Anatomy, Chemistry, Materia Medica, Institutes of Medicine, Practice of Medicine, Surgery, Midwifery; and the following classes each for a course of three months—Botany, Practical Chemistry, Medical Jurisprudence.

In regard to Practical Anatomy, every candidate must produce a certificate that he has dissected all the parts of the human body.

2. Eighteen months of attendance on the medical and surgical practice of an hospital containing not fewer than eighty beds, along with attendance for six months on lectures on clinical medicine, and for three months on lectures on clinical surgery.

3. Six months of compounding and dispensing medicines in the laboratory of an hospital, or of a public dispensary, or of a licensed general practitioner, or of a regular dispensing druggist.

Examinations.—4. There shall be two examination terms in each year, commencing on the second Tuesday of April, and the third Tuesday of October.

5. Every candidate who is not a master of arts, nor possessed of a diploma or a licence in medicine or in surgery from any authority established by law within the United Kingdom, shall undergo a preliminary examination on the Latin language (the book to be used being *Celsus de Medicinâ*); on the etymology of such terms in the medical sciences as are derived from the Latin and the Greek; and on the elements of mental science (the book to be used being Abercrombie "On the Intellectual Powers.")

The preliminary examination may be undergone, at the option of the candidate, at any examination term after the expiry of the first session of his attendance on medical classes.

6. Every candidate shall undergo two separate professional examinations: the first on the theoretical, and the second on the practical branches of medical science, as under, viz.:—First examination: Anatomy, Physiology, Botany, Chemistry, Materia Medica. Second examination: Medical Jurisprudence, Midwifery, Surgery, Practice of Medicine. Physiology will comprehend the doctrines of physics, illustrative of animal structure and function.

7. Any candidate that so desires shall be admitted to the two professional examinations at different terms, viz., to the first examination, at the end of his third year of medical classes; and, provided he be twenty-one years of age, to the second examination at the end of his fourth year. But no longer interval than two years will be allowed to intervene between the two examinations without a full renewal of the previous one.

8. In order to be received for examination, certificates must have been lodged with the Professor of Medicine, fourteen days before the commencement of the examination term, stating the age

of the candidate, what classes he has attended, and that he is of good moral character. Along with such certificates must be lodged a schedule, filled up in his own handwriting, containing a list of them, and specifying such additional branches of education, professional and general, as he may have studied.

REGULATIONS REGARDING PRACTITIONERS.

9. It will be held equivalent to the curriculum prescribed in the foregoing regulations, to have obtained a diploma or licence in medicine or in surgery, from any authority established by law within the United Kingdom, and to have subsequently attended medical classes in this University during one winter session.

The Senatus reserves to itself the right of exempting medical practitioners, of experience and good moral character, from residence at the University previous to examination.

10. Practitioners may be admitted, without residence, to examination for the degree of M.B., who have held a diploma or a licence in medicine or in surgery, for at least five years, and who produce satisfactory evidence of good moral character, and of having been engaged in practice during that period.

11. Practitioners may be admitted, without residence, to examination for the degree of M.D., who have held a diploma or a licence in medicine or in surgery, for at least ten years, and who produce satisfactory evidence of good moral character, and of having been engaged in practice during that period.

12. Practitioners who have held, for at least three years, the degree of M.B., obtained without residence, may receive the degree of M.D., upon producing satisfactory evidence of good moral character, and of having been engaged in practice during their possession of the inferior degree.

13. Practitioners who may be exempted from residence, shall undergo two separate professional examinations, which may be taken at the same, or at two different terms; the first examination to include anatomy, physiology, pathology, and therapeutics; the second, practice of medicine, surgery, midwifery, and medical jurisprudence.

CONFERRING OF DEGREES.

14. The degree of Bachelor of Medicine may be conferred on any candidate who has passed the prescribed examinations.

15. The degree of Doctor of Medicine may be conferred on any candidate, after passing the prescribed examinations, who is twenty-two years of age, or on any candidate who has been at least twelve months a Bachelor of Medicine of this University, after residing therein.

16. Graduates who have attended the several medical classes in this University will be charged no graduation fees; but from all others the usual fees will be required.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

REGULATIONS REGARDING THE GRANT OF THE DIPLOMA.

1. The Faculty of Physicians and Surgeons of Glasgow, having recently obtained from the Legislature the confirmation and better definition of their privileges, have carefully revised their regulations respecting the granting of licenses, and have made certain alterations therein. They have accordingly enacted the following laws, to be observed by all applicants for their license from and after this date.

2. **Preliminary Instruction.**—Every candidate for the diploma of this Faculty must either previously to, or during his medical education, have received regular instruction in the elements of mathematics; and must have subsequently attended a course of mechanical philosophy of at least three months' duration, and of not fewer than sixty lectures. He must also have been well instructed in the Latin language.

3. **Professional Instruction.**—The candidate must have been engaged in attending the following separate and distinct courses of lectures during a period of not less than twenty-seven months, in which must have been included three winter sessions of six months' duration each:—

1. Anatomy, two courses of six months; 2. Practical Anatomy, two courses of six months; 3. Surgery, two courses of six months; or, Surgery and Military Surgery, one course of six months' each; 4. Chemistry, one course of six months; 5. Practical Chemistry, one course of three months; 6. Theory or Institutes of Medicine, one course of six months; 7. Practice of Medicine, one course of six months; 8. Materia Medica, one course of six months; 9. Midwifery, and Diseases of Women and Children, one course of six months; 10. Clinical Medicine, (a) two courses of three months;

11. Clinical Surgery, (a) two courses of three months; 12. Medical Jurisprudence and Police, one course of six months; 13. Botany, one course of three months; 14. General Hospital, with at least eighty beds, twenty-one months; 15. Practical Pharmacy, at the laboratory of a surgeon or apothecary, or of a public hospital or dispensary, or at that of a chemist or druggist, recognised by the Faculty, six months.

4. Medical students who had commenced their education prior to the 7th June, 1830, are exempted from the necessity of producing evidence of attendance on practical anatomy, and clinical medicine and surgery; prior to the 4th April, 1831, on medical jurisprudence; and prior to the 8th November, 1831, on practical chemistry. Also, prior to the 3rd February, 1834, on botany, and on more than twelve months of a public hospital. Also, prior to 1st May, 1850, on more than eighteen months of a public hospital, or six months of practical anatomy. At which latter date, also, the alternative was permitted of an attendance of twenty-one months on a general hospital, or of eighteen months on such hospital, with a three months' course of lectures on the eye, and attendance for six months on an eye-hospital.

5. Besides attendance on all these branches, which is imperative, the Faculty recommend the following, viz.:

1. Lectures on the eye, and hospital for eye-diseases, a three months' course of lectures on the eye, with six months' attendance on an eye-hospital, containing at least twelve beds for operation-cases, will be considered equivalent to three months of a general hospital; 2. Lying-in hospital; 3. Hospital for syphilitic diseases; 4. Pathological anatomy; 5. Natural history and comparative anatomy; 6. Greek, French, German, and Italian.

6. Courses of six months must consist of not fewer than one hundred and ten lectures, and courses of three months of sixty lectures, with the exception of military surgery and clinical lectures. Two courses of three or four months, on any of the above subjects, will be taken as equivalent to one six months' course.

7. The above lectures must have been delivered by professors, or lecturers in a university or college, instituted by public authority, or by fellows of the Royal Colleges of Physicians or Surgeons, respectively, of London, Edinburgh, or Dublin, or of this Faculty, in any metropolitan or provincial school, either British or foreign, where there is a general hospital of more than eighty beds, —the lecturer and the school having been recognised by the Faculty or the Royal Colleges of Surgeons, of London, Edinburgh, or Dublin. (b)

8. The Faculty will not recognise any course of lectures by a professor or lecturer who teaches more than one of the branches included in their curriculum, or who, in addition to any one of these branches, teaches any branch, medical or general, not included in the curriculum; unless such professor or lecturer shall have obtained special leave from the Faculty. The following are exceptions, however, to this regulation: viz., lectures on Anatomy, and Practical Anatomy, may be delivered by the same individual; also on Chemistry and Practical Chemistry, or on Materia Medica and Botany, in schools where separate professors for these branches are not appointed. Practice of Medicine and Clinical Medicine may be taught by the same individual, and Surgery and Clinical Surgery; also Clinical Medicine or Clinical Surgery with any one of the other branches of education prescribed in the curriculum.

9. The candidate having been supplied with a schedule of the above curriculum, having filled it up and subscribed it, and satisfied the Registrar, by the exhibition of the necessary evidence, that his education has been conducted agreeably to the above regulations; also, that he is twenty-one years of age, and of good moral character, and having lodged in the hands of the Registrar the sum of 10*l.*, as the fee for his diploma, he shall be admitted to examination. The examination days shall be on the first and third Tuesdays of every month, but in special cases, at the discretion of the President, the candidate may be examined on another day; in which case he must, in addition to the ordinary fee, pay two guineas, which are not to be returned in case of rejection.

10. Each candidate shall be examined, partly orally, and partly by written question and answer, without the use of books. He shall also write, at the dictation of any of the examiners, two or more formulæ of prescription; and his knowledge of Latin shall be tested by translating a portion of a Latin author. Bones, other anatomical or surgical preparations, and specimens of materia medica, shall be used at the discretion of the examiners, for testing the knowledge of the candidate.

11. The Committee of Examiners being satisfied with these

trials, and having reported the same to the next meeting of Faculty, or to a general meeting of the examiners, which the President may call for the purpose, the candidate shall be entitled to his diploma, on taking and subscribing the declaration authorised by law, in place of extra-judicial oaths.

12. The unsuccessful candidates shall be remitted to their studies for a period of not less than three months after a first rejection, and six months after a second, and their names shall be concealed. The whole of the deposited fee shall be returned to an unsuccessful candidate on his first rejection, but on every future similar occasion, two guineas shall be retained, whether the examination may have been before the Faculty or any other licensing board, or when the candidate, prior to application for a surgical licence, may have been five years in practice.

13. With the view of ascertaining more perfectly the fact of the Glasgow students having attended the above courses, and their diligence whilst doing so, the Faculty will keep a book at their hall for registration, at stated times, of all medical students who may apply.

14. In this book, all Glasgow students who desire to possess the diploma of the Faculty must register their names, and place and date of birth, in their own hand-writing, and the classes they attend. The Faculty registrar shall cause to be entered in separate columns:—1st. The name of each individual; 2nd. The medical classes, hospitals, and dispensaries attended by each during the current session; 3rd. The names of the teachers. The registrar shall enter only such as apply to him personally; he shall examine all the tickets produced by each individual, and shall not register any classes for which tickets are not produced. This book shall be closed for registration, of the winter classes, on the 30th November in each year; and of the summer classes, at the end of the second week from their commencement. Sickness alone shall excuse irregularity of registration; but such excuse can only be sustained, and the registration effected, at a later period, on application to, and satisfaction of, the President and his Council.

15. At the close of each session, the students shall produce to the registrar the certificates of attendance they may have received from their respective teachers, the terms of which shall also be entered in the registration-book.

16. The Faculty require that every private lecturer, under pain of his certificates not being recognised by them, shall ascertain, at least twenty-five times in a six months' and twelve times in a three months' course, the actual attendance given by his pupils. That he shall do this by calling the name of each pupil at least once a week on uncertain days, marking his presence or absence in a regular roll book. That, in granting certificates of attendance, he shall specially mention, in words at length, the number of times the roll was called, and the number of occasions on which the pupil was present.

17. When the student shall have been absent more than five times in a six months', or three times in a three months' course, he will be specially examined on the particular branch where the attendance was defective; but when his absence shall exceed eight times in a six months' or four times in a three months' course, unless accounted for to the entire satisfaction of the Council of the Faculty, he shall not be admitted to examination until he has attended another course of lectures on such department of study.

18. For registration no fee shall be exacted from the student; he shall also be entitled, without fee, to a certified extract, at any time, from this register, attested by the signature of the registrar. Such certificates will be required from all candidates for surgical diplomas, in regard of that part of their medical education which they have received in Glasgow. Similar certificates will be required from any other schools in which registration-books are kept, relative to such portions of the course of study as the certificates may embrace, in place of the testimonials of the individual lecturers or teachers. Candidates educated at schools where no register is kept, must produce certificates from their respective professors or lecturers, both of their having entered the several classes at an early period of the course, and also of their having attended these classes with due regularity.

19. The Faculty having resolved to institute an examination in Latin, on the second and following Saturdays in December, annually, without expense to the students who may choose to avail themselves of it, such students as have been registered may apply, and on giving a satisfactory exhibition of their proficiency in these branches, will have such examination entered in their registration, and shall not be again called upon to give evidence of such proficiency at any future examination. Students who have taken a Degree in Arts, from a University of Great Britain or Ireland, will also be exempted from these examinations.

Note.—The licentiates of the Faculty of Physicians and Surgeons of Glasgow are, by the late Act of Parliament in their favour,

(a) These not to be attended at the same time.

(b) The only exception to this rule relates to lecturers on Chemistry, Practical Chemistry, and Botany, who may be non-professional men, but must be specially recognised by the Faculty.

placed on precisely the same footing throughout the British Empire as the licentiates of the Royal College of Surgeons of Edinburgh; and consequently, as to the privilege of surgery, as the members of the Royal College of Surgeons of England. Also, by special letters, those holding the diploma of the Faculty are admitted to the same privileges, in respect of the Army and Navy, and East India Company's medical services, as those holding the diplomas of the Royal Colleges.

UNIVERSITY OF ST. ANDREWS.

The following are the Official Regulations for Granting Medical Degrees:—The Senatus Academicus having determined that no degree shall be conferred until it has been ascertained by a minute and scrupulous examination, conducted by the professor of medicine, in conjunction with other distinguished members of the Medical Profession, that the candidates are in every respect qualified to practise with advantage to the community, have adopted the following regulations:—The candidate must produce evidence of unexceptionable moral character, and, before being admitted to examination, must subscribe a declaration that he is twenty-one years of age. He must have had a liberal and classical education, and if not in the possession of the degree of A.M., must be ready to undergo an examination as to his proficiency in the Latin language. He must produce certificates that he has regularly attended lectures delivered by professors in some University, or by resident fellows of the Royal Colleges of Physicians or Surgeons of London, Edinburgh, Glasgow, Aberdeen, or Dublin, for at least four complete winter sessions or three winter and three summer sessions, on the following branches:—1. Anatomy, two courses, of six months each; 2. Practical Anatomy, twelve months; 3. Theory of Medicine, or Physiology, one course of six months; 4. Chemistry, one course of six months; 5. Practical Chemistry, one course of three months; 6. *Materia Medica* and Pharmacy, one course of six months; 7. Surgery, one course of six months; 8. Clinical Medicine, one course of six months; 9. Practice of Medicine, one course of six months; 10. Clinical Surgery, one course of six months; 11. Midwifery and diseases of Women and Children, one course of three months; 12. An apprenticeship, or six months' attendance in the shop of an apothecary, or in the laboratory of a public hospital or dispensary; 13. Attendance at a public hospital, containing not less than eighty beds, for at least eighteen months. These regulations will be invariably observed, except when the candidate is possessed of a surgeon's diploma or license from the Colleges of London, Edinburgh, or Dublin, or the Faculty of Physicians and Surgeons of Glasgow, or a license from the Apothecaries' Company, in which case he has merely to present such diploma or license previous to examination for M.D. Each candidate, after he shall have afforded sufficient evidence to the University as to his course of study, and paid the fee of graduation (25*l.* 3*s.*) will be admitted to examination, which must be conducted before the Senatus Academicus, on the first Thursday in May, or the first Thursday in August.

IRELAND.

The medical session in Ireland may be said to commence fully one month after that of the English schools. The dissecting-rooms are, generally speaking, opened on the 1st October, and in the private schools especially the lecturers and demonstrators of anatomy are in constant attendance during this month, so that an excellent opportunity is offered to the industrious pupil of making considerable advances in his anatomical studies before he becomes involved in the numerous and complicated duties which the winter session brings on him.

The several corporate institutions to which a medical faculty is attached, as well as the less ambitious educational bodies which do not boast the honours of a Royal charter or collegiate foundation, give timely notice, in the middle and end of October, of the commencement of their winter courses; and, as it can only be attempted, in the present notice of the Irish schools, to give a general idea of the arrangements of the several institutions, we must refer to this source all who are anxious for detailed information. We proceed, therefore, to give our readers a sketch of the principal educational establishments of Ireland, and their regulations with regard to degrees and diplomas.

The University of Dublin confers two degrees in Medicine, the M.B. and the M.D. The former is that which, for all practical professional purposes, is the more important of the two; the latter, though conferring higher collegiate dignities and university privileges, being seldom proceeded to, except by those who desire to possess the

right of voting at the election of the University representatives to serve in the Imperial Parliament, which is the only substantial advantage which the M.D. acquires over his less ambitious junior, unless some of our friends should consider that the rich scarlet robe, pink silk facings, and hood of the M.D.'s academic costume constitute an equivalent for the high additional collegiate fees and extravagant stamp-duties. In all essential points, however, the M.B.T.C.D. is the degree of this University, which claims the student's particular attention. The possessor of it is legally entitled to practise medicine, to present himself as a candidate for all important medical offices, and is furthermore, by universal usage and an acknowledged courtesy, styled and addressed as "Doctor." Be it understood, however, that he is in no way privileged to sign M.D. after his name, the initials of his own degree being, for every purpose, equivalent.

Candidates for the degree of M.B. are required to possess the degree in arts, or A.B., of this or some other University, and to have passed at least four medical years in attendance on certain prescribed courses of lectures, in addition to producing evidence of having followed clinical studies in hospital for a stated period. By recent very satisfactory arrangements effected by the Board of Trinity College, the student can prosecute his studies in arts and medicine simultaneously, so as to take both degrees (that of A.B. and that of M.B.) at the first "commencements" next after the termination of his four academic years, and the passing of the requisite examinations, by which, as compared with former regulations, a period of six months, with its attendant expenses, is saved to every diligent student. The student, therefore, who desires to obtain his medical degree at Trinity College, Dublin, has first to establish his connexion with the University, by passing an entrance-examination in a prescribed course of Greek and Latin classics, when he is duly matriculated and enrolled as an undergraduate. Unlike Oxford or Cambridge, the Irish *alma mater* allows the option of residing in any locality which the student may choose; accommodation for a considerable number being provided within the College walls, but residence therein is not enforced. This is a point which we mention particularly, because of its importance to students who may be prosecuting surgical and medical studies *pari passu*, and may wish to become hospital *interns*. The young undergraduate has now to prepare for two academic examinations in each of his four years; the subjects are specified, and consist of a generally judicious mixture of classics and science. The last examination of his fourth year is by far the most important, and is called his degree examination. With two examinations in the year, the student has likewise to combine attendance on some of his medical courses. The order in which these are to be taken out is completely at his own option, the only restriction being, that at least one, and not more than three, be followed in each of his four years. We shall enumerate the courses, in the order in which we think it would be most judicious to arrange them; and we shall attach to each the name of the lecturer:—Botany, a summer course, Professor Allman; Anatomy and Physiology, demonstrations and dissections, Professor Harrison and his assistants; Chemistry, Professor Apjohn; *Materia Medica*, Professor Osborne; Institutes of Medicine, Professor Law; Practice of Medicine, Professor Banks; Surgery, Professor Smith; Midwifery, Professor Montgomery. Attendance on one course of each of the above lectures is required from all students; in addition to which, they are required to follow, during nine months, the clinical instruction at Sir Patrick Dun's Hospital, which is the *clinicum* of the University, as well as of the College of Physicians. This hospital is, by the regulations of its foundation, solely devoted to medical diseases; in consequence of which, the heads of the University, by a recent regulation eminently characteristic of the wise views of the Regius Professor, have required from all candidates certificates of attendance on at least nine months' practice of a medico-chirurgical hospital, which it is at the student's option to select.

On the completion of his studies, in arts as well as in medicine, the student now finds himself called on to prepare for two very serious ordeals, which, however, a diligent attendance on the several Professors, and his own carefully conducted reading, will enable him to surmount without difficulty, he may even so judiciously arrange, as to allow an interval of two to three months between his Arts Degree examination and that in medicine, by which he will be the better enabled to direct his energies in an especial manner to the latter. His examiners will be the Professors, who have watched his career with attention, in addition to whom the Regius Professor of Physic (in the present instance Dr. Wm. Stokes) acts as President, usually taking an active part in the proceedings, and conducting a considerable share of the examination. Every student will be naturally anxious to learn what are the expenses entailed by his graduation in this University. The collegiate fees amount to 15*l.* per annum, exclusive of incidental

charges; the fees for each course of lectures are 3*l.* 3*s.*; but the Board, by recent regulations, allows each undergraduate the privilege of attending one course with each Professor gratuitously. The fees for Sir P. Dun's Hospital and clinical instructions amount to 12*l.* 12*s.*, while the Meath Hospital has set the example to all others, of allowing a diminution of about one-fourth to all undergraduates; the fee for nine months' attendance would be consequently about 6*l.* 6*s.* The further expenses to be incurred are those of the College fees, for the degrees of A.B. and M.B. amounting respectively to 11*l.* 15*s.* The stamp-duty for the A.B., 3*l.* 3*s.*, for the M.B., 10*l.* 10*s.* It is not required, however, to pay the stamp-duty until the testimonial is wanted for some official purpose. The degree of M.B.T.C.D., as we stated, entitles the possessor to all the privileges of practice and candidature for office, without any additional examination or expense for a license *ad practicandum in medicina*, such as is required by the University of Cambridge, while those anxious to proceed to the higher degree of M.D., are permitted to do so, when a period of three years has elapsed since the M.B. was conferred. The exercises for this degree are understood to be *pro forma*, and the fees amount to 22*l.* The principal additional honour is that of voting at the University elections.

The institution which is entitled to rank next in point of precedence, as enjoying the dignity of a University, is that of the Queen's University in Ireland, incorporated by Royal charter in the year 1850. The Queen's University, in Ireland, comprises three colleges, viz., those of Cork, Belfast, and Galway, each possessing a distinct medical establishment provided with all educational requisites; and, when taken together, they constitute the second Medical Faculty of Ireland, the University conferring the degree of M.D. on all candidates who have complied with certain specified regulations, and have duly passed the examining Board appointed by the Senate.

The studies in arts and medicine can be pursued simultaneously, and immense advantages are offered to the industrious student, who, as many have already done, may succeed in obtaining double scholarships; that is to say, one in arts or science, and one in medicine. The emoluments vary between 24*l.* and 40*l.* The University is governed by a Senate, which holds its sittings in Dublin, and it is generally understood that the degrees will be conferred there also by the same body. Each college possesses its own medical staff, and, in order to conduct the examinations in a fair spirit towards each of these members of the University, as well as to give a guarantee to the public of the efficiency of the system, a separate board of examiners has been recently appointed, on which the colleges are severally represented by professors, in addition to whom certain eminent physicians of the Dublin school have been selected to aid in conducting the examinations. This board of examiners will hold its first sitting on the 9th October, when the first candidates for the medical degree of this University will present themselves.

There cannot be a doubt that the system of education of the Queen's Colleges is eminently entitled to success, and deserves in the highest degree the confidence of all aspirants to medical honours in Ireland. The course of education in arts and sciences has been selected with the most scrupulous care, and evidently with especial reference to the great wants of the young man who enters on active life in these days of industrial education. The modern languages are judiciously mixed with the study of chemistry and physic, while mathematics and classics likewise receive a due share of attention.

The King and Queen's College of Physicians in Ireland has recently undergone changes in some of its regulations which betoken an extremely wise and judicious spirit of reform in those who possess a directing influence over its councils. The handsome buildings and liberal endowments of the College bear enduring and honourable testimony to the liberality of Sir Patrick Dun, one of its presidents in the last century. In order completely to understand the arrangements of the College of Physicians in Ireland, it will be necessary for the student to bear in mind, that the "School of Physic," so-called, comprises the educational staff, not only of the College, but also of the Dublin University, four of the professors, viz., those of anatomy and physiology, botany, chemistry, and surgery being on the foundation of Trinity College, while the remainder are on the foundation of the College of Physicians. We purposely omitted any mention of this fact in connexion with the curriculum of the University of Dublin, which we are anxious to present to the student in as simple and intelligible a form as possible. It may, however, not be uninteresting for him now to learn, that the professors are appointed by the two separate institutions, which, however, have been long associated in their educational labours, and work together most harmoniously and efficiently.

It may be as well to state further, that all the lectures, save the

clinical instruction of Sir P. Dun's Hospital, are now delivered within the walls of the University Medical School,—an arrangement by which the comforts of the students are materially enhanced. The College of Physicians grants to all candidates complying with its prescribed educational regulations, a licence to practise medicine, equivalent, in most respects, to the medical degree of a university, the holder being by courtesy entitled to the privilege of being addressed as "Doctor." The higher honours of the College, and the right of holding any of its offices, are enjoyed by Fellows who are elected from those licentiates of three years' standing who possess the M.D. of Oxford, Cambridge, or Dublin, or have equivalent university standing and medical education. The examination is conducted on two separate days by the professors of the School of Physic, aided by the Regius Professor of the Dublin University. Bachelors of Medicine are required to present themselves on only one day.

The Royal College of Surgeons in Ireland confers a licentiate and fellowship, the latter, of course, being the higher honour, and alone conferring the privileges of holding collegiate office, or aiding in the councils. The College of Surgeons of Ireland is an educational as well as a corporate institution, possessing a complete medical staff, with professors in each department. Its regulations, however, are, generally speaking, of a liberal nature, and such that certificates of attendance on all duly organized private schools are received as equivalent to those of its own professors; and, in order to insure a fair and impartial examination, the Court of Examiners, which is totally distinct from the professional circle, and for which every professor is *de facto* disqualified to become a candidate, is selected from amongst the most eminent of the faculty in their several departments, who are completely unconnected, during the period of holding such office, with any educational establishment, the staff of medical and surgical hospitals always excepted. Election to the Court of Examiners is annual, but re-election, except for sufficient reasons to the contrary, appears to be the general practice.

[Full particulars are given in another column of the Rules and Regulations.]

The candidate, having fulfilled these conditions, is now examined on two several days, by a court consisting of seven examiners, chosen as we have stated above. The subjects of Anatomy, Physiology, Practice of Medicine and Midwifery, Materia Medica, and Medical Jurisprudence, are represented by one examiner to each group, as we have arranged them; while the surgical side of the court comprises three special examiners, generally chosen from the most eminent of the staff of the Dublin hospitals.

The Apothecaries' Hall of Ireland constitutes the next medical corporation. Like the last-named body, this is also an educational establishment, possessing a complete medical school, with separate theatre and dissecting-rooms, and lectures in the several departments of medical science. Candidates for the licence of the Apothecaries' Company in Ireland are obliged, in addition to having served, during a period of five years, an apprenticeship in the establishment of a qualified apothecary, to attend the several courses of lectures delivered in the school of medicine, which is under the direction of the Hall, or in some other institution recognised by its Directors. Previous to entering on apprenticeship, an examination in a prescribed course of classics, science, and modern languages, is undergone by each student, who, at the termination of this period, has to submit to the ordeal of a final examination in the several subjects of the courses of lectures which he has attended. The Professors of Hall (so styled) are those of Anatomy and Physiology, Demonstrations and Dissections, Botany, Materia Medica and Pharmacy, Practice of Medicine and Midwifery.

In addition to the medical schools of the above-named corporate institutions, we have to enumerate the private schools, which, from the energy and ability with which they have always been worked, depending as they do entirely for success on the zeal and intelligence of the lecturers in the several departments, constitute very formidable rivals of their more dignified competitors, even though unprotected by the influence of a Royal Charter, and enjoying, in the majority of instances, no special foundation or endowments. At the head of these stand the *Carmichael*, formerly the Richmond Hospital school of medicine, the name of which has been changed to honour the memory of one who, in his lifetime, devoted his best energies and abilities to the advancement of its interests, and at his death testified by very large and liberal endowments his anxious desire to perpetuate its existence, and increase its utility and powers. Taken in conjunction with the Richmond, Hardwicke, and Whitworth Hospitals, the three in fact composing one great medico-chirurgical establishment, this school forms a most complete medical educational institution. The hospital, dissecting-rooms, theatres, and museums, are in the closest vicinity to each other, and the student finds within a radius

of five minutes' walk all that is requisite for completing his studies until the approaching day of final examination calls him to the other side of the Liffey, and introduces him to the portals of the Royal College of Surgeons.

The other private schools are now limited to those situated in Peter-street,—rival establishments, placed side by side in the same street, yet working in all harmony and good-fellowship. *The Original School of Medicine* claims many years of seniority over its neighbour, *The Dublin School of Medicine*, and, indeed, its foundation, in 1810, preceded that of any other private school in Ireland. Each possesses a distinct and complete staff of lecturers on every branch of medical science; the *Original* has long enjoyed a high reputation for the attention bestowed on practical anatomy.

The hospitals of Dublin may be divided into the general Medico-Chirurgical and the Special. The former comprise *Steevens's Hospital*, an institution accommodating 200 patients. Surgeons, Messrs. Cusack and Wilmot. Physicians, Sir H. Marsh, Dr. Croker, beside assistants, resident physicians and surgeons, clinical clerks, etc. *The Richmond Hospital*, which, with the Whitworth and Hardwicke, form, as we said, but one medico-chirurgical establishment. Surgeons, Messrs. Adams, Hutton, M'Donnell, Hamilton, Smith. Physicians, Corrigan, Banks, M'Dowel, Gordon. *The Meath Hospital*, so well known by the researches of Graves and Stokes. Surgeons, Messrs. Crampton (Sir P.), Porter, sen., Porter, jun., Collis, Smyly, Rynd. Physicians, Stokes, Lees. *Jervis-street Hospital*: Surgeons, O'Reilly, Ellis, Stapleton, Harrison, Banor, Hughes, Power. Physicians, Neligan, Hughes. *Mercer's Hospital*: Surgeons, Tagert, Jameson, Butcher, Bevan. Physician, Osborne. *St. Vincent's Hospital*: First medical adviser, Dr. O'Ferrall; second ditto, Dr. O'Bryen Bellingham. *City of Dublin Hospital*: Surgeons, Jacob, Hargrave, Tuffnell, Geoghehan. Physician, Benson.

Under the head of Special Hospitals we shall class *Sir Patrick Dun's*. This, as we have already stated, is purely for the reception of medical cases, and constitutes the clinique as well of the Dublin University, as of the College of Physicians, the hall of which forms part of the hospital building. Attendance on this hospital is enforced only by the University. Its staff of clinical Professors is chosen principally from those of the *School of Physic*. The next Special Hospital is the *Rotundo Lying-In or Maternity Hospital*, the first and most extensive of the kind in Europe, and forming an everlasting memorial of the genius, high-minded devotion, and enthusiasm of its founder, Dr. Bartholomew Mosse, an Irish physician of the middle of the last century. The clinique of this fine hospital is directed by Dr. Shekleton, now the resident Master: this office is held for a period of seven years, and has been successively filled by very eminent Irish obstetric practitioners. With the Master, are associated two resident assistants, who take part in communicating instruction to the pupils.

The Rotundo Lying-in Hospital grants a diploma in Midwifery, which enjoys a very high reputation. Candidates are required to attend the practice and lectures of the hospital, either as interns or externs, during a period of six months, and to undergo a rigorous examination. Comfortable accommodation is provided for about six intern pupils, who enjoy numerous advantages in the way of practice. The fee is 20*l.* for interns, 10*l.* 10*s.* for externs. The former are almost invariably English or American students, and a vacancy is always waited for with considerable anxiety. Four institutions of less note deserve, however, to be mentioned, as we can state, that extern midwifery practice is conducted with great ability and zeal: they are, the *Combe Lying-in Hospital*, the *Anglesey*, the *South-Eastern*, and the *Western*. Many names are to be found on the books of each; and students, in a great many instances, avail themselves of the proximity of these establishments to their places of residence or study, in preference to resorting to the larger and more celebrated institution,—which, however, is the one we would recommend our young friends to select; they would do well, however, to take the summer session, and to keep themselves, during their six months of midwifery practice, as free from other business as possible. Dublin possesses lunatic asylums of considerable magnitude; but it is to be regretted that in no instance have the Government, under whose control these institutions exclusively are, attempted to turn them to purposes of clinical instruction.

Of the special cliniques which Dublin enjoys in a high condition of perfection, we would signalise that of the Meath Hospital, especially Dr. Stokes's course on Diseases of the Chest; the surgical and general pathological instruction of the Richmond. The Museum of this Institution is too well known to need comment from us. Dr. Jacob devotes his time specially to an ocular clinique, with operations, at the City of Dublin Hospital, which Mr. Wilde has recently established,—a very complete Ophthalmic Hospital and Dispensary on the site of the old Park-street School of Medicine. St. Mark's

Hospital contains twenty beds, a very large dispensary, lecture-room, etc. Operations principally on Wednesday. At the City of Dublin Hospital, Mr. Tuffnell delivers a course of military surgery, free to pupils of this establishment. We may also notice Dr. Lyon's course of microscopic anatomy and pathology, which commenced last winter, and will, we believe, be continued during the ensuing session.

The student attending lectures in the Dublin School enjoys many advantages; his anatomical studies are greatly facilitated by a liberal and constant supply of subjects. Many libraries are at his command. Those of the Royal College of Surgeons, Sir Patrick Dun's Hospital. The library of Trinity College only to Graduates, however. Well furnished Museums are freely opened to his inspection, and he has the privilege of attending the meetings of the Surgical and Pathological Societies, the latter of which grants gratuitously to all students who attend a certain number of its sittings, a handsome testimonial bearing the signature of the most eminent member of the Irish Faculty. These advantages have not been slow to be recognised, and the increasing number of English, Welch, and American students, testify most fully that the labours of the Irish school have met a commensurate reward in a widely-extended reputation.

QUEEN'S UNIVERSITY, IRELAND.

COURSES OF INSTRUCTION, SCHOLARSHIPS, DEGREES, ETC.

Matriculation Examination.—Candidates for matriculation will be required to pass an examination in the following subjects. The Greek and Latin languages. The following books in each, at the option of the student:—Homer, the first four books of the *Iliad*; Xenophon, the first three books of the *Anabasis*; Lucian, Walker's *Selections*; Virgil, the first six books of the *Æneid*; Horace, the first book of the *Odes*, and the first book of the *Satires*; Sallust, the *Conspiracy of Catiline* and *Jugurthian War*; Cæsar, the fifth and sixth books of the *Gallie War*. Arithmetic and Algebra:—The first four rules of arithmetic, proportion, vulgar and decimal fractions, extraction of the square root, addition, subtraction, multiplication, and division of algebraical quantities; proportion, simple equations; geometry, the first and second books of Euclid; geography, outlines of modern geography. This examination may be passed at the commencement of the first, second, or third years of medical study; but only the matriculated student can compete for scholarships and prizes.

Faculty of Medicine.—Candidates for the degree of M.D., from the Queen's University in Ireland, must produce evidence of full age of twenty-one years, and of having pursued the following course of study:—First year, anatomy and physiology, chemistry, French or German, six months each; natural philosophy, botany, three months each. Second year, anatomy and physiology, *materia medica*, practical anatomy, six months each; practical chemistry, three months. Third year, surgery, midwifery, clinical surgery, six months each; comparative anatomy, three months. Fourth year, practice of medicine, medical jurisprudence, clinical medicine, six months each.

In addition to the foregoing classes, candidates for the degree of M.D. will be required to attend a general hospital during twenty-four months, or a general hospital during eighteen months and a dispensary during six months, and also a course of practical pharmacy for three months. Candidates will be required to attend one-third, at the least, of the above classes in some one of the Queen's Colleges in Ireland. Graduates in arts will be admitted to examination for the degree of M.D., two years after having obtained the degree of A.B., provided they shall have complied with the above regulations, except that which requires four years' professional study. The fees payable by matriculated students in medicine, on behalf of the College, will be, first year, (including the Matriculation fee,) 3*l.*; second, third, and fourth years, each 2*l.*; degree of M.D., (exclusive of stamp-duty,) 5*l.*; non-matriculated students pay, on behalf of the College, 5*s.* for each course of lectures.

Class Fees.—Anatomy and physiology, 3*l.*; each subsequent course, 2*l.*; Comparative Anatomy, 1*l.* 10*s.*; Practical Anatomy, 3*l.*; Practical Chemistry, 3*l.*; Natural Philosophy, 1*l.* 10*s.*; Botany, 1*l.* 10*s.* For all the other classes, first course, 2*l.*; each subsequent course, 1*l.*

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The Winter Session, 1851-2, commences on Monday, the 27th of October, at one o'clock. Anatomy and Physiology, by Dr. Jacob, at 1 o'clock every day; Practical and Descriptive Anatomy, Drs. Hart and Macdonnell, at 12 o'clock every day; Theory and

Practice of Surgery, Mr. Porter and Mr. Hargrave, at 3 o'clock on Tuesdays, Thursdays, and Saturdays; Theory and Practice of Medicine, Dr. Benson, at 4 o'clock on Mondays, Wednesdays, and Fridays; Chemistry, Dr. W. Barker, at 2 o'clock on Mondays, Wednesdays, and Fridays; Materia Medica and Pharmacy, Dr. Williams, at 2 o'clock on Tuesdays, Thursdays, and Saturdays; Midwifery and Diseases of Women and Children, Dr. Beatty, at 4 o'clock on Tuesdays, Thursdays, and Saturdays; Medical Jurisprudence, Dr. Geoghegan, at 11 o'clock on Tuesdays, Thursdays, and Saturdays; Botany and Vegetable Physiology, Dr. A. Mitchell in spring and summer; Practical and Pharmaceutic Chemistry, Dr. W. Barker, at 3 o'clock on Mondays, Wednesdays, and Fridays; Comparative Anatomy and Zoology, Dr. Jacob, at 1 o'clock every day to November 12; Dissections, Dr. Leeson, and Mr. Labatt, all day.

The fee for each of the above courses is two guineas, except Comparative Anatomy, which is free to registered pupils.

Practical instruction on Operative Surgery is given by the Professors of Surgery, separate from the surgical lectures, to students, practitioners, and medical officers of the Army and Navy requiring it. Fee, 5*l.* 3*s.*, subjects included and instruments provided. The Professor of Chemistry gives a separate course on Practical and Pharmaceutic Chemistry, and admits operating pupils into the laboratory. The dissections are conducted by the Professors of Practical and Descriptive Anatomy, assisted by the Demonstrators, and are continued from sunrise to sunset every day, except Sundays. Pupils attending the lectures on Midwifery and Diseases of Women and Children are admitted to the practice of a recognised midwifery hospital on payment of a fee of 4*l.* 4*s.* Private instruction, preparatory to the examination for the diploma in Surgery is given in the College by the Demonstrators. Fee for six months, 5*l.* 5*s.*

The Summer Session will commence on the 6th of May, during which full courses of lectures on the following subjects will be delivered, viz., on Chemistry, Practical and Pharmaceutic Chemistry, Materia Medica, Midwifery, Medical Jurisprudence, and Botany. Instruction in Operative Surgery, by the Professors of Surgery, will be given during the same period, and dissections under the direction of the Demonstrators will also be carried on.

For further information respecting the course of instruction at the College, application should be made to one of the Professors, or to the Registrar, Mr. Boylan.

Bye-laws relative to Education and Qualifications for the Letters Testimonial and the Fellowship of the College.

1. *Registration of Pupils.*—Every person requiring to be registered as a pupil on the College books shall, if the Council think fit, be so registered, if he shall have laid before the Council a receipt showing that he has lodged to the credit of the President, and for the use of the College, in the Bank of Ireland, a registry fee of five guineas.

2. *Qualifications of Candidates for Letters Testimonial.*—Every registered pupil shall be admitted to an examination for letters testimonial, if he shall have laid before the Council the following documents:—*a.* A receipt showing that he has lodged a sum of twenty guineas in the Bank of Ireland, to the credit of the President, and for the use of the College. *b.* A certificate from the Examiners of the College that he has passed an examination as to his acquaintance with the Greek and Latin languages. *c.* Certificates showing that he has been engaged in the study of his profession for not less than four years, three of which shall have been passed in attendance on lectures or hospitals in Dublin, London, Edinburgh, or Glasgow. *d.* Certificates of attendance on an hospital recognised by the Council, where clinical instruction is given, during three years. *e.* Certificates of attendance on three courses of lectures on Anatomy and Physiology, three courses of lectures on the Theory and Practice of Surgery, and of the performance of three courses of dissections, accompanied by demonstrations; also certificates of attendance on two courses of lectures on Chemistry, or one course of lectures on General, and one on Practical Chemistry; one course of lectures on Materia Medica; one course of lectures on the Practice of Medicine; one course of lectures on Midwifery; and one course of lectures on Medical Jurisprudence.

3. *Qualifications of Candidates for the Fellowship.*—Every

registered pupil or licentiate shall be admitted to examination for the fellowship, if he shall have laid before the Council the following documents:—

a. A receipt, showing that he has lodged in the Bank of Ireland, for the use of the College, the sum of ten guineas, in case he is a licentiate, or of twenty-five guineas in case he is a registered pupil; provided in either case he intends to reside beyond ten miles from Dublin. Should the candidate intend to reside in Dublin, or within ten miles thereof, he shall lodge, if he is a licentiate, twenty guineas; or, if he is a registered pupil, thirty-five guineas. Fellows entering on the country list, who may subsequently settle as practitioners in Dublin, or within ten miles thereof, shall pay ten guineas to the College. *b.* A certificate that he is twenty-five years of age. *c.* A certificate that he is a Bachelor of Arts of some University, or that he has been examined in such manner as the Council may from time to time direct, with a view to ascertain that he has obtained a liberal preliminary education. *d.* A certificate, signed by two or more fellows of the College, of good general conduct during his professional education. *e.* Certificates that he has been engaged in the acquisition of professional knowledge for a period of not less than six years; during three of which he must have studied in one or more of the schools and hospitals of Dublin, recognised by the Council. He may have studied for the other three years in any school or schools of the United Kingdom which shall be approved by the Council, or in any foreign school of repute. It is also required that the candidate shall have had opportunities of practical instruction, as house-surgeon or dresser, in a recognised hospital. *f.* Certificates of attendance on the several courses of lectures required to be attended by candidates for letters testimonial, together with one course of lectures on comparative anatomy, one course of lectures on botany, and one on natural philosophy. *g.* A thesis on some medical subject; or clinical reports, with observations of six or more medical or surgical cases taken by himself. *h.* Candidates of the required age, who shall have taken the degree of Bachelor of Arts in a British or Irish University, and have complied with the foregoing regulations in other respects, will be admitted to examination at the end of five years of professional study, of which three years must have been passed in one or more of the recognised schools or hospitals of Dublin. *i.* Licentiates of the College, who may not be able to show that they have followed the course of study specified in the preceding regulations, may, at the expiration of ten years from the date of their diploma, be admitted to the examination required for the fellowship, provided they produce such evidence as shall be satisfactory to the Council that they have conducted themselves honourably in the practice of their profession.

4. *Qualifications of Candidates for the Diploma in Midwifery.*—Any fellow or licentiate of the College shall be admitted to an examination for the diploma in midwifery, upon laying before the council the following documents:—

a. A certificate, showing that he has attended one course of lectures on midwifery, and diseases of women and children, delivered by a professor or lecturer, in some school of medicine or surgery recognised by the council. *b.* A certificate, showing that he has attended the practice of a lying-in hospital, recognised by the council, for a period of six months; or the practice of a dispensary, for lying-in women and children, recognised by the council, and devoted to this branch of surgery alone. *c.* A certificate, showing that he has conducted thirty labour cases at least. Candidates for the midwifery diploma shall be publicly examined on the organisation of the female; the growth and peculiarities of the foetus; the practice of midwifery, and the diseases of women and children; and if approved of, shall receive a license or diploma certifying the same.

5. *Conduct of the several Examinations.*—*a.* *Examination of Candidates for Letters Testimonial.*—The examinations of candidates for letters testimonial shall be held from time to time, as the Council may direct. Five examiners at least shall be present at each examination. Each candidate shall be examined upon anatomy, physiology, the theory and practice of medicine and surgery, Materia Medica, and the form of prescription, and shall perform such surgical operations or dissections, or explain such anatomical and pathological preparations as the examiners may require. Candidates whose answering shall be found insufficient will not be allowed to present themselves a second time, until after the expiration of six months from their first examination.

b. *Examination of Candidates for the Fellowship.*—The examinations for the Fellowship shall be held at stated periods, as the Council may direct. Five examiners at least, together with the President, or Vice-President, and two members of the Council, shall be present at each examination. Each candidate shall be examined on two days, with such an interval as the Council may appoint. The subjects of the first examination shall be Anatomy and Phy-

(a) Resolution passed by the Council on the 23rd of January, 1846:—“Candidates for letters testimonial who shall have attended metropolitan hospitals during three winter sessions of six months each, shall be considered to have performed sufficient hospital attendance if they shall be able to produce certificates of regular daily attendance during a like number of months at a county infirmary or provincial surgical hospital, containing at least fifty beds, provided the surgeons of such infirmaries or hospitals shall make returns to this College in the months of May and November in each year, of the number of students so attending.”

siology (human and comparative); those of the second, Pathology, Therapeutics, the Theory and Practice of Medicine and Surgery, and such other branch of medical science as the Council may from time to time direct. In addition to the oral examinations, candidates shall be required to give written answers to written or printed questions, to be delivered to them in such manner as the Council may direct. In the anatomical examination, the candidates shall also perform dissections and operations on the dead body. Candidates whose answering shall be found insufficient, will not be allowed to present themselves a second time, until after the expiration of one year from their first examination. *c. Examination in Midwifery.*—The examination of candidates for the diploma in midwifery shall be conducted by the examiners in midwifery and the examiners in anatomy and physiology. Such examinations shall be held from time as the Council may direct. Should a candidate be rejected, he shall not again be admitted to an examination until a period of three months shall have elapsed; and he shall then be obliged to produce satisfactory evidence of his having been engaged in the study of this branch of surgery subsequent to such rejection.

Classical Examination, Registration, and Matriculation.—Registered pupils are admitted to answer the classical examination at any period previous to the final examination for letters testimonial. Students who are not registered pupils are also admitted to answer the classical examination upon payment of a matriculation fee of five shillings, but they are not enrolled as registered pupils, or entitled to the privileges reserved for such pupils, until they have paid the full registration fee of five guineas. The examination in Greek is in the Greek Testament, and confined to the Gospel of St. John; in Latin, in the first five books of the *Æneid* of Virgil. The certificate required by the bye-laws to be laid before the Council by candidates for letters testimonial, is granted to registered pupils and students who answer this examination to the satisfaction of the Court of Examiners. Registered pupils are permitted to study in the museum, on three days in each week (no particular hour), and to read in the library every day, from ten o'clock to one o'clock. They are also permitted to attend the lectures on natural philosophy and comparative anatomy, and obtain such certificates of such attendance without payment of any fee. No student is admitted as a candidate to the sessional examinations, or to the final examination for letters testimonial, until he has been enrolled as a registered pupil.

Sessional Examinations.—Pursuant to a resolution of the Council of April 7, 1847, sessional examinations are to be held each year in the month of May, to which such registered pupils as present themselves as candidates are to be admitted, in two classes, a senior and junior. The pupils of the junior class are required to produce certificates of attendance in the school of the College, or in a recognised school, during two winter sessions at least; and those of the senior class similar evidence of attendance during three winter sessions. Such pupils as pass a sessional examination in each of these two classes are subjected to an examination on one day only at the final trial for the letters testimonial of the College.

REGULATION OF SCHOOLS.

1. *School of the College.*—The school of the College shall be under the control of the President and Council, and subject to such regulations and supervision as they may from time to time establish.

General Regulation of Schools.—Certificates shall not be received for attendance on lectures delivered in Ireland, unless from teachers in schools permitting the visitation of the Council and receiving their sanction. Neither shall certificates be received from teachers or professors in colleges or other institutions for medical or surgical education in Great Britain or Ireland, which colleges or institutions refuse to receive, as qualifications for a degree or licence, the certificates issued by professors in the College of Surgeons; nor shall certificates be received from teachers who deliver lectures upon more than one distinct subject as hitherto allotted to professors in colleges and universities. This regulation shall not, however, exclude the certificates of two or more teachers who may deliver, conjointly, separate, perfect, and distinct courses on Anatomy and Physiology, and on the Theory and Practice of Surgery. Certificates shall not be received for attendance on lectures on Anatomy and Physiology, unless such lectures shall have been delivered upon at least five days of each week of the usual winter season, between October and May; nor on the Theory and Practice of Surgery, unless delivered within the same period, on at least three days in each week. The courses of lectures on the Practice of Medicine, Chemistry, Materia Medica, Midwifery, and Medical Jurisprudence, shall consist of sixty lectures at least; and the courses of dissections and demonstrations shall be of six months' duration. Certificates shall not hereafter be received for

attendance on lectures delivered in Ireland, unless from persons who shall have acquired, either by education or practice, such ample information on professional subjects generally, as is required from candidates for the Fellowship of the College, and who shall have enjoyed such opportunities of acquiring information on the particular subjects upon which they propose to lecture, as the Council may consider necessary to qualify them to perform that duty.

Returns of Students Attending Lectures.—Professors and lecturers are required to transmit to the College, on or before the 25th of November in each year, returns of the names of the pupils who shall have entered to attend, and are then actually attending their respective lectures or demonstrations. They are also required to ascertain from time to time whether the students so returned are in attendance or not, as similar returns are required in the course of the session. Certificates of attendance are not received as qualification for the letters testimonial or Fellowship of the College, unless the name of the candidate who produces them appears in these returns for the periods corresponding to the dates of such certificates.

UNIVERSITY OF FRANCE.

FACULTY OF MEDICINE, PARIS.

THERE is only one University in France, comprising under it three faculties of medicine, viz., those of Paris, Montpellier, and Strasbourg, together with twenty preparatory schools in various provincial towns of France. The course of education required for the degree of Doctor in Medicine or Surgery is very complete, and is comprised under the following regulations, which have been analysed from the original code:—

1. To obtain the diploma of Doctor four years' study is required. No certificates of attendance on the professors are demanded, but the student furnishes evidence of his presence in Paris by taking out what are called "Inscriptions."

2. The "inscription" consists simply in signing his name in a register, and in paying a certain fee. Four inscriptions must be taken out each year, at the commencement of the several quarters.

3. Before matriculating, or taking out the first inscription, the student must obtain the diploma of Bachelor of Letters, the examination for which is not difficult, and comprises a moderate acquaintance with Greek, Latin, history, geography, mathematics, and physics. After the fourth inscription, the student is required to obtain a diploma of Bachelor of Sciences, and undergoes an examination in arithmetic, elements of geometry, algebra, mechanics, and the elements of physics, chemistry, and natural history.

4. The only certificate, properly so-called, which the student must produce, is one of hospital attendance. This is required after the 8th inscription. Every three months during his third year's study, the student must produce a certificate proving that he is following some hospital; and at the end of the year a certificate from the medical officer, that he has attended his visits throughout the year.

5. The course of study is thus laid down—

1st Year.—*Winter Session.*—Medical chemistry and pharmacy, anatomy and dissections.

Summer Session.—Medical natural history and physiology.

2nd Year.—*Winter Session.*—Anatomy and dissections, surgical pathology, and clinical surgery.

Summer Session.—Physiology, pathology, clinical surgery, and internal pathology.

3rd Year.—*Winter Session.*—Pathology and clinical medicine and surgery, internal pathology, dissections.

Summer Session.—Internal and external pathology, operative medicine, midwifery and clinical medicine.

4th Year.—*Winter Session.*—Pathology and clinical medicine, midwifery, legal medicine.

Summer Session.—Operative medicine, materia medica, clinical medicine, clinical midwifery, hygiene.

6. In order to determine the progress of the students, they are examined at the end of each year (for the first three years) in the subjects of the courses prescribed, and if rejected they are not allowed to take out fresh inscriptions until they have passed in a satisfactory manner.

7. Having taken out his 16 inscriptions and passed the three preparatory examinations, the student is now entitled to undergo his examination for the degree of "doctor." This final test is composed of five examinations, together with a thesis.

1st. Examination, Physiology and Anatomy, with a Dissection in presence of the examiners. 2nd. Medical and Surgical

Pathology, with Operations. 3rd. Natural History of Medicine, Medical Physics, Chemistry, and Pharmacy. 4th. Hygiene, Legal Medicine, Materia Medica, and Therapeutics. 5th. Clinical Medicine, Clinical Surgery, Midwifery.

These several examinations are held on separate days, by two professors and an agrégé; each examiner questions each candidate for about a quarter of an hour.

At the first examination, the pupil is obliged to dissect a given portion of the dead body, and answer on it; at the second examination he operates on the dead body in presence of the examiners. At the fifth examination the student proceeds to the clinical hospital with the examiners; there examines a patient, makes a diagnosis, and declares his treatment. The thesis is written in French, and must be printed. Having thus fulfilled the formalities required, the student receives from the Grand Master of the University his diploma of Doctor of Medicine, or of Surgery, as the case may be. The study is precisely the same for both; but when an option is made for the surgical diploma, then the fifth examination is chiefly directed to surgical subjects.

8. The sum total of fees required is 1100fr., or 44*l.*,—thus: Fifteen inscriptions, at 50fr. each, 750fr.; sixteen inscriptions, 35fr.; five examinations, at 30fr., 150fr.; Thesis, 65f.; university seal, 100fr.: total, 1100f.

The diploma of "bachelor of letters" costs 70fr.; that of "bachelor of sciences" costs 50fr., but this latter sum is deducted from the inscriptions.

The lectures delivered by the Professors of the Faculty of Medicine take place in the amphitheatre of the school, and in the order laid down in the annexed table. The clinical lectures on Medicine and Surgery are delivered at the Hôtel-Dieu, La Pitié, and La Charité. The small clinical hospital of the Faculty, which is situate in the immediate vicinity of the school, is exclusively reserved for midwifery instruction, and for the examinations for the diploma.

Dissections are performed in the dissecting-rooms of the "Ecole Pratique," close to the school of medicine, or in the larger establishment at Clamart, which is not far from the Jardin des Plantes. The dissecting season commences on the 2nd of November, and closes on the 30th of April. Students are admitted on presenting their cards of inscription; foreign students are not admitted unless they pay inscriptions. During summer, the anatomical directors and assistant demonstrators at the Ecole Pratique and Clamart give numerous courses of operative surgery, together with operations on the dead body, which are extremely useful, and followed by numbers of foreigners. No fees are required for dissection during winter.

SCHOOL OF MEDICINE, PARIS.

Winter Session, Nov. 4, 1851.—Anatomy, M. Denonvilliers, Tuesday, Thursday, Saturday, 4 p.m.; Physiology, M. Berard, Monday, Wednesday, Friday, 12 a.m.; Medical Chemistry, M. Orfila, Monday, Wednesday, Saturday, 10½ a.m.; Medical Physics, M. Gavarret, Tuesday, Thursday, Friday, 10½ a.m.; Legal Medicine, M. Adelon, Tuesday, Thursday, Saturday, 12 a.m.; Surgical Pathology, M. Gerdy, Monday, Wednesday, Friday, 3 p.m.; Medical Pathology, M. Dameril, Monday, Wednesday, Friday, 2 p.m.; General Pathology and Therapeutics, M. Andral, Tuesday, Thursday, Saturday, 3 p.m.; Operations and Bandages, M. Malgaigne, Monday, Wednesday, Friday, 4 p.m.; Clinical Surgery, M. Roux, at Hotel Dieu, M. Gosselin, at the Faculty, M. Velpeau, at La Charité, M. Laugier, at La Pitié, daily, from 6 to 10 a.m.; Clinical Medicine, M. Roger and M. Bouillaud, at La Charité, M. Chomel and M. Rostan, at Hotel Dieu, daily, from 6 to 10 a.m.; Clinical Midwifery, M. Dubois, at the Hospital of the Faculty, daily, from 6 to 10 a.m.

Summer Session, April 1, 1852.—Midwifery, M. Moreau, Monday, Wednesday, Friday, 12 a.m.; Pharmacy, M. Dumas, Monday, Wednesday, Friday, 1 p.m.; Surgical Pathology, M. Cloquet, Monday, Wednesday, Friday, 3 p.m.; Medical Natural History (Botany), M. Richard, Tuesday, Thursday, Saturday, 10½ a.m.; Hygiene, (Vacant,) Tuesday, Thursday, Saturday, 1 p.m.; Medical Pathology, M. Piorry, Tuesday, Thursday, Saturday, 3 p.m.; Pathological Anatomy, M. Cruveilhier, Tuesday, Thursday, Saturday, 4 p.m.; Materia Medica and Therapeutics, M. Trousseau, Tuesday, Thursday, Saturday, 4 p.m.; Clinical Surgery, M. Roux, at the Hotel Dieu, M. Velpeau, at La Charité, M. Laugier, at La Pitié, every morning; Clinical Medicine, M. Chomel, at the Hôpital de la Faculté, M. Bouillaud, at La Charité, every morning; Clinical Midwifery, M. Dubois, at the Hôpital de la Faculté, every morning.

Foreign students are now permitted to obtain certificates of attendance on courses and hospitals without taking out inscriptions. A register is kept for them at the secretary's office of the school of medicine, in which they are required to write their names

and addresses within the first fifteen days of each quarter; whereon they receive admission cards for the courses and hospitals; but not for the dissecting-rooms at the Ecole Pratique. At the rooms at Clamart, however, the formality is not strictly observed.

The Library and Museums are open to students without any card; at least none is demanded.

Foreign certificates are also admitted as valid by the Faculty of Medicine under the following conditions:—

When it is notorious that the foreign University possesses a complete course of medical education, then the certificates are admitted as if they emanated from the secondary schools of France; but are only valid for subjects that are purely medical.

Doctors in medicine or surgery of foreign Faculties may obtain the corresponding degrees from any of the three French Faculties on submitting to the five examinations, and presenting a thesis. They must also obtain an order from the Minister of Public Instruction for the delivery of the sixteen inscriptions, which will be given to them in a proportion of one-third less than those they obtained in the foreign University. Thus, to obtain the sixteen inscriptions which represent four years' study, they must produce certificates demonstrating six years' study. The price of the diploma is the same as for a French student. Thus:—

1st Examination, 230fr.; 2nd, 430fr.; 3rd, 315fr.; 4th, 30fr.; 5th, 30fr.; thesis, 165fr. Total, 1100fr.

HOSPITALS.

The French hospitals are open to all students on presentation of their cards of inscription, or of those delivered by the Secretary to the School of Medicine. The visits of the medical staff take place at various hours from six to nine a.m. The clinical lectures take place after the visit, about ten o'clock a.m.; and, whenever circumstances will permit, important operations are performed in the lecture-room, previous to the clinical lecture, and in presence of the pupils. There are three Professors of Clinical Medicine, viz., MM. Chomel, Rostan, and Bouillaud; three of Clinical Surgery, viz., MM. Roux, Velpeau, and Laugier; and one of Clinical Midwifery, M. Dubois.

The following is a list of the principal hospitals of Paris, with the medical staff attached to each:—

HOTEL-DIEU.—A clinical hospital; 1000 beds. Physicians, thirteen in number, the chief of whom are, Chomel, Rostan, Louis, Recamier, Magendie, and Martin Solon. Surgeons: MM. Roux, Jobert, and Robert.

LA CHARITE.—500 beds. Physicians: Andral, Bouillaud, Rayer, Cruveilhier. Surgeons: Velpeau, Gerdy.

LA PITIE.—650 beds. Physicians: Serres, Piorry, Gandrin. Surgeons: Laugier, Malgaigne.

ST. LOUIS.—800 beds. Physicians: Lugol, Cazenave, Gibert, and Devergie. Surgeon: Boyer.

CLINICAL HOSPITAL.—Surgeon: M. Jules Cloquet. Accoucheur: M. Paul Dubois.

ENFANS MALADES.—500 beds. Physicians: Bonneau, Trousseau, Blache. Surgeon: M. Guersant, jun.

VENEREAL HOSPITAL (Male).—450 beds. Surgeons: MM. Ricord and Vidal.

SALPETRIERE (for Insane Females).—1200 beds. Physicians: Fobret, Trelat, Baillarger.

BICETRE (for Insane Males).—1000 beds. Physicians: MM. Voisin, Moreau, Delasiauve.

In addition to the above, there are numerous other hospitals; but these are seldom frequented by students, if we except the Hospital Necker, where M. Civiale still professes. During summer M. Ricord continues to deliver his attractive course on syphilis at the Hôpital du Midi; M. Cazenave holds his conferences on skin diseases at St. Louis; and M. Trousseau delivers some excellent lectures on the diseases of children, at the Enfants Malades. Many of the chef de clinique also deliver special courses on the stethoscope, diseases of the chest, etc., which are well attended, and extremely useful. These courses are paid for, about 4*l.* each. The dressers to all the Parisian hospitals are appointed by concours, and always include in their body two or three select British students. They are distinguished into "internes and externes." The candidate for the place of "externe" must be eighteen years of age, and have taken out one inscription at least. The examination which they undergo is not a difficult one. They are appointed for three years, and can only visit the wards while the medical officers are there, their duty chiefly consisting in applying the minor dressings, and in assisting the internes to keep the case-books. The internes, or house-clerks, are selected by concours from the externes. The examination which they undergo is severe. They are elected for two years, but may be continued in service for one year longer. They receive 400 francs the first year, and 500 francs the second or third year, and are lodged in the hospital.

They are on guard in the hospital, each in turn for twenty-four hours, and during that time are fed. The chief duty of the interne is to keep the case-books, follow the medical officer during his visits, apply all dressings, bleed and perform minor operations, and visit during the day such patients as the medical officer shall direct them to do. The place of interne is always warmly disputed, and nearly all the distinguished practitioners in Paris have commenced their studies in this capacity. It affords, in fact, the very best ground-work for a perfect knowledge of the healing art.

GENERAL CORRESPONDENCE.

THE BRANDING-ORDER IN THE ARMY.

[To the Editor of the Medical Times.]

SIR,—Your article on the "branding order" in the army was much called for; and I hope that the subject will not end here. What course, if any, the medical officers will pursue, is unknown; the distant stations in which they are scattered renders it difficult to understand the sentiments of the body on the subject; and the old saying, "What is everybody's business is nobody's," is truly applicable to the Profession in the Service. It seems to me, that the remedy lies in the hands of the chiefs of the Army Medical Department; for no individual of the lower ranks of the service would take the matter in hand, and, if he did, it would be, most undoubtedly, to his own detriment, and of little or no service to the cause.

It is difficult in this matter for medical officers to adhere to that good rule amongst true British soldiers, namely, "Obey first, and complain after;" for I am tolerably certain there is not a surgeon in the army who knows how to perform the operation, and therefore they must decline doing what they are unacquainted with, and particularly when the operation is one unconnected with surgery, and, as far I know, has never been described or commented on by any professor in the Profession.

If the authorities, perhaps, were to compel candidates for commissions in the Army Medical Department to attend a course of lectures delivered by Professor Calverley, at Fort Pitt, Chatham, not only on the art of marking the letter D, but also on the other branches of his exalted calling, medical officers would, no doubt, be found more efficient, and the class of candidates for appointments in the medical department of the service would certainly improve; and, in fine, rival if not excel their notorious master!

I am, &c.

X. Y. Z.

MISSTATEMENTS OF DR. LIGHTFOOT.

[To the Editor of the Medical Times.]

SIR,—My attention has been called by a friend in London to a lecture of Dr. Lightfoot, published in the *Medical Times* for September 20.

At page 300, Dr. Lightfoot figures an intra-uterine pessary, invented by me several years ago, and which, with others, I have since used pretty extensively in cases of retroversion, etc.

Dr. Lightfoot attributes the invention of this pessary to Professor Velpeau, of Paris. Since I first described it, the instrument in question has been modified by Valleix and Huguier, of Paris, by Meyer, of Berlin, by Kiwisch, of Prague, and by others who have used it; but certainly Velpeau never could or did claim its invention, and I am not aware that he has even employed it.

Dr. Lightfoot further states, that M. Amussat of Paris, has "proposed a new method of treating obstinately retroverted uterus [uteri], namely by the cauterization of the posterior-neck," etc. I published the same proposition long before M. Amussat either suggested or tried it.

Dr. Lightfoot proceeds to insinuate, that the uterine sound was also a French discovery. Some time after I first published an account of it here, Professor Kiwisch stated to the Profession in Germany, that a similar instrument had suggested itself to his mind. But I am not aware that any one in France has ever set up any claim for the proposition of this new means of uterine diagnosis.

Dr. Lightfoot goes on to offer to the readers of the *Medical Times* various other deliberate misstatements and insinuations of exactly the same cast, and all of them equally unfounded. Indeed, his whole lecture appears, (as far as I have glanced at it), to be made up of the strangest mistakes and misstatements. He would evidently wish to be considered to talk as if he were really

acquainted with "inflections and deviations," etc., of the uterus. I would kindly and earnestly urge Dr. Lightfoot to consult his own medical advisers as to whether he is not himself unhappily suffering under some unaccountable type of mental "inflections and deviations."

I am, &c.

Edinburgh.

J. Y. SIMPSON.

[We do not hold ourselves responsible for the statements of gentlemen who put their names to their communications; but we do desire that truth should prevail, and always open our columns to replies. Dr. Lightfoot will do well to revise his remaining papers, lest other mistakes similar to the above should inadvertently have crept in.—Ed. *Medical Times*.]

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS.—At the quarterly meeting of the Comitia Majora, held on Tuesday, Sept. 30, the following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College:—

Dr. HABERSHON, Finsbury-circus.

Dr. BARRON, St. Thomas-street, Southwark.

Dr. PARKER, London Hospital. Also,

Dr. THORNTON, Norwich, was admitted an extra-licentiate.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 25:—

BLACK, JAMES, Chesterfield, Derby.

BUCKNILL, HENRY WALTER, Rugby, Warwick.

CLARKSON, WILLIAM HILL, Ledbury, Hereford.

MITCHINSON, GEORGE JONATHAN, Carrington, Boston.

OBITUARY.—On the 26th Aug., suddenly, at Santa Maura, G. R. Richardson, Esq., assistant-surgeon H. M. 47th Regiment. On the 21st ult., at Norbiton, near Kingston, Charles Bell, M.D., in the 74th year of his age. On the 9th ult., at his residence in St. Aldate's, Oxford, George Hitchings, Esq., surgeon, in his 62nd year. Mr. Hitchings was one of the surgeons to the Radclyffe Infirmary for forty years. On the 27th ult., at Surbiton Hill, Surrey, after a few hours' illness, Charles Julius Roberts, M.D., of New Bridge-street. On the 26th ult., in the Western-road, Brighton, Robert Deverell Pyper, M.D., aged 34, after protracted suffering.

ORDNANCE MEDICAL DEPARTMENT.—George Paul Minchin Woodward, gentleman, to be assistant-surgeon, vice Howard retired.

MILITARY APPOINTMENTS.—3rd Regiment of Foot, Surgeon Henry Cooper Reede, from the 97th Foot, to be Surgeon, vice Stevenson, deceased. 43rd Foot, Assistant-surgeon Robert Browne, from the 38th Foot, to be Assistant-surgeon.

NAVAL APPOINTMENTS.—Assist. Surgeons James Jenkins, M.D., (1841) to the Fisgard flag ship, for service in Woolwich dockyard, vice Derriman, deceased, and William T. Billings (1845) to the Fisgard, vice Jenkins. Acting Assistant-Surgeons James F. Stoddart (1850) confirmed to the Driver, 6, paddle-wheel steam-frigate, on the Pacific station; and Richard Pickers, M.D., (1850) confirmed to the Lily, 12, sloop, on the East Indies station.

MEDICAL APPOINTMENTS AND VACANCIES.—Dr. Frampton, one of the Physicians to the London Hospital, is about to resign that appointment. The vacancy will be declared on the 7th inst., and the day fixed for examining the candidates, and for the election of a Physician in his place. The Surgeoncy to the Radclyffe Infirmary is vacant by the death of Mr. Hitchings; and the Regius Professorship of Medicine in the University of Oxford, by the decease of Dr. Kidd. On Monday, Sept. 29th, Mr. Robert Hamilton, late house-surgeon of the Royal Westminster Ophthalmic and Charing-cross Hospitals, was elected one of the honorary surgeons to the Northern Dispensary, Liverpool.

THE QUEEN'S COLLEGE, BIRMINGHAM.—The Queen has presented to this Institution a full-length portrait of Her Majesty, to be placed in the new College-hall. A public meeting will be held on Monday, the 6th, in the Town-hall, which has been handsomely granted for the occasion by the Mayor, to acknowledge in suitable terms this special mark of Royal favour conferred on the town and county.

EPIDEMIOLOGICAL SOCIETY AND VACCINATION.—We have been requested by the Honorary Secretary of the Small-Pox and Vaccination Committee of the Epidemiological Society, to beg

that all gentlemen who have received the Circular of Queries issued by the Society on those subjects, and who have not yet replied to them, will have the kindness to do so before the 15th of October. We are informed that a large number of replies has already been received, with the analysis of which the Committee is immediately about to proceed.

STATUE TO DR. JENNER.—Efforts are being made in Boston and the vicinity to collect funds towards the erection of a bronze statue of Dr. Jenner in London, in honour of his great discovery of vaccination. The subscription should be a world-wide one, for all the earth has benefitted by his labours. It is strange that such a movement should have been left to the present day.

CHOLERA.—The Registrar-General, in speaking of the cases of cholera which have occurred during the last five weeks, observes:—Half of the cases were of more than three days' duration. It has been mentioned before, that half the fatal cases of the epidemic cholera terminate in twenty-four hours after the first striking symptoms have appeared. Another singular difference is shown in the annexed table. The population of London on the north side of the Thames, in 1851, was 1,745,095; on the south side of the Thames, 616,545: numbers nearly in the proportion of 3 to 1. Yet the number of deaths from cholera in the year 1849, on both sides of the river, was nearly equal—7000 and 7137. In the recent summer cholera, the deaths have been distributed more equally, and in the proportion of the population.

Deaths from Cholera in

	Districts North of the Thames.	Districts South of the Thames.
Week ending August 2nd, 1851....	12	..
" 9th, "	16	..
" 16th, "	19	9
" 23rd, "	15	5
" 30th, "	23	5
September 6th, "	12	5
" 13th, "	9	8
" 20th, "	5	2
" 27th, "	6	3
	117	37
The epidemic year 1849	7000	7137
Population in 1851	1,745,095	616,545

REGISTRATION NOTABILIA.—In Fulham, at 16, Star-lane, on 24th September, the daughter of a night watchman, aged 18 years, "childbirth labour (28 hours), died one hour after delivery, supposed in a fit—no medical attendant;" had previously applied for admission into the workhouse, and had been refused.—The wife of a coach-painter gave birth to twin-daughters, born at six months. Mr. Popham, the medical attendant, adds, that "the two children were united along the chest and neck; that there were two heads, two arms, and four legs, and that they lived a quarter of an hour."—In Shoreditch, St. Leonard sub-district, at Old-street-road, on 19th September, a domestic servant, aged 30 years, "natural death, sudden in the street, accelerated by want of proper nourishment and care."—In Bethnal-green, at 6, Satchwell-rents, on 21st September, a weaver, aged 29 years, "debility, accelerated by an extraordinary susceptibility to the action of opium administered in ordinary doses." An out-patient at the London Hospital.

PROGRESS OF EPIDEMICS.—Influenza is very prevalent in Demerara, Barbadoes, and Jamaica. The cholera still lingers in the last-named island, and also in Iowa, U.S. Hydrophobia among dogs is very prevalent in the district of the Tyne. We have already mentioned the occurrence of cases of yellow fever at Oporto. The following is the latest news respecting it, and the alleged explanation of the outbreak. They are contained in a letter from the *Times'* Correspondent at Oporto:—"Regarding the yellow fever, it appears there have been several cases, but only in a modified form, and which the medical men say is not of a contagious nature, and I am not aware that a single case now exists in the place. It is admitted that the disease was on board the Portuguese ship *Tentadora*, lately arrived from Brazil. Several had died on the passage, and it is said one man was missing, and that when the vessel was discharged of her cargo, his body was found in a state of corruption amongst some ballast on board; the remains were privately put away, but the ballast was landed on the shore, where it is supposed those who have suffered caught the fever.

Certain it is, that all the sufferers belonged to the neighbourhood where the vessel lay. It is to be hoped we shall hear no more of it." How far a disease supposed to be imported in a vessel from the Brazils, can produce cases of a similar malady, but not of a contagious nature, we shall leave for the consideration of Sir Wm. Pym, and of those who have devoted much time and thought to the investigation of epidemics; it appears to us to be a strange and irreconcilable anomaly.

PROCURING ABORTION.—Two young females, one a widow, residing in the village of Wrington, near Bristol, have died in consequence of the poisonous action of some drugs taken by them to induce abortion, both being pregnant. It appears from the death-bed statement of the younger female, that the other, the widow, prepared the poisonous article, which she gave to her companion, and also herself partook of. We fear the practice is far more prevalent than it is supposed to be; many an old herb-seller being so far acquainted with the use of certain plants as to know that they possess a degree of repute for this purpose, and either ignorant or reckless of their death-causing quality. In this instance, however, justice cannot reach the criminal, as both the poisoner and the poisoned have passed to a higher tribunal.

THE SCIENTIFIC CONGRESS OF FRANCE lately held its eighteenth session at Orleans. It was numerous attended. Baron Stassart presided.

M. SEUTIN.—This distinguished Belgian surgeon, who has written so much and so well on the starched apparatus for fractures, is at present making a tour in Germany and Russia, in both of which countries he has been treated with the utmost kindness and *bienveillance*, by the Profession. In Berlin, Cracow, Tarnow in Galicia, Stettin, St. Petersburg, and Moscow, he has found the *bandage amidonné* in general use, but employed in a somewhat different manner to that which he recommends. Neither is it used in cases of compound fracture. M. Seutin has, consequently, given demonstrations of his mode of applying the bandage, and further recommended its application in compound fractures. He describes the Russian hospitals as being very magnificent, and seems to have been much gratified with his reception by the Czar. The treatment of syphilitic diseases is conducted as in the more southern countries. Science of late seems to have made great progress in the north.—*L'Indépendance*, Belgian newspaper.

MADAME DESMEDT, the widow of M. Houder, formerly Professor *emerite* of the Faculty of Medicine in the University of Ghent, has been presented by the Belgian Government with an annual pension of 60*l.* (1500*fr.*)

DR. CH. PHILIPS, a Belgian surgeon, now practising in Paris, has been named an officer of the Legion of Honour.

THE CALAMINE FURNACES IN BELGIUM have been declared to be dangerous and unhealthy.

DEATHS in the Metropolis for the week ending Saturday, September 27, 1851.

CAUSES OF DEATH.	Sept. 27.				Sum of Ten Weeks.
	0	15	60	All Ages	
ALL CAUSES	460	308	190	958	10349
SPECIFIED CAUSES	453	308	190	956	10290
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	205	39	23	267	2913
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	22	15	43	461
3. Tubercular Diseases. ...	60	102	11	173	1790
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses, ...	48	30	32	110	1174
5. Diseases of the Heart and Blood- vessels	5	17	9	31	317
6. Diseases of the Lungs, and of the other Organs of Respiration ...	27	22	28	77	986
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	21	27	12	60	695
8. Diseases of the Kidneys, &c. ...	...	5	...	5	80
9. Childbirth, Diseases of the Uterus ...	...	9	...	9	103
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	4	1	6	58
11. Diseases of the Skin, Cellular Tis- sue, &c.	2	...	...	2	8
12. Malformations	5	...	...	5	32
13. Premature Birth and Debility ...	32	...	...	32	216
14. Atrophy	19	2	1	22	215
15. Age ... ..	...	...	45	45	454
16. Sudden	1	3	2	6	237
17. Violence, Privation, Cold, and In- temperance	21	26	11	58	551
Causes not Specified	2	...	...	2	59

TO CORRESPONDENTS.

J. B., Lancashire.—We have no means of knowing how a German degree can be obtained in England. We do know, however, that in Germany it can only be obtained by examination.

R. L. L.—We do believe that Pulvermacher's battery has been found useful in chronic rheumatism, and the Chinese emmenagogue in amenorrhœa.

We will next week endeavour to find room for the letter from the Secretary of a Tower Hamlets Medical Society.

We return our thanks to those friends who have kindly placed at our disposal the Introductory Lectures delivered at the opening of the various medical schools of London. We published so many last year, that, with the exception of one delivered at a school which then did not appear in our pages, we have this session determined, and that in accordance with the wishes of several of our readers, not to reproduce them.

We have received a printed circular from our Correspondent, Mr. Parker, of Birkenhead, containing various letters to the "Liverpool Mercury," to and from Mr. Tucker, of Berners-street, Sir Benjamin Brodie, &c. Mr. Parker's object appears to be to call attention to the hitherto undiscovered properties of nitrogen, and to the part which it plays in the economy of nature. He seems to wish for some public discussion on this and on some other physiological points, but seems to be rather at a loss how to bring the matter before the Profession. If Mr. Parker has any novel propositions to bring forward on the uses of nitrogen, or on the circulation of the blood, he should state them in the columns of one of the medical journals, with reasons and arguments for this belief. He may rest assured, that if there be anything worthy of discussion in his opinions, it will receive it.

Mr. Cave Browne, Tamworth.—We have received the correspondence, but as it has no reference to professional affairs, we do not feel ourselves at liberty to express an opinion upon the subject.

Mr. George Barwick.—Letter received with thanks.

Quousque Tandem.—The advertising bill sent to us is one of the most impudent and disgraceful things of the kind we have for some time seen. We have referred to the "Directory," but do not observe in it the name of the impostor. We may hope, therefore, that the fair character of the Profession is not polluted by his low pretences and infamous parodies of Scripture. The Profession should watch the man strictly, and mark what becomes of his patients.

M.R.C.S. and L.A.C.—Any qualification that is legal in England would be held equally so in the Colonies. We are unacquainted with the details of medical law in the United States, but we are not aware that there are any restrictions imposed on qualified practitioners. Our Correspondent should apply for information respecting other matters contained in his letter to the Office of the Emigration Commissioners, 9, Park-street, Westminster.

Mr. Sargent, of Plymouth, will be good enough to read the foregoing answer relating to the subject of his letter.

[To the Editor of the Medical Times.]

SIR,—Having had an occasion to attend at the Manchester County Court, held on the 19th of this month, a case came on for hearing, viz., *Lythgoe v. Richardson*, to recover "for professional attendance and medicine." As a doubt existed respecting the plaintiff's qualification, he was served with proper notice to produce his diploma to practise. It was objected to by his attorney either to prove or produce his certificate. The judge, notwithstanding the non-production of those documents, seems to think that the plaintiff is entitled to recover as for work done. The case that he attended was croup; so you observe that it was a pure medical case. Under the circumstances, be pleased to insert a paragraph in the next Saturday's "Medical Times," and state your views on the subject. The re-hearing comes on on the 3rd of October next. By so doing you will greatly oblige

A SUBSCRIBER OF THREE YEARS' STANDING.

Strangeways, Manchester.

[If the defendant have reason to think that the plaintiff is not qualified by law to practise, he should apply to the Secretary of the Society of Apothecaries, for a statement of the fact. If the plaintiff be unqualified he cannot claim. The law is precise with respect to practising as an apothecary. Had there been no statute, it might have been a question whether the plaintiff might not have claimed as "for work done," or on a contract, if one had been made.]

[To the Editor of the Medical Times.]

SIR,—In the Student's Number of the "Medical Times," I see in the regulations of the Apothecaries' Society no mention made of the new regulation with regard to an examination in the Classics and Mathematics. As I am preparing for that examination, I should feel obliged if you would in your next publication, inform me if that examination is to take place or not, as was mentioned in the "Medical Times" some time ago.

I am, &c.,

XENOPHON.

[As we have received several communications making the inquiry contained in the above, we deem it advisable to re-print the Society's Resolutions referring to the subject. Our Correspondent will observe that the examination is for the present optional. We are gratified to learn, however, that a much larger number of students than was expected have presented themselves for examination:—

"APOTHECARIES' HALL.

"At a Court of Examiners held March 13, it was Resolved, 1stly. That a Preliminary Examination for the Junior Students of the Medical Profes-

sion would be desirable, as an important auxiliary to their subsequent Professional Studies.—2ndly. That such Examination should comprise an inquiry into the student's knowledge of the Latin and Greek Languages, and of the Elements of Mathematics.—3rdly. That students should be admissible to such Examination at any period from the date of their Apprenticeship to the completion of the first Winter Session of their curriculum.—4thly. That such Examination should in the first instances include the following subjects, viz.: I. The First Book of Virgil's *Æneid*, and Cicero's Oration for Milo. II. The Greek Testament to the end of the Acts of the Apostles, or the First Book of Xenophon's *Anabasis*, at the option of the Candidate. III. Algebra as far as Simple Equations (inclusive.) IV. The First Books of Euclid's Elements.—5thly. That Students who pass this Examination satisfactorily, should not be subject to any subsequent Examination in Latin, except in the Pharmacopœia Londinensis, and Prescriptions.—6thly. That Students who have not passed this Examination should, for the present, be allowed as heretofore to undergo the Preliminary Examination in Celsus and Gregory after they have completed Two Winter Sessions of their medical studies.

"N.B. The first Preliminary Examination for Junior Students will take place at Apothecaries' Hall, on Saturday, the 18th October, 1851, at Half-past Three, p.m. Candidates are required to give Notice at the Beadle's Office, on or before Saturday, the 4th of October."

[To the Editor of the Medical Times.]

SIR,—For some time past a portrait of Mr. Kingdon has hung in the Library belonging to the School of St. Bartholomew's Hospital,—being placed there on account of the support he has afforded it. But now, having changed his principles of practice to homeopathy,—which act was so fully shown up before the Profession by the Medical Journals,—those connected with the School of this Hospital, and particularly the students, thought it likely that if the portrait remained in the library until the 1st of October, our visitors and junior students might believe that that degrading practice is patronized or looked on lightly by those connected with the Hospital and School.

To show the public, therefore, that, although we respect Mr. Kingdon as a gentleman, we think too highly of the rising reputation of our School to allow his portrait to remain in the library by the side of those so noble and valuable to the Profession as Abernethy, Lawrence, and Vincent, with the concurrent wishes of all, the offending portrait of the offending gentleman has been unhung, and placed out of sight.

I am, &c.,

A THIRD YEARS' STUDENT.

The Regulations of the Royal College of Surgeons of Ireland had been received from the authorities, and were in type, before we received the communication of our Irish Correspondent.

R. Jones.—You are in error. The law stands thus: An individual holding an appointment with a fixed salary, under a Board of Guardians, cannot be a member of the Board; but if he be appointed merely for occasional service, he is competent to be elected, and to hold his seat. There is only one colourable objection to a medical man being a member of a Board of Guardians,—the possibility of his coming into unfriendly collision with the medical officers of the Union; but if a medical guardian be upright and discreet, there can be no doubt that his advice and influence would be of much benefit to his brethren and the poor. He might be the means of introducing a higher humanity into the Board's counsels, and procuring more honourable terms for his professional brethren. We think that medical men ought more frequently to become members of Boards of Guardians.

Sanitas.—The total areas of the metropolitan parks, including those of Greenwich, Windsor, and Richmond, and exclusive of two new ones, the Albert and the Battersea, is stated to be about ten square miles, or 6,536 acres,—to wit, St. James', 87 acres; Green-park, 56; Hyde-park, 360; Kensington-gardens, 300; Regent's-park, 450; Primrose-hill, 200; Greenwich-park, 200; Victoria-park, 300; Richmond-park, 2,253; Windsor Little-park, 500; Windsor Great-park, 1,800; Buckingham Palace-gardens, 40. The Albert-park will consist of 150 acres.

A Union Surgeon.—Mr. Jasper Rogers has published a pamphlet, entitled, "Peat-charcoal and Sanitary Reform," in which he describes the deodorising qualities of the prepared peat-charcoal, and its valuable properties as manure, when duly mixed with human ordure. His plan seems worthy a trial, and it is strange that our Commissioners of Sewers have not taken it up. His statements have been fully vouched by respectable, scientific, unprejudiced individuals, and if they can be sustained by a full trial, his plan would be in every respect a benefit to the country at large.

COMMUNICATIONS have been received from—

Professor SIMPSON, of Edinburgh; Mr. GUTTERIDGE, of Birmingham; Mr. PARKER, of Birkenhead; Dr. TANNER, of Charlotte-street, Bedford-square; XENOPHON; Mr. MILTON, of Jewin-street, City; SECRETARIES of the MEDICAL SOCIETY of LONDON; Mr. HEWETT, of the Bradford Infirmary; Dr. BENICE JONES, of Brook-street; Dr. ROUTH, of Dorset-square; Dr. SNOW BECK, of Langham-place; Mr. WARD, of the London Hospital; Dr. MAYNE, of Leeds; Mr. CAVE BROWNE, of Tamworth; J. B., Lancashire: A SUBSCRIBER OF THIRTY YEARS' STANDING; Mr. SARGENT, of Plymouth; Dr. HECTOR GAVIN, from the West Indies; EDITORS of the "Nederlandsch Weekblad;" EDITORS of the "American Magazine;" R. and L.; Mr. GROVE, of Wandsworth; Dr. BARCLAY, of St. George's Hospital; Dr. SNOW, of Frith-street; Dr. PARKES, of University College; Mr. FRANK PALMER, of Suffolk-street; Mr. COFFIN, of Millbrook; DEVON; Mr. JERRARD, of Honiton; A PROVINCIAL PRACTITIONER; A THIRD YEARS' STUDENT of ST. BARTHOLOMEW'S; Dr. DUNDAS, of Liverpool; Dr. BARKER, of Bedford; Dr. LIGHTFOOT; Mr. TYLICOTT, of the North Staffordshire Infirmary.

ORIGINAL LECTURES.

LECTURES

ON

DIGESTION, RESPIRATION, AND
SECRETION,GIVEN AT THE ROYAL INSTITUTION,
TO THE MEMBERS, AND TO THE PUPILS OF
ST. GEORGE'S HOSPITAL.By H. BENICE JONES, M.D., F.R.S.,
Physician to St. George's Hospital.

[Continued from page 273.]

ON THE SUBSTANCES EXCRETED FROM THE
BODY WHICH MAY FORM CALCULI.

I have already, gentlemen, in my previous lectures, spoken of some of the substances which are excreted from the body, as carbonic acid and water. In my lecture to-day, and in my future lectures, I am going to speak chiefly of many other substances which are thrown out of the body by the urine; for this forms the great excretory fluid,—the chief means of carrying off the excretions from the body. The matter which passes off from the intestines, for the most part we may consider to consist of substances which cannot be finely divided,—which cannot be brought into that state of subdivision which I showed you was absolutely necessary in order that they should be enabled to enter into the blood, and take part in the nutrition of the body; such substances remain undissolved, and pass off by the intestines. The matter which passes off in the urine consists of the substances which have entered into the blood, and have been used in the body, or have served the purposes of life; other most important excretions, as we have seen, pass off by the lungs, as carbonic acid and water.

I shall, then, occupy your attention with the urine, because it contains the chief excretions of the body. And I can thus bring before you the different substances which are thrown out of the body. Moreover, it seems to me that, instead of first taking the urine as a whole, I shall fix these substances more clearly in your memories by taking the different natural analyses of the urine which are made, so to speak, in the body itself. By showing you the different substances which are occasionally separated in the body from the urine, you will best remember the different substances which are continually passing out of the body.

The urine is a very complex fluid. It is at times overcharged, or, from different causes, is unable to hold in solution substances passing into it; and, when these are not dissolved, they accumulate and form different concretions, of which you see many large and rare specimens here. These calculi are nothing but separations in the body of the ordinary constituents which exist in the urine. Some few were separated in the kidneys, but most in the bladder; at the same time, the other constituents of the urine passed off out of the body. These natural analyses will best impress upon you the nature of many different substances which are passing out of the body. And, for this reason, I begin these lectures on excretion with the calculi.

The first agent in determining the composition of the different kinds of calculi is heat. If we take different substances which form concretions in the body, we find the ingredients thus deposited may be divided into two distinct classes, according to the different manner in which they are affected by heat. Some will resist it, and will not burn

away; while others will be acted upon by it most energetically, and be entirely dissipated. I make, then, of these substances which can be thus separated in the body, two divisions. The first contains those which can be destroyed by heat, and the second, those which cannot.

Table for Examining Urinary Calculi.

1. by heat	2. By Acids.	3. By Alkalies.	Nature of Calculus.	Additional Tests.
Destroyed by heat.	With nitric acid, red.	Soluble in carbonate of potash, evolving ammonia.....	Urate of ammonia	{ Soluble in water when boiled.
		Soluble in carbonate of potash, evolving no ammonia	Uric acid	{ Not soluble in water when boiled.
	With nitric acid not red	In ammonia soluble, crystallising when evaporated	Cystine ...	{ Soluble in strong caustic potash; the solution gives sulphuret of lead.
		In ammonia with difficulty soluble, not crystallizing.....	Fibrine ...	{ With nitric acid becomes yellow.
Not destroyed by heat.	With hydrochloric acid, soluble; before heat, effervesces	Solution in acid, when neutralized, gives a precipitate with carbonated alkalies, and oxalate of ammonia...	Carbonate of lime	{ Soluble in dilute acetic acid, with effervescence.
		Solution in acid, when neutralized, gives a precipitate with carbonated alkalies and oxalate of ammonia...	Oxalate of lime	{ Insoluble in acetic acid. Decomposed by sulphuric acid into carbonic oxide, carbonic acid, and lime.
	With hydrochloric acid, soluble without effervescence or without heat	Solution in acid, with excess of ammonia, gives a crystalline precipitate.....	Phosphate of ammonia & magnesia	{ With phosphate of lime, (bone earth) is very fusible with the blow-pipe.
		Solution in acid, with excess of ammonia, gives an amorphous precipitate.....	Phosphate of lime	{ With phosphate of ammonia & magnesia, is very fusible with the blow-pipe.

Not many years ago, the influence of heat on different calculi was tested, by means of a mint furnace, as mentioned in a paper communicated to the Royal Society. An ordinary muffle was used in the mint for the purpose of determining the effect of the heat. A piece of calculus was placed in a cupel; this was put in a muffle; and this, again, in a furnace heated up to the highest heat which a mint furnace could produce. This was a cumbersome mode of acting upon the calculus by heat. Such an apparatus was utterly unnecessary. All that is needful to produce the full effect of heat, is a little platinum spoon and a spirit lamp. A small portion can be placed in the spoon,—a grain will be amply sufficient,—and the effect of heat may be at once seen: the spoon rapidly becomes red hot, and the calculus, if it can burn, burns in a few minutes. I will heat in the spoon a portion of calculus capable of being destroyed by heat. This small spirit-lamp furnishes sufficient heat for the experiment. You will see that, in a short time, the whole substance will be perfectly destroyed. (Experiment.) If I take, however, a portion of another species of calculus, incapable of destruction by heat, a different effect will be produced. In this latter calculus, which you will observe is white, (the other was red), there will be a large portion of residue,—a portion which forms by far the larger part of the calculus, will not burn away. (Experiment.) Thus we get, then, a manifest and convenient division of the calculi. The first question to ask a calculus, is, can you be destroyed by heat, or can you not? Having tried the action of heat, I proceed to the second test, which is the action of acids. If I take a portion of a calculus, such as I first heated,—that is, any calculus which belongs to the first division, that is, which is capable of being destroyed by heat, if I take even the minutest portion of such a calculus, and then add to it a drop of nitric acid, and heat it in a watch glass, the action of the acid will either produce a red colour in the dry residue, or it will not. If it produces a red colour, that is sufficient to prove that the substance contains uric acid. The vapour of ammonia will increase the intensity of the colour. (Experiment.) Look at this large basin, in which uric acid has been acted on by nitric acid and a little ammonia. See the magnificent colour which is produced. The action is a very complicated one, and varies with the strength of the nitric acid. Very many peculiar substances can be produced; the most important of them you may see

in these specimens, and their composition and relation to uric and hippuric acid is stated in this diagram.

	C	H	O	N
Urea	2	4	2	2
Allantoin	4	3	3	2
Uric acid	10	4	6	4
Hippuric acid..	18	8	5	1
Alloxan	8	4	10	2
Alloxantin	8	5	10	2
Murexid	12	6	8	5

Uric acid, when pure, I may mention, is perfectly free from colour; so that the colouring matter in these uric acid calculi on the table is an entirely separate ingredient. Not only uric acid, but all the other substances which form calculi are perfectly white; when pure they are free from all colouring matter. When this pure uric acid is acted upon by nitric acid, the two most remarkable substances to which it gives rise are *alloxan* and *alloxantin*. I need not enter further into these substances than to say, they are products of the action of nitric acid upon uric acid, and that when in contact with ammonia they give rise to the beautiful substance known as *murexid*.

	C	H	O	N
1 Alloxan	8	4	10	2
2 Alloxantin ..	16	10	20	4
4 Ammonia ..	..	12	..	4
	C24	H26	O30	N10
Become				
	C	H	O	N
2 Murexid.....	24	12	16	10
14 Water .....	..	14	14	..
	C24	H26	O30	N10

I have here a specimen in green crystals of the murexid-which was made out of uric acid. It has this beautiful property: if I take the minutest portion of it, and dissolve it in water, a magnificent pink colour is produced. It is the formation of this substance which gives rise to the red colour when uric acid calculi are acted on by nitric acid and ammonia.

The calculus, if it become red with nitric acid, may not be uric acid alone, but it may consist of uric acid in combination with a base. All calculi that become red must contain uric acid; but every substance that becomes red may not be uric acid alone, but some uric acid compound. It might be urate of potash, or urate of ammonia, or urate of lime. These are different compounds of uric acid with alkalies, all of which might occur in the urine, and all of which do occur, probably, in the calculi, in a greater or less quantity, and one of which does occur as a separate calculus, that is, urate of ammonia. The difference between urate of ammonia and uric acid is this: If I take a portion of the powdered calculus containing uric acid, and add a little distilled water, and then apply heat, the uric acid will not be found soluble in the boiling water; ten thousand parts of water will take up but a very small portion, perhaps not more than three or four parts of uric acid; whereas, urate of ammonia is very soluble in warm water. The urates will form the subject of my next lecture, because they always exist in healthy urine in greater or less quantities. How, then, can these substances be separated most easily and perfectly when mixed. Of course by boiling water; in which case the urate of ammonia will dissolve, and the uric acid will remain undissolved. The method which must be followed is this:—a portion of the calculus must be reduced to powder, or, if the stone be divided, the surface may be scraped, and the powder must be thrown into a little distilled water in a test-tube. Heat is then applied by means of a spirit-lamp. As soon as the liquid boils, it is quickly thrown on a filter, the uric acid remains on the filter, and is caught there; whilst the clear liquid, which contains the urate of ammonia, passes through. This substance is much less soluble in cold water than in hot, and, as the liquid cools, the urate of ammonia forms a precipitate, which can be redissolved immediately by the application of heat. (Experiment.) But, there is another re-action of urate of ammonia, by which it can be distinguished from urate of soda or potash. If I take a portion of this urate of ammonia, dissolve it in water,

and mix it with a little solution of carbonate of potash, and then boil the mixture, what would happen? The result would be, that I should get carbonate of ammonia, and urate of potash. The carbonate of ammonia being volatile, will rise as a vapour, while the urate of potash will remain in the solution. (Experiment.) That I have carbonate of ammonia present as vapour, I may show by its action on red litmus paper. If the calculus had consisted of uric acid, or urate of soda, and I had treated it thus with carbonate of potash, no ammoniacal fumes would have been disengaged, I should have had no evidence of the presence of volatile alkali. It is only when urate of ammonia is present, that these vapours are produced. If I drive off the carbonate of ammonia from the test paper which has been acted upon, you will see that it will become red again. Thus much, then, regarding the first kind of calculi. We have seen, that, when a calculus is destroyed by heat,—when, on being acted upon by nitric acid, it becomes red,—when it is soluble with potash, evolving ammonia, that it must be urate of ammonia. As an additional test for this kind of calculus, you may try the effect of boiling water. But, if the substance is destroyed by heat—if it becomes red with nitric acid—if it is soluble in carbonate of potash, *evolving no ammonia*, and if it is not soluble in boiling water, then the calculus consists of uric acid.

Here is another calculus, very different in appearance from those of which I have spoken. If I take a portion of it, and apply heat to it, it will be entirely destroyed. (Experiment.) If I add a drop of nitric acid to a little of the powdered calculus, and then evaporate it to dryness with a gentle heat, I shall have no redness produced. There is no appearance of redness even after exposure to the vapour of ammonia. My conclusion, then, is, that the calculus contains no uric acid. If uric acid had been present, it would have been converted into alloxan and alloxantin, and, ultimately, into murexid; and the peculiar red colour would have appeared which characterises uric acid. But, in the calculus before you now, instead of redness, when treated with nitric acid, we see a decided blackness. If tested with alkali, it will be found readily soluble, agreeing, in this respect, with uric acid or urate of ammonia; but it evolves no ammonia with carbonate of potash. The black colour which I have mentioned as resulting from the action of nitric acid, is a very remarkable characteristic of the calculus. There is but one substance which occurs in the urine and is known to produce this re-action, and it is named “cystine,” or “cystic oxide.” When you meet with any calculus that can be entirely destroyed by heat, and can give a black colour when treated with nitric acid, you may be sure that it is worthy of special attention. But, how are you to make sure that it is cystine, or cystic oxide? The test, happily, is an easy and a very beautiful one. The composition of cystine and its relation to other calculi is represented in this diagram:

Composition of Calculi.

Cystine	C ₆	H ₆	NO ₄	S ₂
Uric oxide, xanthic acid ..	C ₁₀	H ₄	N ₄	O ₅
Uric acid	C ₁₀	H ₄	N ₄	O ₆
Oxalate of lime	C ₂	O ₃	Ca.O + 2 HO	
Phosphate of lime	PO ₅	3 Ca.	O	
Phosphate of ammonia and magnesia	PO ₅	2 MgO	NH ₄ O + 14 HO	

and it contains six equivalents of carbon, six of hydrogen, one of nitrogen, four of oxygen, and two equivalents of sulphur; or, taking the composition of 100 parts, no less than 25½ consist of sulphur. You may remember how I showed you the presence of sulphur in albuminous substances; and I can far more easily show you the sulphur in cystine, by the same test. A small portion of the calculus is taken in a test-tube, and acted upon by a strong solution of caustic potash. By this means the calculus is so far decomposed, that when a salt of lead is added in small quantity, and heat is applied, there is an immediate formation of the sulphuret of lead, which, by its black colour, cannot easily be mistaken. I have here a portion of cystine in powder; I boil it with caustic potash, and then add a drop of a solution of acetate of lead, and boil it again freely; you see a deep blackness is immediately produced, showing that sulphur is certainly present. When in any calculus treated with caustic potash, on the addition of a lead salt, you rapidly get this blackening, you may be sure that you have found a cystine calculus. The only other

substance which contains sulphur and can form a calculus is fibrin. The action of ammonia or nitric acid best distinguishes between cystine and fibrin. Nitric acid, when evaporated gently to dryness with the cystine, gives a black residue; with fibrin a bright yellow results. The accustomed eye, without any chemical test, can immediately distinguish the crystalline waxy cystine from the coagulated fibrous fibrin. Let me say a few words more on the fibrinous calculus, and you will see how it differs from cystine.

By reference to my Table, you will see, that among substances which can be destroyed by heat, there remains but this one. It is a body which occasionally, though very rarely, is found in the bladder when blood has passed in some quantity. The fibrin forms a clot, which, if it cannot be washed out by the urine, becomes a concretion of small importance, on account of the rarity of its occurrence. It is destructible by heat, leaving a slight ash. It is soluble in strong alkali, and gives a precipitate when the alkali is neutralised. When it is acted upon by nitric acid, it swells up, becomes distinctly yellow, and this yellowness becomes of a much deeper colour (almost orange) on the addition of any alkali. The stain of nitric acid on the fingers must be familiar to all; precisely similar action ensues when nitric acid and fibrin are in contact. The peculiar appearance of fibrin calculus I am unable to show you; it occurs so rarely that I have no specimen of it. I have only mentioned it to point out how it may be distinguished from cystine. There is another calculus which gives a yellow colour when treated with nitric acid, and which is entirely destroyed by heat. It has been called uric oxide or xanthic acid. It is soluble in water, can be destroyed by heat, and becomes yellow when evaporated with nitric acid. It occurs most rarely. I only know of two or three chemists who have found it. It is said to exist in the urine of the spider, and a substance nearly, if not quite identical, has been obtained from guano—the excrement of sea fowl. It has been named guanine. Here is a specimen; but I must pass on to other more common calculi.

The class of substances which are not destroyed by heat, like the destructible class, consists of different kinds of calculi. The first of these substances which I shall mention is oxalate of lime. The re-action of oxalate of lime, when heated, is intermediate between the re-action of uric acid and the bodies which stand lower in my Table. If I burn a portion of an oxalate of lime calculus in a platinum spoon, it will blacken, crepitate, and fly out of the spoon unless it be covered; ultimately it will deflagrate; but it will never be entirely burned away. When heated to the utmost, there will always be a residue left, which, on examination, will prove to be quick-lime. If I do not perfectly burn the substance, I find, nevertheless, that it undergoes, by the application of a more gentle heat, a great change. If to a portion of this powdered calculus I add dilute hydrochloric acid, no action will take place; the oxalate of lime will remain unacted on and undissolved. If, however, I heat the powdered calculus, and then add water and hydrochloric acid, a brisk effervescence will take place. (Experiment.) The effervescence is caused by the escape of carbonic acid gas. By the action of heat the calculus was changed from oxalate of lime into carbonate of lime; the carbonic acid gas is set free on the addition of the hydrochloric acid, and the chloride of calcium which is formed exists in the solution. Here, then, is a method of distinguishing between calculi consisting of carbonate and oxalate of lime. This is the difference between the two substances. The carbonate of lime calculus, before heating, effervesces strongly with hydrochloric acid; while the oxalate of lime calculus requires to be heated before it will effervesce. Both, however, agree in giving caustic lime. If I heat carbonate of lime intensely, I drive off the carbonic acid, and get caustic lime, which can be slaked, and has an alkaline reaction; so, also, if I take oxalate of lime, and subject it to a high temperature, it loses its property of effervescing, and is converted into caustic lime. Dr. Wollaston used to heat a portion of the suspected oxalate of lime calculus, and then place it on the skin of his hand, in contact with a drop of water; if its heat was distinctly perceptible, he concluded that the calculus contained lime.

The most certain and decided test for oxalate of lime will require a few minutes' attention. As it is the only test by which oxalic acid can be distinguished from all other vegetable acids, I must not omit it here. If I heat a small portion of oxalate of lime calculus with sulphuric acid, the

oxalic acid is decomposed into carbonic oxide and carbonic acid gases, in consequence of the affinity of the sulphuric acid for the water, without which oxalic acid cannot exist. The accompanying diagram will show you the relation of the oxalic acid to the gases which are evolved; and there is no other substance which, when treated with sulphuric acid, gives rise to equal volumes of carbonic oxide and carbonic acid:—

<i>Oxalic Acid.</i>					
	Vol.	Equiv.	Per cent.		Vol. Equiv.
Carbon....	2	12	33·34	Carbonic oxide..	1 14
Oxygen ..	3	24	66·66	Carbonic acid ..	1 22
	—	—	—		—
	1	36	100·00		1 36
<i>Crystallized.</i>					
	Vol.	Equiv.	Per cent.		
Anhydrous oxalic acid	..	..	..	1	36 57·14
Water ..	..	..	..	3	27 42·86
	—	—	—	—	—
	1	63	100·00		

I have a small test-tube, containing a little powdered oxalate of lime calculus. I add a few drops of sulphuric acid, to which I will apply heat; and, by means of a cork, I fasten on another tube, for the purpose of carrying off the gases that will be evolved. The sulphuric acid does not act upon the lime further than combining with it to form sulphate of lime; but very different is its effect upon the oxalic acid. Sulphuric acid cannot be in contact with oxalic acid without taking water away; and, if it takes water away, the carbonic acid and carbonic oxide gases will escape. These gases you see coming out of the tube, and in rapid succession the bubbles rise through the quicksilver, under which they pass into the glass tubes which are filled with mercury. I can fill many tubes thus with the mixed gases, and when no more gas escapes on the application of heat to the tube retort I can remove it and examine the gaseous substances which have been collected. We will take one tube and test its contents. You know that caustic potash immediately absorbs carbonic acid gas. I will with a pipette make a little caustic potash pass into the gas, and then after a little agitation the caustic potash rapidly rises in the tube, and the whole of the carbonic acid gas is taken up by it, leaving only the carbonic oxide gas. You see half the gas is gone. What does the other half consist of? Carbonic oxide gas has the property of burning with a delicate blue flame. I will invert my tube and apply a light, and now you see the blue flame passing down the tube. The other tests mentioned in my table lead to a very strong opinion, that you are examining an oxalate of lime calculus; but only by this last test can you be perfectly certain that you have oxalic acid and nothing else. If your calculus, insoluble in dilute acid, can by heat be converted into a substance soluble with effervescence; and if by applying heat further, you can reduce it to quicklime, you have positive proof that lime is present; but the difficulty is to be certain as to the nature of the acid. It is highly probable that any substance which behaves thus is oxalic acid, but it is not necessarily so; other organic acids, did they occur in the urine, might give a similar reaction. But by the decomposition of the suspected calculus in the way I have shown you, you may be positively certain that oxalic acid is present.

Time permits me to say a very few words only on the other substances mentioned in my table. I have here two calculi which before and after they are heated are easily dissolved in water and a drop of hydrochloric acid; they differ, then, from oxalate of lime, which can only be dissolved easily in dilute acid after heat has been applied. One of these substances gives off ammonia when treated with alkali, and the other does not. Both have very remarkable re-actions with the blow-pipe; if mechanically mixed together they immediately give a substance which is with the greatest ease fusible. When these substances occur in the same calculus it has received the name of the fusible calculus, of which you see a beautiful specimen. It only requires that a portion of the calculus should be placed in a charcoal holder, and by the application of heat the calculus, which is only a mechanical mixture of these two calculi, fuses most readily. (Experiment.) If I take either separate, and test it in the same way, it will not fuse; but by adding one or the other, so that two parts of phosphate of ammonia and magnesia are mixed with one part of phosphate of lime, I can form the fusible

mixture. Dr. Wollaston was accustomed to scrape off a little phosphate of lime from his paper-cutter, mix it with a little of the calculus he was examining, and determine with the blow-pipe whether the mixture was made more or less fusible by the addition of the phosphate of lime. A calculus which will not burn away and will dissolve easily in dilute hydrochloric acid, and fuses when heated with half its bulk of phosphate of lime, is phosphate of ammonia and magnesia. If it will not fuse until it is mixed with twice its bulk of phosphate of ammonia and magnesia, it is phosphate of lime. I have thus gone through the substances mentioned in the table.

You must not think (and I have already hinted at this) that calculi consist of these substances in a state of purity; there are always other substances present mixed with the most important constituents of the calculus. I might mention colouring matter, mucus, pus, infusoria; and what I now wish to bring before you, there is a variable quantity of water, containing the salts of the urine. And do not let it be thought, that the water present in calculi is a matter of no consequence; it is of no consequence when the calculi are removed from the bladder, but, in the bladder, it may be of considerable importance. When the calculus is first deposited, each particle is highly saturated with moisture; the calculus is, in consequence, in the loosest state of aggregation; as fresh matter is deposited around it, the interior is shielded from the fresh moisture of the bladder; a portion of the water of the interior of the calculus may be given to the exterior layer of deposit, and a different state of aggregation within may result. Though this may occur in all calculi, yet it is rarely that it produces a manifest result; occasionally, however, it is quite certain that the calculus has been broken by the change in the aggregation of particles, arising from the change in the state of moisture in the interior of the stone. I have here two most convincing specimens of this spontaneous splitting up of the calculus in the bladder, in consequence of the changes which the particles of the stone underwent. In one stone you can count seven fragments which were passed from the bladder at different times, and were afterwards put together, forming this calculus; happily the nucleus was also passed, and thus the patient underwent lithotomy by nature, if I may so speak, and was cured, and has come to my lecture to-day. Let me show you, by this mass of quick lime, how a substance can be broken up in consequence of a change in the relation of the exterior to the interior of the mass. If I dip this quicklime into water, there will not be a contraction of the interior, but there will be an expansion of the exterior, which will produce the same remarkable change. In a few moments you will see the solid mass fall into pieces, and even the centre will be broken up. In the lime, the expansion of the outer part breaks up the mass. In the calculus, the contraction of the inner part produces the same result.

I have, then, to-day brought before you many different substances which can be taken from the urine, most of which can be at all times detected there. In my future lectures, I shall dwell on these excreted substances separately, showing you, as far as I can, their relations to nutrition and respiration.

ORIGINAL COMMUNICATIONS.

AMENORRHŒA.

By EDWARD RIGBY, M.D., &c.;

Senior Physician to the General Lying-in Hospital; Examiner in Midwifery in the University of London.

THE following case of amenorrhœa is interesting from the vicarious suffering which attended it, and I hope not the less valuable because I have failed to restore the lost catamenial secretion to its natural state.

B. D., aged 43; married eleven years; never pregnant; tall, well formed.

Dec. 21.—Complains of hot, burning irritation of the vulva, and especially of the orificium urethræ, coming and going in flushes of scorching heat, and extending to the vagina and perineum, alternating with depression of spirits and abdominal discomfort. Tongue red and fissured; urine natural, except when she is in the above-mentioned suffering, and then it is of a dark, dirty red. Severe pain at the lowest part of sacrum, coming on from no assignable cause.

The catamenia ceased three years and a half ago, after severe mental depression, followed immediately by acute dyspepsia, which, in the course of a twelve month, was relieved by the appearance of a mucous discharge from the nose, the Schneiderian membrane of which was intensely red and injected. This was followed by a similar condition of the orifice of the urethra and vagina.

Examination.—Orificium urethræ is much swollen, and of a crimson colour. The os and cervix uteri are very small; the os forms merely a small dent, which is difficult to detect with the finger, and through it I could not pass the sound. Behind, I feel what appears the fundus, somewhat retroverted.

℞ Extract. taraxaci, ʒj; liq. calcis, ʒ viii. M., ft. mist. cujus sumat cochl. magn. ij. ter die.

℞ Pulv. guaiaci, magnesiae carb., aa. gr. x. M., ft. pulv. j. o. m. sumendus.

℞ Liq. plumbi, ʒii; decoct. papav., ʒviii. M., ft. lotio.

Dec. 24.—No change. Evacuations dark and offensive.

℞ Pil. hydrarg. chloridi comp. gr. v.; o. n. rep. alia.

Dec. 28.—Has continued the above treatment. The bowels have been well opened; evacuations offensive, of a muddy, leaden colour. The condition of the orifice of the urethra and vagina is much improved, being much paler, and she has less suffering and irritation. Until the last few days the eyes have had a peculiar glassy look, but now are clear and bright as usual. Says that she has not felt so well for years as she has been during the last few days. Rep. omnia.

January 17.—Has been taking a Plummer's pill every night; the evacuations are still unhealthy, but she is better.

℞ Ferri sulphatis, gr. ij.; magnesiae sulph. ʒj.; acidi sulph. dil., ʒi.; syrupi rheados, ʒss.; aquæ menthæ pip. ʒviijss. M. ft. mist. cujus sumat cochl. magn. ij. primo mane.

℞ Acidi hydrochlor. dil.; acidi nitrici. dil. aa. ʒj.; liq. taraxaci, ʒj.; infusi gentianæ, co. ad ʒviij. M. ft. mist. cujus sumat cochl. magn. ij. bis die. Rep. pil. hydr. chloridi comp.

January 21.—Bilious evacuations have passed, at length, with great relief to the local affection, and improvement of the general health. Rep. omnia.

I ceased to take notes of this interesting case, but the chief features of its treatment, which in the main point was unsuccessful, are sufficiently impressed upon my mind for me to give a general account of it. Although I succeeded in establishing a tolerable action of the liver, which had been nearly suspended for some time, the erythematous state of the vulva never entirely yielded; for a time it would abate considerably, but it never failed to return after a short time, whether aggravated by an attempt to walk, or, as was not unfrequently the case, coming on without any assignable reason.

The red and fissured state of the tongue kept pace with the condition of the external parts, and on some occasions, when this was at its very worst, especially when increased by exercise, the bladder and kidneys sympathised considerably, the bladder being in a painful state of irritability, and passing frequently small quantities of turbid, loaded urine, the colour of mahogany.

On account of the heat, swelling, and throbbing about the perinæum, and also in the hope of relieving the burning erythematous congestion of the vulva and vagina, by restoring the suppressed catamenial secretion, or, at least, by effecting a topical depletion as a substitute for it, I ventured to recommend the application of four leeches to the anus; but the inflammation which followed not only increased her sufferings to a tenfold degree, but ran such a risk of inducing erysipelas, that I did not venture upon a repetition, and I was compelled to relinquish my hopes of obtaining relief for her, and be content with having effected an improved condition of the general health.

On reviewing the history of this case, I presume that it is essentially one of suppressed menstruation, and that the burning erythematous flushing of the vulva, etc., must be looked upon as a vicarious substitute for the suppressed secretion, which I tried in vain, by a variety of local means, to restore. It is to be hoped, that, when the change of life, as it is called, arrives (and it may naturally be expected in the course of a year or two), the affection will subside, and leave her free from what is little short of positive torment.

Mrs. B., aged 29, tall, elegantly formed; married five years, never pregnant; complexion dusky.

March 5, 1851.—Amenorrhœa for five months. Feeble pulse; tongue glazed, pale, and sulcated, yellow at the back; violent flushings, followed by perspiration; frontal and vertex headache; bowels irritable and offensive; urine turbid.

R. Liq. taraxaci, ℥i.; Decoct. sarzæ co.; Liq. calcis, aa. ℥iiss. M. ft. mist. cujus sumat. cochl. magna ij. ter die.

R. Pulv. guaiaci, magnesiae carb., aa. gr. x. M. ft. pulv., o. m. sumend.

March 4.—Evacuations still offensive; urine clear; tongue much improved; flushing diminished; appetite better; complains of pain and weight in her back. Bowels not relaxed.

R. Pil. hydrarg., gr. iij.; pulv. ipecacuanhæ, gr. j.; ext. lupuli q. s. ut. ft. pil. ij., h. s. sumend.

Rep. mist. et pulv.

March 17.—Bowels greatly improved; feels much better; tongue more natural; appetite good; sleeps well.

Omit. pil. et. mist.

R. Acidi nitrici dil., acidi hydrochlor. dil., aa. ℥i.; Liq. tarax., ℥i.; infusi gentianæ co., ℥vii. M. ft. mist. cujus sumat. cochl. mag. ij. bis die ante cibum.

Rep. pulv.

March 20.—Better.

Examination per Vaginam.—Os uteri very small. The uterine sound passes to the natural extent, but evidently through a narrow canal. Uterus is tender to the touch. Cervix very soft. Rep. med.

March 24.—Much better.

R. Ferri. sulph. gr. ij.; ext. lupuli, gr. vi. M. ft. pil. ij., o. n. sumend. Rep. mist. and pulv.

March 27.—Better; but the tongue is furred and yellow.

R. Pil. hydrarg. extr. hyoscyami aa. gr. v. o. n.

R. Ferri. citratis, ℥ij.; acidi citrici, ℥ij.; aquæ destillatæ, ℥viii. M. ft. mist.

R. Potassæ bicarb., ℥ij.; syrupi aurantii, ℥j; aquæ destill., ℥vij., M. ft. mist. Cujus sumat cochl. magn. ij., bis. die. cum. pari misturæ superscriptæ inter effervescendum portione.

March 31.—Better. Tongue much improved; urine clearer; but her pulse is still feeble; hands purple; feet cold.

Sumat pil. alt. noctibus. Rep. mist. ferri citratis effervescens.

April 9.—She remarks that these flushings come on daily at the same hour, and terminate in perspiration.

Loco ferri citratis sumat quinae et ferri citratis gr. v., ter. die. in mistura effervescenti.

May 7.—Writes from the country, that she is feeling much stronger, and enjoys her country walks and rides; but says that during the last two days she has suffered from what she calls "a burning discomfort" in her chest, and that the abdomen is tender to the touch; this is worse after meals, and is relieved by a glass of sal volatile and water. She had a similar attack a few years ago, but more severely, and dreads a return of it now. Bowels are regular. No sign of catamenia. Omit. mist.

R. Pil. ferri comp, gr. x. o. n.

R. Potassæ bicarb., ℥iv.; potassæ nitratis, ℥ij.; Sp. ætheris nitr., ℥ss.; aquæ menth. pip., ℥viiss. M. ft. mist., sumat cochl. magn., bis. die. post cibum.

May 15.—During the last fortnight she has suffered from paroxysms of severe colicky pain, extending over the whole abdomen, and attended with much flatulence. Bowels regular; pulse stronger.

Rep. Mist. potassæ bicarb. et nitr. Rep. pil. hydrarg. and hyosc., p. r. n.

R. Ferri sulphatis gr. ij.; extr. lupuli, gr. vj. M. ft. pil. ij. bis. sumend.

June 25.—This day four weeks, after two or three days of severe pain of chest, right hypochondrium, and back, the catamenia appeared, quite healthy, and lasted for seven days, without producing any feeling of debility. The complexion is remarkably improved, having become quite clear. Although she has been exerting herself too much in the laborious gaities of a London season, she feels much better. Pulse tolerably good. Urine clear. Has returned to the mistura ferri citratis effervescens.

Rep. mist.—Sodæ potassio-tart., primo mane p. r. n.

Aug. 29.—After an interval of six weeks, the catamenia returned without any pain, although she did not refrain from walking at the time. The discharge lasted moderately for

four days; produced a feeling of great relief, without any sense of weakness.

R. Pil. hydr. chloridi. co. gr. v., alt. noctibus.

R. Acidi hydrochlor. dil. acidi nitrici dil. aa. ℥i.; Liq. taraxaci ℥i.; infusi cinchonæ cordifol. ℥vii. M. ft. mist. cujus sumat cochl. magna ij. bis die ante cibum.

The state of amenorrhœa in this case may be fairly attributed to general debility, arising from very considerable derangement of the chylopoietic viscera. Her general appearance, the state of the tongue, the vertex and frontal headache, loaded urine, offensive and irritable bowels, were sufficient indications of it. The constant flushings also point to an unhealthy condition of the circulation itself.

So much mucous irritation of the bowels had been set up by the long continuance of this condition, that I abstained from giving any form of mercurial at first, and merely confined myself to putting her on a short course of taraxaci, with lime water and sarsaparilla, regulating her bowels by a simple powder of guaiacum and magnesia. In about ten days a sufficient improvement had been effected to let me try blue pill in small doses, and I combined it with a little ipecacuanha, considering that I should increase its action on the liver thereby.

The state of the bowels was decidedly better in consequence; every function had improved, and I now put her upon the mixture of nitro-muriatic acid, taraxacum, and gentian, which so often appears in these reports.

Having thus cleared my ground, as it were, and improved her general health to a certain amount, I made an examination on the 20th of March. The os and cervix uteri were remarkably small, but the sound passed to the natural extent, and nothing abnormal in the size, position, &c., of the uterus could be detected; the inner surface of the organ was tender and irritable when touched, but this was probably a result of the deranged state of the abdominal viscera which had hitherto existed, as the soft condition of the cervix, which I have noted, was probably a result of debility and want of tone.

With increasing improvement of the general health, I ventured to give a little steel at night, and thus gradually brought her to the course of citrate of iron, which seemed ultimately to do her so much good.

In her report of herself, on May 7th, she began to notice an amount of abdominal discomfort and tenderness, which I cannot help looking upon as one of those various symptoms which come under the head of "Molimina Menstruationis," and which are, in fact, so many efforts of the system to establish this periodical relief, and, in rather more than a fortnight afterwards, the catamenia returned after an absence of eight months.

ON THE BENEFIT DERIVED FROM THE INHALATION OF CHLOROFORM IN A CASE OF PULMONARY CONSUMPTION.

By T. SPENCER WELLS, F.R.C.S.,
Surgeon Royal Navy.

[To the Editor of the Medical Times.]

"SIR,—In January last I wrote a paper on the relief afforded by the inhalation of small quantities of chloroform in a case of phthisis, which was attended with an unusual degree of dyspnoea and spasmodic cough. The paper was presented to the Royal Medical and Chirurgical Society, by Dr. Forbes, and read before the Society in April. A short abstract appeared in the journals at the time; but, as the subject is one of great practical interest, I have sent you a copy of the paper with the hope that some of your readers will be induced to make use of a remedy which I believe to be a far more effectual and safe palliative in the most distressing and alarming symptoms which attend the course of phthisis than any other I have employed myself, or the effects of which I have witnessed in the practice of others.

"I am, &c.

T. SPENCER WELLS."

ONE of the last wishes expressed to me by a nobleman, recently deceased, was, that I should take the earliest opportunity of making known to the Medical Profession the great

relief afforded by chloroform in every attack of difficult breathing and spasmodic cough from which he suffered during the last eight months of his life.

The patient was thirty-seven years of age. He was first seen by me in October, 1849. At that time he had suffered from cough and some difficulty of breathing for about a year, and had been out of health for some months before any cough was observed. Early in 1848 he was forty pounds below his ordinary weight, and this loss he never regained. At my first examination I detected disease in the upper part of the right lung, and my diagnosis was confirmed soon afterwards in Paris by Louis. I accompanied my patient during a nine months' voyage in Egypt and Italy, and returned with him to England in July, 1850. Sir James Clark and Dr. Bright then saw him, the disease being very much in the same state as when he left England. It progressed, however, in the autumn, and was advancing rapidly when he was seen by Drs. Forbes, Watson, and Walshe in October. It ran the usual course, and was terminated by death just after the opening of the new year. Examination of the body after death showed the existence of tubercular deposits and cavities in the lungs, and ulceration of the trachea.

From the very first the sense of oppression in breathing, the feeling of inability to fill the chest, and the violence of the convulsive or spasmodic cough, were much greater than usual. Most of the favourite sedatives and narcotics, demulcents, and counter-irritants, and ordinary inhalations were employed, but without any very evident benefit. Opiates, in particular, appeared to do harm, by inducing a general dry condition of the bronchial mucous membrane. During the voyage on the Nile the urgent symptoms almost disappeared, but returned with increased violence in Italy. At Rome, in May, the violence of the cough was quite extraordinary, and the fits of difficult breathing resembled those of pure spasmodic asthma. I was called to him in one of these fits just after having employed chloroform for another purpose. The thought then occurred simultaneously to his lady and to myself, to attempt, at any cost, to give some temporary relief. I accordingly threw a few drops of chloroform on a handkerchief and held it before his face. The most complete relief was afforded immediately. In a few seconds, he passed from a state of extreme suffering to one of perfect ease. Tolerably healthy respiratory murmur was heard in parts of the chest where loud cooing and whistling noises had been heard just before. From this time he would never be without chloroform in his room. He thought once or twice that it left a feeling of faintness, or increased weakness, for some hours, and, at one time, slight coldness and want of circulation in the extremities followed it; but I am not at all sure that these were not mere coincidences. They led me, however, to use the chloroform in a dilute form, mixing it with from four to six parts of eau de Cologne. About half a drachm of this mixture on a handkerchief quite sufficed to afford relief, and, as he did not take it at first more than three or four times a week, the quantity of chloroform inhaled was then very small; yet it always enabled him *immediately* to take a long, full, deep breath, and he described the sensation of relief as "most luxurious." Latterly, as advancing disease led to a more frequent necessity for its employment, I thought the spirit in the eau de Cologne might affect his head. I therefore gave the chloroform pure. Afterwards, the "dead feeling" in the limbs and increased weakness was never observed, although the quantity of chloroform inhaled was much greater. He never took it, however, in such a quantity as to produce anything like insensibility. He was always perfectly conscious, and knew the exact moment when the necessary relief was obtained. If he continued the inhalation longer, he felt himself becoming a "little light about the head," and sometimes spoke for a few moments in a confused manner; but I never observed, at any time, the least ill effect which could fairly be attributed to the chloroform. The pulse always became fuller and softer, but its rate was scarcely, if at all, affected.

During the last few days of his life, those well-known symptoms of ulceration of the trachea came on, which often render the termination of consumption so agonizing both to the patient and his friends. They led to the more frequent and almost constant use of chloroform, but in the same small doses, and with the same happy results. The intellect remained perfectly clear until asphyxia was actually commencing, and he was most anxious that those suffering

from his disease might find relief from the same remedy. He called it his "bottle of life." He was well acquainted with the physiology of respiration and circulation, was continually analysing his own sensations, and he said he felt perfectly sure, not only that the chloroform relieved some spasmodic closure of the air-passages, and allowed air to enter his lungs, but that the vapour itself "ventilated his blood" more than common air would do. Its effect was always certain and immediate. We never had to *hope* that the remedy would be effectual; we were always *certain* that, whatever the degree of dyspnoea, however great the violence of the cough, so long as we had chloroform, the means of relief were at hand, and we were never once disappointed.

I do not wish to add any speculations to a narrative which I intend as a plain statement of facts, still less to deduce any general conclusions from one case; but I may add, that I have employed chloroform in two cases of spasmodic asthma with similar good effects, and that I have never been able to trace the least ill effect to its use. Even if it were proved to produce such injurious effects as opium and other narcotics, I submit that this would be no valid objection to its employment, for the daily general use of these drugs, the benefit of which is often very doubtful, shows that such ill effects are universally thought to be less than those likely to result from unrelieved cough and dyspnoea. I had more than one proof during the progress of the case just related, of the truth of the general belief, when, owing to accidental circumstances, no chloroform could be procured for some time. It must be remembered, also, that the period during which phthisis was running its course was much more than double the average length.

I must in conclusion express my hope, that in the use of chloroform we shall advance a step towards the cure of consumption, gaining time for the operation of other remedies by employing a safe palliative for the most urgent and distressing symptoms. Even should this hope prove fallacious, I feel confident that chloroform will diminish the sufferings of consumptive patients far more completely than any ordinary sedative.

INFANTILE COMA.

BY T. HERBERT BARKER, M.D.

Fellow of the Royal Medical and Chirurgical Society.

For some time my attention has been directed to a form of coma in very early life,—not mentioned, as far as I have searched, by any writer on the diseases of children. Since another case has lately presented itself to my notice, I have thought that a few brief observations on the subject, through the medium of the *Medical Times*, would be acceptable to the Profession.

Symptoms.—Five cases have been observed, and the symptoms and progress of the disease have been similar in all of them. In every case the child was apparently healthy at its birth. With one exception, it occurred in children where some circumstance or other had rendered it undesirable, or impossible, for them to be nourished at their mother's breasts, and the attempt had been made to rear them by artificial feeding.

Within a few days after birth drowsiness comes on, which gradually deepens into profound coma. At first, the periods of sleep are simply prolonged, the infant arousing at intervals and taking the food presented to it readily, and in sufficient quantity. Gradually the child awakes less frequently, and shows less disposition to take food when offered to it, perhaps relapsing into sleep in the very act of feeding. At length the sleepiness becomes so profound that it is impossible to rouse it sufficiently to take more than half a drachm or a drachm of food at a time. Even while being washed and dressed, the child scarcely awakes. The alvine evacuations were too pale in two cases, slightly relaxed in one case, but in the others healthy. The urinary secretion was apparently health,—not high-coloured, not suppressed; whether deficient in *urea* I have not been able to ascertain. The surface becomes cool, and there is increasing difficulty in maintaining its warmth, particularly in the extremities. The action of the heart becomes gradually feebler and slower. The surface of the body and the conjunctiva become deeply tinged with yellow. The respiration gradually becomes slower, and at rarer intervals suspicious. The body

emaciates, and the countenance presents a pinched and somewhat anxious appearance. The pupils are slightly dilated. The anterior fontanelle is depressed, and the skin of the forehead sometimes corrugated; in fact, all the signs of inanition are by degrees superadded. The little patient, which had previously shown no indications of suffering, occasionally, before the fatal termination, manifests a disposition feebly to whine, particularly on being moved. I have observed no enlargement of the abdomen.

Causes.—The cause of the coma would seem to be involved in considerable uncertainty, but, in the cases which have come under my observation, I am satisfied that it has not arisen from the administration of any kind of narcotic; in fact, the occasion for such medicines has not existed in any one of the cases. In the case of my last patient, for a slightly relaxed state of the bowels, I prescribed a mild astringent, but studiously avoided any form of opiate, in consequence of the tendency to drowsiness. Afterwards, upon the increase of this symptom, I congratulated myself on the avoidance.

It is probable that the circulation of bile through the brain may be the cause of the coma; and the fact, that in the cases of recovery the yellow colour of the surface and the coma have disappeared simultaneously, would seem to strengthen this supposition. If this be the cause of the coma, we must still search for the occasion of the derangement of the biliary secretion, and the result of the only successful plan of treatment which I have observed would indicate, that unsuitable food is the primary cause of the mischief.

Treatment.—In the first three cases I tried in succession several medicines, particularly mild laxatives, mercurial alternatives, and stimulants, but without success, the cases terminating fatally within three weeks after birth. The occasional administration of small doses of spiritus ammoniæ comp. and two or three drops of brandy diluted with water produced a temporary alleviation of the comatose symptoms; this was but transient, and the stupor returned. From the want of success in these cases I was induced to recommend the trial of a wet nurse in my fourth patient, although, from the deep sleep, and from the exhausted condition of the system, there appeared but little chance of benefit. Indeed, at first the child could not be sufficiently roused to take the nipple between its lips, even if it had strength to suck; and the milk was allowed to drop into its mouth directly from the nipple. This was slowly swallowed from time to time, and, after several persevering trials, the child began to suck, at first taking but a very small quantity each time. The colour of the surface gradually but quickly improved, the coma very perceptibly diminished from day to day, and within one week the child was in a state of good health.

In my fifth case, which occurred a few weeks ago, bearing in mind the success in the last instance, I did not allow the artificial feeding to be persisted in so long, but, on the third day from the appearance of the drowsiness, which was daily increasing in intensity, directed a wet-nurse to be procured, and had the satisfaction of observing a speedy subsidence of all the unfavourable symptoms from the moment the child began to suck.

Whatever may be the explanation, I have no doubt in my own mind, that the unsuitableness of the artificial food is at the root of the mischief in these cases. We know that cases do occasionally present themselves, in which artificial feeding, however judiciously it may be pursued, will not suffice to sustain the life of the infant. Whenever the train of symptoms which I have attempted to describe should present themselves, I would strongly recommend a *healthy wet-nurse* to be procured, if possible. My experience on this point would lead me to infer, that this is the only reasonable chance for the little patient.

I would also recommend this plan to be pursued, should the same symptoms occur in a child nursed by its mother; the presence of these symptoms would sufficiently indicate that the milk was unsuitable, and justify the change. In the only case of coma, at so early a period, which occurred in an infant nursed by its mother, she was in ill health, and the child died; but, should another case of the same kind occur in my practice, I would certainly attempt to rescue the life of the child by means of the wet-nurse.

These cases are interesting in a medico-legal point of view, inasmuch as they may possibly be mistaken for the effects of opiates. It was with great difficulty that my mind

could be dissuaded from the notion, that opium in some shape or other had been administered in the first case which came under my notice.

Probably some of your readers have observed similar cases, and can throw some light upon the pathology and treatment of this class of cases; and if this imperfect sketch shall elicit communications which shall convey any information on the subject, or shall confirm the correctness of the treatment suggested, and shall induce others to make a timely attempt to save the lives of these little patients, I shall be amply rewarded.

The name which is prefixed sufficiently indicates the nature of the disease, and has been preferred to that of *coma infantum*, or *coma neonatorum*.

Bedford.

ON THE PATHOLOGY OF THE UTERUS ITS ANATOMY AND PHYSIOLOGY.

By T. SNOW BECK, M.D. Lond., F.R.S.,

Fellow of the Royal College of Surgeons of England.
Physician to the Farringdon General Dispensary and Lying-in Charity.

[Continued from page 274.]

ON THE EXISTENCE OF ULCERATION AS A COMMON DISEASE (CONTINUED.)

DR. BENNET appears very confident of the existence of "ulceration of the neck of the uterus in the virgin," observing, "This discovery cannot but be considered of extreme importance, inasmuch as it brings at once within the scope of successful treatment a class of most distressing and intractable cases." When speaking of the frequency of the disease, he says, "it is of not unfrequent occurrence;" "it does exist, and not very unfrequently;" "is not an uncommon disease;" and, after describing it as if of common occurrence, he concludes with, "notwithstanding all that I have said above, I must not be considered to assert that this disease is a very common one in the virgin female. On the contrary, I believe it to be exceptional," Pp. 159—170. Thus, leaving it undetermined, whether it is an "exceptional," or "not uncommon disease." He states, he has met with it "in virgin females above twenty, who have menstruated for some time. In young females only sixteen and seventeen years of age, in whom menstruation was not even yet established; (and further,) at every phasis of female existence,"—the exact meaning of which latter phrase it is difficult to comprehend. In its ordinary sense it must mean that he has "met with" ulceration in young girls, and even female children; but, I cannot think the morbid desire to discover ulceration, or a condition to which this term is applied, can have been carried to this extent. I would rather conclude, that the sentence is without meaning, and introduced after the manner of the school whose doctrines he publishes for effect only.

The symptoms which indicate this morbid lesion are described thus:—"pains in the lumbo-sacral, ovarian, and hypogastric region, as also in the hips and thighs, a white or transparent mucous, a yellow purulent, or a muco-sanguinolent discharge, and pelvic weight and bearing down. As in married females, a glairy or purulent discharge indicates inflammation, and probably ulceration. A permanent white discharge is a most suspicious circumstance,—the absence of a permanent yellow or white discharge is no proof whatever that inflammatory ulceration may not exist. As in married females, the local pains generally persist throughout the entire interval of menstruation, although they are usually much more severe during its existence." "In many, the most prominent symptom has been dysmenorrhœa in a very severe form." "It is not, however, the existence of pain during menstruation, but the presence of pain when it did not previously exist, and its increase when it did. The breasts are often sympathetically affected,—they become large, swollen, tender, and painful; and the areola is developed as in early pregnancy." "The general symptoms will often throw great light on the nature of the disease,—of all, extreme debility is the most significant." "A disordered condition of the digestive system, great mental depression, loss of rest, hysterical symptoms, nervous agitation, spinal irritation, etc., also characterise the disease." The local symptoms are thus mentioned:—"If the cervix is

free from disease, it is soft, and the os is closed; if inflamed and ulcerated, it is enlarged and swollen, and the os more or less open and velvety."—P. 167. "The ulcerated surface is, also, often irritable and vascular."—P. 169.

When speaking of instrumental examination, Dr. Bennet says:—"No physical examination should be ever thought of in an unmarried female unless there be next to a moral certainty that inflammation and ulceration of the uterine neck actually exists. Fortunately, a practitioner, familiarised with the disease, may generally acquire this conviction by oral examination of the patient, and by a careful and judicious appreciation of all the elements of the case."—P. 163. Yet he subsequently adds, "that by an accurate analysis of the local and general symptoms presented by the patient, very fair presumptive evidence of the existence or non-existence of inflammatory ulceration of the cervix uteri may be obtained, in many instances, without resorting to physical examination." P. 166. There is, however, a wide difference between a "conviction next to a moral certainty" and "very fair presumptive evidence." With the former we might feel justified in proposing instrumental examination of the virgin; but with the latter, all careful and right-minded practitioners would hesitate long before doing so. Here again the peculiar style of Dr. Bennet, who first asserts, and then so qualifies the previous assertion as almost to deny it, leaves it undetermined which of the two can be obtained in practice.

When we review these symptoms, it is evident that they present no evidence of the existence of ulceration, nor do they afford any foundation for the statement, that ulceration of the neck of the uterus exists in the virgin female. But to examine them *seriatim*. The discharges, whether "permanent white, glairy, yellow purulent, or muco-sanguinolent," are not signs of an affection of the uterus, but of the vagina, which statement is confirmed by the remark unconsciously made by Dr. Bennet, that "the absence of a permanent yellow or white discharge is no proof whatever that inflammatory ulceration may not exist." Of the pains described in the lumbo-sacral, ovarian, and hypogastric region, hips and thighs, some are produced by a disease of the uterus; others by an affection of the vagina; they, moreover, accompany chronic inflammation of either of these organs, and, consequently, are not indicative of ulceration. The presence of "dysmenorrhœa in a severe form," or the persistence of "local pains throughout the entire interval of menstruation," are again signs of chronic inflammation of either the uterus or vagina; while the evidences of derangement of the general health attend different affections of the uterine organs, and do not by any means indicate the existence of ulceration.

The analysis of the symptoms, then, leads to the conclusion, that neither "a conviction next to a moral certainty," nor "very fair presumptive evidence," can be obtained by an "oral" examination. This is confirmed by cases, published by myself, wherein all the symptoms said to indicate this morbid lesion "existed to a marked degree, and yet not a trace of ulceration was to be found"—(*London Journal of Medicine*, May 1851)—and by cases detailed by Dr. Bennet, who, when considering the symptoms, says: "Sometimes there are only one or two symptoms present; thus, I have now under my care an unmarried lady, aged 27, with whom the only symptoms were excruciating pain for the first day of menstruation, and a slight falling off in the general health. I was led to connect this state with local disease, because the dysmenorrhœa had only existed for two years, had resisted all general treatment, and was increasing." An examination was made. Nothing could more forcibly illustrate the improper practice advocated, or the unwarrantable use of the speculum, than the details of this case. No other medical man, I am convinced, would consider himself justified, by these symptoms, to subject a virgin female to this treatment.

In illustration of these remarks, I might quote many cases similar to the following:—

S. D., aged 24, unmarried; of good conformation, fair, ruddy complexion, light brown hair; had no remembrance of being ill until the last twelve months. The present illness began about two years ago, with pain in the lumbar region during the catamenial period—previously been quite free from pain, which passed off to return again at the next period. The pain gradually increased in severity at each menstrual epoch, and after a time was felt in the sides of the abdomen; it afterwards extended to the lower part of the abdomen and inside of the thighs, and now she began to feel very nervous, languid, and was soon tired during the catamenia.

She also experienced a pain at the top of the head, could not sleep, and was more troubled with dreams. The catamenia continued regular each month; but, twelve months ago, it was noticed that the colour began to be pale, and the duration to shorten (two days.) For six or seven months the pain in the head has been more at the top, and of a hot, heavy character, also a little across the forehead, accompanied with much nervousness; very little sleep in the night, and very frightful dreams. During this period she has lost much flesh, chiefly about the chest, and especially the bosom; and for the last three or four months all the pains have been constantly present, and greatly increased at each menstrual period.

When I saw her, the expression was excited, anxious, and languid; the face flushed; the skin soft, warm, and moist; the body thin, having lost much flesh, she said, within the last few months, especially about the chest; she was subject to frequent flushes during the day, on speaking, on exertion, or any sudden occurrence. She complained of a "good deal" of pain, of a hot, heavy character, at the top of the head; the head also feeling full; of sleeping very badly, and being disturbed with very frightful dreams, which had been particularly noticed for three or four months; of being very nervous and irritable, with a wish to be engaged, but as if she had not patience to do anything; and of a frequent feeling of something dreadful going to happen to her. The spirits were generally very low, the temper not so good as formerly; the eyesight impaired, being dull, as if a mist was before the eyes, after looking at anything for a short time. The appetite was not good; the tongue moist, with a thin, brown fur at the base; a very bad taste in the mouth, rotten, sour, and bitter combined; very thirsty; a sensation of sinking frequently felt at the epigastrium; no pain after eating; much troubled with flatulency, which rolled about the abdomen; bowels moved every day; urine sometimes thick, scanty, and some pain in passing it; at other times clear, more copious, no pain, and less frequent desire; pulse 100, regular, soft, not jerking; for the last two months has had palpitation of the heart after the least exertion; at other times "can't feel it beating at all;" no cough.

She complained much of pain in the lower lumbar region, which extended round above the hips, down the sides of the abdomen, and across the lower part; it also passed into the inside of both thighs, reaching, generally, as far as the knees, yet sometimes as far as the front of the legs, and even to the top of the feet. After walking, the pain was generally felt very much in the lower part of the stomach. There was never any pain in the sacrum, nor hips, nor back part of thighs. For the last three months, she had, very frequently, a pain between the scapulæ, extending round the lower part of the chest; and also down the back as far as the upper lumbar region. When the pain was very bad in the back, she noticed that the bowels were tender, and that the wind rolled about much more. At the same time, her clothes appeared too heavy, and she could not bear them to touch the stomach; but this was a very different pain from the soreness of the bowels. No tenderness was felt on sitting down, or on passing a motion; no vaginal discharge; the bowels never purged.

April 15th, 1851.—Pil. hydrarg., gr. ij.; extract conii, gr. viij. Misce. Each night.

Sodæ carbon., gr. x.; ammon. carbon., gr. ij.; tinct. aconite, Ph. L. ℥ ij.; tinct. hyosciam. ℥xx.; infus. gentian co.; aq. menth. pip. aa., ʒss. Misce. Twice a day.

A hip bath, for fifteen or twenty minutes, each night.

April 22nd.—She expressed herself as much better, all the pains being equally improved; felt less languid and weary, but still very soon tired; slept better; spirits improved; the head much less painful; still troubled with frequent hot flushes over the face, hands, and feet, not over the body, which were followed by a feeling of great coldness, languor, and sinking. When quiet, these flushes were not so frequent; but always had them once or twice a day.

To continue the remedies.

April 29th.—The appearance was much improved; the complexion much clearer; the expression brighter. She expressed herself as much better in every respect, except the pain down the inside of the thighs and front of the legs, which was so severe a day or two ago, as to prevent her walking about. Some pain remained at the top of the head, and some aching across the forehead; slept much better, and much more composed; the tired, weary feeling also less, but not so much improved as the other symptoms.

Continue the medicine and the bath every other night.

May 23rd.—On this day I made the following notes:—Looks depressed and pale; was very much better, but for the last week has not had the baths, and has had considerable exertion. Feels the pain between the shoulders at each inspiration, which, at times, extends round the sides of the chest. The pains in the lumbar region continue much better; but those at the sides of the abdomen and hypogastric region have not been so well this last week; they

are not constant, and are chiefly felt in the morning, when she can scarcely stand from a feeling of fatigue. The head is not so well as it was; has been "much worried" the last fortnight; can sleep all day, but cannot sleep at night; lies wakeful till the morning, and does not know why; spirits depressed.

Ferri ammon. citrat., ammon. carbon., aa gr. iij.; infus. gentian co., aq. menth. pip. aa ʒss. Misce. Twice a day.

In a few weeks from this date, she perfectly recovered her health and strength, and gained in flesh.

In this case, which I have given at some length, all the symptoms said to indicate ulceration of the uterus, and to require instrumental means for their removal, were present to a marked degree, and yet they passed away by general treatment. The diagnosis was not difficult, as the symptoms which indicate the existence of sub-acute inflammation of the uterus were very evident. It is, moreover, a good example of the course of the disease, and of the effect which is induced upon the general health.

But to continue, "In this case, the moment the necessary local treatment was commenced, all the ordinary local pains, previously absent, appeared—the back-ache, bearing down, exhaustion, etc. I have consequently had great difficulty in persuading the patient and her friends that these symptoms were not solely caused by the treatment."—P. 166. Thus, in a case of chronic inflammation of the uterus, causing excruciating pain on the first day of menstruation, and slight falling off in the general health, and which resisted the treatment employed, but of what description it is not stated, has the disease aggravated by the improper use of local applications; then follows the "great difficulty." The patient and her friends correctly attribute the increase of the symptoms to the treatment; the physician endeavours to persuade them to the contrary. To offer any remarks upon this case would only weaken the evidence which it affords; yet the following observation gives so forcible a commentary upon the practice advocated, that I cannot withhold quoting it. "I not unfrequently meet with cases in which this difficulty has to be encountered." Of this I have no doubt, for more than once I have met with cases presenting similar symptoms, wherein gentlemen, misled by the published statements, had first applied nitrate of silver, and afterwards stronger escharotics, and finally ended by making the patient much worse than when she applied for advice; whilst rational antiphlogistic treatment soon removed the urgent symptoms, and finally effected a cure.

Lately, July 1851, I had a case under my care which presented the identical symptoms detailed. Had it been made for the purpose, the similarity could not have been more exact:—

The house-keeper in a gentleman's family, aged twenty-seven, and unmarried, had suffered for the last five years from excruciating pain during the commencement of menstruation. For the first twenty-four hours she writhed in agony, sometimes on the bed, sometimes on the floor, almost insensible from the pain. The next day she was moderately comfortable; but in the night the pain returned with great violence for about twelve hours, though less excruciating than before. During the intervals, she was fully able to perform her duties, yet there was a decided falling off in the general health. For four years she had been under constant treatment by the use of the speculum, a portion of the time being under Dr. Bennet, not only without relief, but with an aggravation of her sufferings. Having been frequently submitted to examination, there seemed no reason why she should not be examined once more. This I did, and, after the most careful scrutiny, I could not find the slightest evidence of ulceration, or even of excoriation. The adoption of antiphlogistic means, materially relieved the amount of suffering within a few days, when she was obliged to leave town for the country, and since then I have not heard from her.

In noticing this case, I omitted the phrase, "On examination, I found extensive ulcerative disease of the cervix," because this statement cannot be considered of any value where the existence of this very disease in the virgin is disputed, unless the appearances were clearly described to which the term was applied. This objection acquires additional weight from the unusual manner in which Dr. Bennet uses the term. However, the local signs which are said to characterise this morbid lesion, remain to be considered. The cervix "enlarged and swollen," is no sign of ulceration; whilst "the os more or less open," is a very questionable condition. As will appear in the sequel, the open condition of the orifice is considered by Dr. Bennet as "pathognomonic" of ulceration; but when this opinion comes to be examined, it will be seen, that, in making this statement, two morbid conditions of the uterus, very distinct from each

other, have been confounded together. For the present, I can only remark, that I have never seen the orifice in the virgin uterus enlarged to that extent to make it of any practical value. When chronic inflammation of the organ has existed for some time, the lips are enlarged, and, projecting into the vagina, form a shallow, cup-like depression, surrounding the orifice; but this is very distinct from the orifice itself being open, especially when the remark is connected with another affection in which this actually exists. But I must reserve the discussion of this point to another opportunity. The terminal words, "and velvety," are not more distinctive of ulceration than the former, for all mucous membranes present this character when merely inflamed.

I believe I am perfectly conversant with the condition of the neck and orifice of the uterus which has been described. On two occasions where it was recognised during life, and where the patient subsequently died from acute disease (typhoid fever), I carefully examined the mucous membrane with a lens, whilst floating under water, and in neither instance did I find the least breach of surface, nor the least evidence of the previous existence of ulceration. Observations similar to these have been met by the remark, that the ulceration which existed in the living subject cannot be detected on the dead body. Was any further evidence required of the improper manner in which this term has been used, this observation would furnish it; for it is well known, that the dynamic condition of congestion, &c., alone pass away after death, whilst the structural alterations remain, and can be recognized. Those who make this objection, appear to forget, that, in doing so, they only proclaim their want of knowledge in the morbid appearances found after death, and their very slight acquaintance of minute anatomy.

Appended to the description which has been examined, are "several interesting cases, which may be considered typical of the disease."—P. 171. These it will be necessary to consider. The first is that of a young lady who, while suffering from inflammation of the uterus, and probably of the vagina, had a pessary introduced into the latter part. It caused indescribable torture, and when withdrawn, it is stated, "a really frightful amount of inflammatory and ulcerative disease became apparent." But, admitting this description to be correct, it only shows what no one would deny, that a hard substance pressing for some time upon an inflamed structure, will induce ulceration of the part pressed upon.

The third case—a girl of 17—was afflicted with inflammation of the "labia majora and the nymphæ, and evidently passing into the vagina," which subsequently involved the neck of the uterus. The fourth case—a diminutive girl of 16—also attacked with "rather swollen and inflamed" vulva, which likewise subsequently involved the uterus. The second case, a young lady aged 23, who had long suffered from symptoms of uterine derangement. The examination is given in the following words:—"I found the vagina hot, moist, and exceedingly tender. The cervix was enlarged, but soft throughout its entire extent; the os open, and surrounded by a well-marked, velvety surface. The uterus did not appear much enlarged, but was exceedingly sensitive to the touch. Pain was distinctly felt every time the velvety surface around and inside the os was pressed upon by the finger. This examination was sufficient to reveal the nature of the case. It was evident that the patient was suffering from confirmed inflammatory ulceration of the cervix."—P. 181.

"A bivalve speculum was subsequently used, when was found on the inflamed cervix an ulceration around the os and dipping into its cavity, rather larger than a shilling. The granulations of the ulcer were large, rather spongy, and covered with pus, which had to be wiped off before the diseased surface could be seen."—P. 183. After the full consideration which the improper employment of the term "ulceration" has received, it appears unnecessary to minutely examine this description. From the history of the case, the patient was evidently suffering from inflammation of the uterus and vagina, to which the tenderness and velvety surface are to be attributed; whilst the large and rather spongy granulations described were, I doubt not, but the swollen and reddened mucous membrane of the part. These appearances are closely typified by the orifice of the male urethra during a severe attack of gonorrhœa, where the mucous membrane around the orifice and dipping into the canal presents the appearance of large rather spongy granulations, covered with pus. But no one has ever

thought, previous to this, of describing these signs of inflammation as an ulceration.

I have reserved till the last the consideration of the case which is considered absolutely to prove the existence of ulceration in the virgin uterus. It is thus detailed. "A young lady, attended in private practice, died from an acute chest affection at the age of nineteen. She was previously in rather robust health. Mr. Anderson (under whose care she was) was not able to tell me whether she had presented any uterine symptoms previous to her fatal illness, although they, no doubt, existed. On making a *post-mortem* examination, he found the hymen small and intact; the cervix uteri, however, was much hypertrophied and extensively ulcerated, as will be seen in the wood-cut."—P. 172. There are obvious and very serious objections to the case as thus given. The sentence, "She was previously in rather robust health," when compared with the previous description of the general symptoms attending this supposed affection,—of all of which "extreme debility is the most significant," shows that there is either some error in the history of the case, or some serious error in the account of the pathological changes found after death. It cannot, for an instant, be supposed, that morbid actions, similar to those described could be going on with a "rather robust health." All the results of clinical experience are against this idea. In the woodcut, which is stated to be "mathematically correct," the orifice is represented exceedingly open, being three-quarters of an inch in diameter, and the lips as very much thickened. I have never seen any approach to this condition in the virgin female, nor do I know of any circumstance which would lead me to believe that such ever exists, except as the result of some heterologous deposit. Did we possess no further information respecting this case, it would remain "unique" in the annals of medicine, and incapable of explanation. But it is not so; for, at a discussion at the London Medical Society, in April, 1851, I had an opportunity of examining the morbid preparation, and was extremely surprised to find that it did not present the characters of a virgin uterus, nor did I detect any signs of ulceration. This altered the whole case. As to the existence of ulceration, I am willing to give Dr. Bennet all the advantage which such an examination of the preparation will afford; for I admit, that, after an examination made with the diffused light in the rooms of the Society, I am unable to make a positive affirmation of the absence of ulceration in this preparation; still my strong belief is, that no ulceration ever existed. I pointed out, upon the preparation, the appearances which might lead to the idea of the presence of ulceration, in those unacquainted with the healthy structure of the part. These were, the depressions which existed between the longitudinal lines of the rugæ as they terminated at the orifice of the uterus, and which are so strongly marked *only* in those females who have conceived, or in whom the uterus has undergone, from disease, a change similar to that which takes place after impregnation. It is, therefore, possible, that Dr. Bennet, in describing this as an ulceration, may have mistaken the natural appearance for a morbid lesion. Still, I cannot think he does not know the difference, in general appearance, between a virgin uterus, and one that has been impregnated; nor can I conceive that he should have carefully examined and described this preparation, and also had a drawing made from it, without being aware of the appearance which it presented. I am hence forced to conclude, that a most important part of the description has been suppressed, because it militated against the views he wished to sustain. This conclusion acquires additional force, from a similar account of the case having been since published (*London Journal of Medicine*, May, 1851) without any notice being taken of these objections, although they remained unrefuted on the occasion referred to, when the preparation was before the Society, and when the point might have been fairly discussed.

The statement, that "he found the hymen small and intact," has little weight; for I am aware how easy it is to be deceived on this point.

A case occurred to me, during the summer of 1850, which bears upon this question, and which I will shortly relate:—A young girl, aged 22, was attacked with typhus fever, from which she partially recovered. On the sixteenth day of observation, the notes are as follow:—Slept well; no return of delirium; skin natural; tongue moist and cleaning; appetite returning; two stools in the twenty-four hours; pulse 96. Two days after this, a slough was observed to be forming on

the sacrum; it afterwards separated, and the patient subsequently sank without any appreciable cause. I did not see the girl during her life, but I was present at the examination after death; and I may shortly state, that no alteration of any of the organs was discovered of sufficient extent to account for her death. She was considered to be a virgin, and no marks were discovered upon the breasts or the abdomen which could invalidate that idea. The orifice of the vagina was small, admitting only the point of the index finger, and a fold of mucus membrane projected around the orifice, which was considered by those present to be a true hymen. The vagina was rough and corrugated as in virgins, only more ample, and the mucous membrane thicker than usual. The orifice of the uterus was large and open, admitting the point of the finger, and the lips were smooth, somewhat enlarged, soft, and round. The neck was larger than natural; the body also enlarged, rounded, and plump-like,—slightly marked on the posterior surface from the pressure of the intestine; soft and doughy to the feel, and anti-flexed against the bladder. This condition of the uterus I had always considered as the sequence of child-bearing, yet the hymen apparently existed. Unable satisfactorily to solve the difficulty, I applied, as a last resource, to the nurse who attended her, and inquired whether anything unusual was observed during the girl's illness, when she replied: "Why, Sir, she was constantly talking about her baby, when at the height of the fever, and saying that she could not help it dying; she tried all she could to keep it alive." Put upon this scent, I soon found out that she had been estranged from her friends for some time, that she had been delivered of a child in a public Institution, and that a young man who was paying her attention was considered to be the father of the child. But for the information of the nurse, which elicited the correct history, this case might have been detailed as an affection of the virgin uterus, seeing that the swollen state of the vaginal mucous membrane so closely simulated a hymen as not to be distinguished from it.

9A, Langham-place.

[To be continued.]

CASE OF POISONING BY OIL OF TURPENTINE.

By FREDERICK H. JOHNSON, Esq.

M.H., aged eighteen months, was observed to take a cup containing oil of turpentine, which was being used by a servant, and to hastily drink from it a portion of its contents. The child immediately spluttered out the food which she had been eating, along with a small quantity of turpentine; she appeared in pain, but was almost immediately soothed to sleep, from which she was roused in about ten minutes, by a neighbour, who alarmed the parents by informing them, that the child had taken deadly poison, and suggested an emetic in the shape of a draught of warm water and melted butter, which was given, but produced no vomiting. The child at this time appeared relieved—in fact, in its usual health; and was sent out to walk with a younger sister a distance of 400 or 500 yards.

On nearing home, she appeared tired and unable to walk; was carried into the house; and on being put down, staggered, and fell; when she was put to bed, and, a few minutes afterwards vomited freely, the contents of the stomach having a powerful terebinthinate odour. About ten minutes afterwards, the servant found her in a violent convulsion, when I was sent for.

On my arrival, which, as nearly as I could make out, was about three hours after swallowing the turpentine, I found the child had been in a warm bath.

She was perfectly insensible; the breathing stertorous: the pupils violently contracted; pulse rapid and weak; extremities, and surface generally cold; countenance pallid; muscles relaxed, with occasional subsultus; no power over deglutition; and, at intervals of ten to fifteen minutes, violent convulsive paroxysms occurring, producing the most frightful opisthotonos.

Being some distance from home, and unaware of the nature of the case, I was obliged to treat it with such remedies as were at hand.

I attempted to administer a mustard emetic; but, being

obliged to desist, from the violence of the convulsions, and the stomach having been previously emptied, I applied leeches to the temples and a large sinapism to the epigastrium. With the bleeding, the violence of the convulsions appeared to abate; and, the bowels acting freely, in about two hours the child was much relieved, became partially sensible to surrounding objects. The pupils dilated, but remained sluggish under stimulus; the surface became warmer, and, the convulsions at last entirely ceasing, the child fell into a sound sleep.

I prescribed a gentle dose of castor-oil; and, up to the present time, nothing unusual has occurred.

On making inquiries, as nearly as could be calculated, not more than two table-spoonsful of the turpentine had been taken from the cup. Part of this the child had immediately rejected; so that not more than one-half of that quantity could have been swallowed.

The case being a somewhat unusual one, both as to the action of the drug, and the length of time elapsing between the time of its being taken and the occurrence of the effects, I venture to bring it under your notice.

The oil of turpentine I find generally stated to be, even in excessive doses, productive of no morbid influence on the nervous system, generally acting on the intestinal canal or urinary organs.

This instance I can only explain by the fact, that the child was engaged in dentition, although not painfully so, and, up to that time, was in good health; that the turpentine acted in the case as an excessive stimulant, producing congestion of the nervous centres; and that its action was rather general than specific.

Sunderland.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

BY

W. SENHOUSE KIRKES, M.D.,

Medical Registrar,

AND

HOLMES COOTE, Esq., F.R.C.S.,

Demonstrator of Anatomy in the Medical School.

EXTROVERSIO VESICÆ—OPERATION.

ON Saturday, October 4, Mr. Lloyd performed the operation of puncturing the bladder from the rectum under circumstances of considerable interest. The patient, a German, was the subject of that malformation called extroversio vesicæ, which results from the imperfect closure of the mucous layer, or the hæmal arch of Owen, in the hypogastric region. It may be well to recal to the memory of those who have perhaps forgotten some of the phases of foetal development, that soon after the impregnation of the ovum, three primary layers are formed; the posterior is called the serous, the anterior the mucous, and the intermediate one, in which the blood-vessels are developed, the vascular. Both the serous and the mucous layers soon cease to remain as flat planes; their free borders curve round so as to form first a longitudinal groove; and next, from the coalescence of the borders, a complete canal, in which the several viscera are retained and perfected. The serous layer is the seat of the formation of the brain, spinal chord, the membranes, the cranium, and the vertebral column. The mucous layer surrounds the lungs, the alimentary canal, and the other abdominal viscera. If from any cause there be arrest of development at some particular spot, there ensues imperfect closure of the canal, and the viscera, generally incomplete, partially protrude.

The surgeon is familiar with very many instances of these malformations, which are common in the serous layer, or that which forms the basis of the vertebral column and the cerebro-spinal axis. What is spina bifida? The imperfect closure of the serous layer in some part of the back; the laminæ of the vertebræ do not unite; there are no spinous processes, and the membranes of the spinal chord project as a bag full of fluid. There is a corresponding want of power in that part of the nervous centre, and the limbs supplied by the nerves emanating thence are cold and weak. The anencephalous foetus is another illustration of the same

phenomenon at the upper extremity of the vertebral column. From some cause in the formation of the cerebrum, the brain-vesicles burst, and the encephalon ceases to exist. From that period the cranial bones remain unchanged in form, although they may undergo some increase in bulk. The different points of ossification keep distinct, unless some preternatural and morbid adhesions are contracted. The skull of the anencephalous foetus is extremely useful in determining the "points of ossification" in the cranial bones. It will be seen from the two familiar instances here mentioned, that arrest of development is not confined just to the superficial parts, but that it involves the contiguous organs. In the anencephalous foetus there is no brain; in the case of spina bifida the limbs are generally weak from the want of power in the corresponding segment of the spinal chord.

Arrest of development in the closure of the mucous layer is common in some regions, very uncommon in others. The instance of hare-lip immediately suggests itself. The fissure may be confined to the lip, but it frequently extends through the hæmal arches of the nasal vertebra, or in other words, through the superior maxillary and the palate bones; sometimes it also goes through the soft palate; and surgical operations have long been suggested for the cure of these deformities.

The ribs sometimes fail in forming complete arches. When the chest is incomplete, the front being covered only by integument, through which the pulsations of the heart, the filling of the great vessels, and the expansion of the lungs are distinctly visible. A case of the kind was reported in the *Medical Times*, 1851.

Deficiency in the front wall of the abdomen is met with in the hypogastric region. There are also similar arrests of development in the organs of generation, in all instances, I believe, combined with imperfect sexual power; they may present those characters to which the term hermaphroditism is applied. The fissure of the labia vaginæ in the female is an instance in which, for obvious purposes, it is ordained that the borders of the mucous layer should remain united.

Whenever a case of arrest of development comes under notice, it should be remembered that it is an indication of imperfect formation, which may extend beyond that which comes immediately before the eyes. The same law, which, when broken, fails to close either the bony arches of the vertebral column, or the integuments of the abdomen, fails generally to perfect the set of viscera connected with that segment of the body. When the front of the abdomen is unclosed, the anterior wall of the bladder is generally deficient. When the penis is imperfect, the power of emitting healthy semen is, as a rule, lost. In the case now in the hospital, the prostate gland, an important organ for sexual purposes, is smaller than natural.

The patient, who is at present under treatment, is a healthy looking man, aged 30. At the lower part of the abdomen, between the umbilicus and the pubes, there is an opening readily admitting two or three fingers, surrounded by a red granulating border. Above this, the integument is raised by a prominent elastic tumour, which is the fundus of the bladder. From the opening here described, the urine escapes, and excoriates the adjacent parts of the abdomen and the thighs. The penis is short and imperfect along the upper surface, where it forms a groove or canal. It is incapable of perfect erection. The prostate gland exists; the two lateral lobes can be felt from the rectum, but the organ is smaller than natural. The scrotum is complete, and the testicles have descended from the abdomen.

The patient declared, in answer to questions put to him by Mr. Lloyd, that he had experienced the sexual feeling, and was fond of the society of the young and attractive of the opposite sex. There are but few who like to have their manhood impugned; and this will perhaps explain the reason of his assertion. It seems to be wisely ordained, that those with imperfectly developed genital organs, cannot, like the subjects of hare-lip, perpetuate their deformities upon their offspring.

The patient closed the opening in the abdomen by a large pad, fixed by a bandage round the small of the back. It answered its end in part; but the escape of urine soaked through the clothes, and rendered him, from the unpleasant odour, unfit to be in the society of others.

Mr. Lloyd proposed to the patient the operation of puncturing the bladder from the rectum, above the prostate,

and establishing a recto-vesical fistula. The passage of urine through the rectum being complete, he then has in view the closure of the opening in the front of the abdomen by paring the edges with a sharp knife, and uniting them by suture.

The patient having been rendered insensible, and secured as in the operation of lithotomy, a long trocar armed with some threads was passed through the posterior wall of the bladder from the rectum. The seton having been detached, the instrument was withdrawn; but the two ends of the seton, one projecting from the rectum, and the other from the vesical cavity in the abdomen, were tied in a knot. The patient was then put to bed. The operation lasted no time, nor were there any difficulties to be encountered worthy of note. The result of the case is, of course, uncertain. The further progress, together with the effect of the passage of urine into the cavity of the rectum, will be the subject of a future report.

In this case, the anæsthetic agent employed was a drachm of chloroform to two ounces of sulphuric ether. The fluid was poured into a large bladder, to which an ordinary mouthpiece was attached. The patient, therefore, breathed into the bladder. Both the instrument and the fluid answered its purpose. Insensibility was produced in the usual time, and maintained without trouble.

It is, I believe, the intention of the surgical officers of the hospital to continue their investigations as to the relative merits of the different inhaling instruments, and to try again chloroform diluted with sulphuric ether, a preparation formerly much in vogue. Experiments also will be conducted with chloric ether, or chloroform plus spirit and water, first employed by Mr. Lawrence, before the introduction of pure chloroform. Mr. Lawrence found, that in private practice, and especially among ladies, the sulphuric ether excited violent fits of coughing, while the chloric ether could be inhaled with ease. Under his direction it was administered very extensively, and it never failed, when carefully prepared, in producing the proper effect. Perhaps this preparation has been too hastily cast aside; and it may so happen, that after further investigation, we shall find it safer to give up the use of pure chloroform, and to return to the preparation introduced by Mr. Lawrence, which certainly effected all that was required both satisfactorily and safely.

H. C.

METROPOLITAN FREE HOSPITAL,

By JOHN MILTON, Esq., M.R.C.S.

EXTENSIVE INJURY TO THE MUCOUS MEMBRANE OF THE STOMACH FROM SWALLOWING A SOLUTION OF CHLORIDE OF ZINC.

John W. was admitted under Dr. Bushman, May 27, 1851, as out-patient at the Metropolitan Free Hospital.

He stated that, during the alterations in Cannon-street, City, being set to watch a burying-ground, he was allowed, as he was exposed to fatigue and night air, to help himself occasionally from a bottle of gin, near which stood a similar sized bottle of solution of chloride of zinc, used as a disinfecting agent when the ground was disturbed. Not remarking the difference, he unfortunately took a glass of the solution. He drank it without noticing his mistake, but was soon after seized with severe pain and burning in the stomach, followed by distressing vomiting. Two or three hours after, when his sister went to take him his breakfast, she was obliged to wait nearly half an hour before she could gain admission, as it was only with the utmost difficulty that he could crawl to the door of the room where the accident took place, and open it. He made his appearance bent nearly double, frothing at the mouth, and with his face so distorted with agony, and so livid, that his sister, alarmed, hastened home for assistance. He was conveyed to an hospital, and, by the remedies administered there, his sufferings were in some degree alleviated, so that in a week he was discharged as cured.

But he soon ceased to show any further symptoms of amendment, and, after going from place to place without deriving any benefit, he ultimately placed himself under Dr. Bushnan's care.

He was now weak and thin; he reeled rather than walked,

and complained of great pain in the stomach, and such constant vomiting, that no food could be retained. Medicine, and even water were rejected, almost as soon as they were swallowed, and he found himself daily growing weaker.

Dr. Bushnan ordered him a free use of laudanum, and a stimulating embrocation, containing cantharides, to be rubbed in over the stomach night and morning.

From this time he gradually, but steadily, improved. In the course of three weeks he could retain his food for about an hour, at the expiration of which time it was invariably vomited. The pain was gone; but as, notwithstanding this, he still appeared extremely weak, a pint of strong beef-tea was ordered to be thrown up in an injection night and morning; and quinine was prescribed, with some blue pill, to relieve the constipation which had ensued. As the liniment was producing some soreness at the skin, it was changed for a stimulating plaster.

In a fortnight more a marked change was visible, and he was ordered to go into the country. On his return to London he had completely regained his former health and strength, and was able to resume his employment.

[This case exhibits, in a very marked manner, the poisonous effects of Sir William Burnet's disinfecting fluid; and we have been induced to publish it on account of the few instances hitherto recorded of poisoning by chloride of zinc. In point of fact, if we refer to the writings of Orfila, Devergie, Christison, or Taylor, we shall be led to conclude, that toxicologists are not accustomed to regard this salt as a noxious and dangerous agent; for they have said but little about it. Nevertheless, it is evident, from Dr. Bushnan's case as related above by Mr. Milton, that the body in question, is a highly deleterious compound. In addition to which, it might be said, that two cases of poisoning by it have been recorded by Dr. Stratton, in the *Edinburgh Medical and Surgical Journal* for October, 1848; and a third, which terminated fatally, has been reported by Dr. Letheby, in the last volume of the *Medico-Chirurgical Transactions*, and reported in this *Journal* for July 13, 1850; so that it is high time that the name of this substance should be included in the list of common poisonous agents.

All the observations and experiments that have been made on chloride of zinc go to show that it is a powerful caustic,—that it rapidly coagulates, and sometimes dissolves the tissues of the part to which it is applied, and thereby destroys their vitality. In this way it attacks the coats of the stomach when it is administered internally, causing great pain, almost instantaneous vomiting, and then complete prostration of vital power. It is possible that much of the last-mentioned effect might be due to the extensive and serious injury done to the mucous membrane of the stomach,—though there is great reason for believing that it might be dependent on a specific power possessed by the poison; for the investigations of all toxicologists have proved, that the salts of zinc have a direct depressing influence on the brain and nervous system.

The truth of this is made manifest by the results witnessed in the present instance. The other features of the case are worthy of note, inasmuch as they indicate the terrible corrosive and disorganising effects of the poison on the stomach, and the difficulty which the medical attendant has to encounter in restoring that organ to its normal state.

Finally, we may remark, that as this is the fourth case in which Sir William Burnet's fluid has been swallowed by mistake, thereby producing most dangerous consequences, it is extremely desirable that some label designating the poisonous nature of the liquid should be attached to the bottles in which it is vended; for not only is the fluid likely, on account of its limpid appearance, to be mistaken for water or some other innocuous liquid; but, as was remarked by Mr. Baron Alderson, in his comments on a case of

poisoning by it, lately tried before him, the label which the bottle now bears might actually lead the ignorant to believe that the liquid contained in it is wholesome, and well suited for the preservation of meat, which is in truth one form of animal matter.

Although this is but the fourth case of poisoning that has been recorded by Sir William Burnet's fluid having been swallowed, others may occur; and practitioners should be prepared to treat them. The *modus medendi*, then, is the exhibition of a solution of soap, or of carbonate of potass, or of carbonate of soda. With all these, carbonate of zinc is thrown down, and, in addition, we have with soap a solution of muriate of potass; with the carbonate of potass a solution of the muriate of potass; and with carbonate of soda a solution of common salt.—*Ed. Medical Times.*]

CANCER OF THE BREAST.—MR. BORLASE CHILDS' NEW WAY OF OPERATING.

We have lately had an opportunity of witnessing some operations for the removal of schirrous breast, by Mr. Borlase Childs, which appear to us of considerable interest, as they essentially modify the form of flap now usually considered the best adapted for securing a speedy and complete approximation of the edges of the wound, and also of illustrating some curious points of prognosis. In order that this may be as clearly exemplified as possible, we shall give the cases somewhat in detail.

Case 1.—Jane F., aged 48, a plump, fresh-coloured, little woman, was admitted an in-patient under Mr. Borlase Childs. She is a married woman, and has had children; so that the ordinary features of the cancerous diathesis, celibacy, and a pale, earthy appearance, on which some authors, and Sir Charles Bell in particular, have so much insisted, were here absent. For some time past she has menstruated but very little. The origin of her complaint she attributes to a bite in the nipple, which, she says, left an enduring pain behind it, and to ill-usage from her husband, who struck her on the breast, seized her by it, and dragged her about the room. From that time the breast swelled more and more, and grew redder and more painful, till, finding it too serious to be any longer without surgical advice, she went to the hospital, and was at once admitted.

At this time there was a hard, schirrous mass in the left breast, with puckering of the skin and retraction of the nipple; so that Mr. Childs decided upon operating without any further delay, and the breast was accordingly removed, May 22, 1851, by the operation which we shall describe after the succeeding case.

Case 2.—Mrs. B., a pale, haggard-looking woman, was admitted an in-patient with a hard lump in the right breast. The nipple was not retracted, and its history was that of a slow growth, at first unnoticed, and only detected when frequent shooting pains drew her attention to it. (a)

On applying at the hospital, she was admitted an in-patient under Mr. Childs, and was operated on, May 30, 1851, in the same way as the preceding patient.

The operation was made by two curved flaps,—the upper one being convex, and the lower one concave,—into which the first fitted very exactly; the intervening space comprised a piece of skin about two inches wide, the nipple being included in it; the incisions ran from within outwards, and above downwards.

The success of both operations completely justified this attempt. There was no bagging of the under flap from collections of matter, and there was materially less strain on the edges of both flaps at the centre. The wounds soon healed up, being entirely closed in three weeks, and left a narrow, firm cicatrix, with much less deformity than might have been expected.

We have already stated, that these cases seemed well adapted to throw light on some curious points of diagnosis, and we proceed to exemplify this by the subsequent history of the cases. In the second case the patient was, as we have stated, pale, earthy-looking, and haggard, yet in her the breast seems now free from any trace of schirrus, and,

with the exception of some slight twitchings in the cicatrix, everything bespeaks a happy termination to the case; but in the other patient the schirrus has already re-appeared in the same breast; the very seat of the operation seems engaged. The relation of temperament to the development of schirrus seems to us capable of receiving further elucidation. As an exemplification, we may mention, that France, with its bright sky and dry air, offers constantly examples of schirrus in patients apparently of a degree of health and stamina far above the average, with ruddy faces and firm muscular fibre. In some of the very healthiest parts of South Africa, almost the only disease with which the settlers are tormented is schirrus, and that, too, in persons who seem little disposed to it.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Oct. 11.—MEDICAL SOCIETY OF LONDON. Subject:—Dr. E. Murphy, "On the Duration of Pregnancy." Eight o'clock.

Thursday, October 16.—HARVEIAN SOCIETY. Eight o'clock.

Saturday, October 18.—MEDICAL SOCIETY OF LONDON. Subject:—Mr. Dendy, "On the Affinity and Prophylaxis of Small Pox." Eight o'clock.

THE MEDICAL TIMES.

SATURDAY, OCTOBER 11.

OUR RELATIONS WITH THE HOMŒOPATHISTS.

To associate with men whose characters you traduce; to use all arts to gain admission to a body, and thereafter to vilify and affect to despise it; to profess certain opinions in order to acquire a professional status, and, whenever you have done so, to ridicule and denounce them; to swear adherence to a profession that you may acquire the right to practice, and thereafter to embrace a medical heresy, that you may the more successfully pander to the follies of the rich and fashionable; to adhere neither to the one nor to the other, but to practise either, as the absence of all principles admits, and the whim and caprice of a patient demands;—these are the achievements of modern philosophy,—these the triumphs of homœopathic morality.

To heap abuse, impute vile motives, and denounce in every possible way, during years of mistaken forbearance, the members of an honourable profession, and yet to raise the cry of persecution, when the pretended bond of union is severed; to print whole volumes, and to circulate journals to prove that regular medicine and homœopathy are diametrically opposed and can never be brought to agree in any one point whatever, and yet to complain of injustice when medical men, acting on this information, decline to be parties to deceiving the public by allowing them to suppose that a regular and a homœopathic practitioner have aught in common; to call in a surgeon to cure intractable external cases where the powerlessness of your pretended treatment can be the more readily observed, and then to denounce surgical appliances as cruel, barbarous, and unnecessary;—these are the characteristics of a science which comes, as one of its eloquent advocates affirms, having as "its errand, mercy; its means, love; its object, peace; its emblem, hope." (a)

If you believe Homœopathy to be true, we do not blame you for practising it; but we call upon you to take your stand on the merits of your new system, and not to support

(a) She was repeatedly questioned as to whether she could assign any cause for it, but invariably asserted, that she knew of none.

(a) Sermon preached in aid of the Hahnemann Hospital, by Rev. Thomas R. Everett, Rector of Wickwar.

yourselves on ours, like the parasite which clings to while it injures the noble tree. We have no objection to your sharing with the Morrisons, the Gosses, and the Perrys of the present generation, the fruits of fashionable folly or popular credulity; nor do we forbid your eclipsing the glories of the Doctors Solomon, St. John Long, and Greatrex of the past; but we do declare, that you shall not do this in the guise and garb of the regular practitioner, or that he shall, in any way whatever, give the sanction of his name and character to the means by which you seek advancement.

We do not, we cannot object, to your founding colleges which shall rival the "British College of Health," or even to your becoming colleagues of the illustrious "Professor Morrison;" but we do denounce this monstrous absurdity,—that any of your number shall hold professorships in any of our colleges, shall teach there doctrines which he cannot believe, or he would not practise as he does, and shall have the audacity to defend this incongruous union, this outrage on all morality.

We have seen you as needy practitioners, outstripped in the race for legitimate practice, your hearts doubtless sickened with hope deferred and long-delayed success, and we did not wonder at your secession. We have seen you again, in some cases, transformed in a single night into practitioners of a system which boasts of the study it requires and the patient investigation which it demands, and we marvelled at your audacity. We have watched you yet further, and have observed in you the obsequious servants of fashionable caprice, trimming your sails to suit each breeze that blew,—now homœopaths, now hydropaths, now anything else,—and we were not surprised at your success.

You may load our tables with "clever" pamphlets, you may talk of "New Test Acts," and "recent conspiracies;" your two philosophers, Henderson and Ransford, may publish to the world, cases before which *Professor Holloway* must hide his diminished head, and Lord Aldborough's leg no longer walk the course without a rival;—but there are certain broad principles of common sense and common honesty which have been violated, which must be proclaimed, and these, not all the talent of your legal advisers shall succeed in concealing beneath the flimsy cobweb of ingenious sophistry.

Hitherto homœopathy has been the toy of the fanciful, when the disease was slight and likely to cease spontaneously, and its victims have lulled themselves with the hope, that if serious disease did attack them, they could fall back on the appliances of legitimate medicine; now this delusion must be dispelled, and they must be taught that their alliance with this quackery is for better and for worse, and that if, while it subsists, the ordinary treatment is required, it must henceforth be administered by those bastard homœopaths who practise indifferently either way.

In the name of our Profession, we have accorded our thanks to those medical bodies, who, roused from the lethargy of years, have acted a noble and independent part. All honour to the Colleges of Physicians and Surgeons of Edinburgh, the Faculty of Glasgow, and our own Provincial Association. But what are the metropolitan colleges about? Why do they allow others to lead when they must eventually follow? Are they emulous of the character of being the only practitioners who consult with homœopaths? How long will they, spaniel-like, lick the feet of the men who abuse them? How long will they consent to blind the public to the fact, that between regular medicine and homœopathy there can be no alliance, that every man must now

decide for himself how he is to be treated, but that from henceforth, when the new system fails, he is not to seek to engraft upon it the old.

We confess ourselves utterly at a loss to understand the immobility of the metropolitan Colleges. Have they no duties to discharge to the Profession and to the Public? Is there no responsibility laid upon them to give an utterance in regard to this modern heresy? What is their office, and why were they instituted? Are they the public guardians of professional character, or are they not? These are questions which are every day put, and which must, sooner or later, be answered. Mere *vis inertiae* will not now avail; a great opportunity was thrown away when they refused to lead the van in this movement against quackery; now they must be content to bring up the rear. Often and justly has the Profession at large been offended at what they have done; let them not add to their past transgressions new grounds of offence, and give us occasion to remind them of what they have left undone.

But, whatever apathy may affect certain public bodies, however sloth may overcome, or indolence oppress them, however the personal success of their individual members may render them indifferent to the interests, and far more to the character of the Profession, enough has already been done to vindicate both. By now acting, they will scarcely add weight to the movement, but they will remove a grievous stain from their own character. The clear and distinct deliverances of the Northern Colleges and Faculties, the determined and manly attitude of the Provincial Association, above all, the ability of the speeches at the Brighton meeting, the separate publication of which we gladly hail, are amply sufficient to vindicate the Profession as a body, and to free it from all charge of homologating the absurdities of quackery, or battenning on the garbage of error.

As a body, the Profession are done with all tampering with homœopathy, and have renounced all intercourse with its professors. Individual exceptions may occasionally occur, for which we would prefer to seek an excuse rather in ignorance than in cupidity; but let those who have now deliberately recorded their opinion of this gross imposition remain true to the principles which they have voluntarily professed, and these exceptions will soon disappear. Let them act on the opinion they have declared, that there are three classes of men with whom they can have no friendly dealings: 1st, Real homœopaths; 2nd, Bastard homœopaths; 3rd, Those who on any pretence meet either of the former in consultation,—and the separation will be effectual and complete.

Let homœopaths secure what amount of practice they can. A certain proportion of our race are born to be the victims of imposition, and it matters little whether they receive it at the hands of Dr. Goss or Dr. Ransford, Professor Holloway or Professor Henderson. But *we* must have no alliance with *them*. The grounds of our renunciation are clear and distinct. No new code of medical ethics is invented to supply them; no "New Test Act" is framed to provide them; they rest on the acknowledged foundations of common honesty and common sense.

We shall deal no longer in mere generalities; our duty, alike to the Profession and to ourselves, demands that we should sift this question to the bottom, expose the shallow sophistries by which it has been ingeniously perplexed, and exhibit the solid foundation on which the resolutions of those various bodies who repudiate homœopathy and the homœopaths are based.

The time for indifference is past; further forbearance

would be thrown away; we proclaim open war: our ethics admit of no accommodation, no compromise whatever.

If homœopathy is to continue to exist, as a bitter and permanent satire on the folly and credulity of mankind, let it have schools and colleges, diplomas and professors of its own. One thing we must declare: our licenses shall not be given to cloke imposture, our right hands shall not be stretched out to encourage quackery, and still less shall our youth continue to be tampered with, and their principles undermined by the ridiculous folly, lose morality, and contemptible meanness of the men who, to the disgrace of those in authority be it said, occupy chairs in our Universities. True, they may not have courage to teach what they profess to believe; but this subterfuge shall not avail them: true, they may have dishonesty enough to teach what they profess to condemn; but this palpable immorality shall not shelter them. Their very presence in such situations must be injurious to the minds of ingenuous youth. If they speak what they believe, they instruct in error; if they are silent, they instruct in deception.

THE PRINCIPLES OF MEDICAL REFORM.

It may be hoped that, the violence of political conflict having subsided, some principles may yet remain unshaken, which the calmer judgment of the disputants may be disposed to recognise as the groundwork of a reform of our professional institutions. It is not to be conceived, that in this age admitted abuses and anomalies can be permitted to continue uncorrected, and thus to deride the efforts and mock the counsels of those who desire their removal. There are few parties who do not now admit, that the Colleges of Physicians and Surgeons stand in a false position, in reference not only to their own members, but also to the members of other licensing bodies in the Empire. Even the Councils of these Colleges have memorialised for an alteration of those clauses of their Charters which place them at variance with the wishes of those branches of the Profession whose interests they are supposed especially to represent. All orders of the Profession are unanimous in demanding similar changes; yet, with a remarkable concurrence of public opinion on many points, the promised relief has not come, and the evils remain, as if by some inherent necessity, to divide, harass, and disturb the Profession. Are there no principles, then, in support of which the consent of a majority may be obtained, so that some progress towards reconciliation may be made? Are there not some principles which, though good in themselves, may be impracticable at this moment, and which have been too pertinaciously urged by some men otherwise earnest promoters of medical reform? We believe there are. Reformers want union. Without it they may as well beat the idle wind, as attempt to realise their varied and inharmonious schemes. It is an easy thing to thwart Association A by means of Association B,—to profess that what is the interest of England is not the interest of Scotland or Ireland; that what is demanded by the Surgeon is adverse to the traditional claims of the Physician; and that, after all, the public interest is paramount to professional rivalries, and is not likely to be granted by a multiplicity of minor schemes, each proposed for the advancement of some class-interest. The difficult thing is to effect a union upon some common principles of justice, in order that the majority of the great interests in the Empire may be brought to bear upon the Government. One important step towards such a result will doubtless be a demand for the admission of Scotch and Irish physicians and surgeons *ad eundem* to the English Colleges.

Such a demand would unite large sections of the Profession, and would not, we should expect, be very strongly resisted by the governing bodies of those Colleges. It is idle and illiberal, at the present hour, to taunt gentlemen with a qualification from the sister countries with being illegal practitioners. They are so, because our partial and unjust laws have made them so; and it is but due to ourselves, our sense of equity, our respect for science, and our profession of good-will and amity to our brethren in the same studies and pursuits, to repeal laws that have thrown the Profession into anarchy, and which belie all our personal sympathies and social relations. These laws have fostered prejudices which never would have existed but for them, and which, if they were repealed next session, we should, by the following one, blush in secret at having ever avowed. It is very certain, that no reform will be accomplished that does not comprehend this change; and we may therefore regard it as an essential principle in the programme of any future agitation for the redress of our corporate institutions.

We admit, that a modification of our institutions to this extent would be very incomplete, and would not touch many of the great questions that have occupied the attention of reformers for a long succession of years; but it would have the beneficial effect of giving increased strength to the hands of those who march more directly to other objects. It may be regarded as a means to an end, and yet in itself is an end ardently sought for by a numerous and intelligent class of our professional brethren. We cannot at present, for want of space, indicate other principles upon which, as it seems to us, there is a great probability of uniting the conflicting opinions of the Profession; but as there is an expectation abroad, that next session of Parliament will not pass over without some attempt being made to effect certain changes in our professional polity, we shall feel it our duty to devote an article from time to time to this subject, with the view of conciliating opposing demands and doctrines, and aiding in the long hoped for, and too long delayed, reconstitution of the Profession.

THE MEDICAL BENEVOLENT FUND.

THE Sixteenth Annual Report of the Medical Benevolent Fund has just reached us. This Fund was instituted in 1836, for "the purpose of affording relief to medical men under circumstances of temporary distress from sickness and misfortune, or when incapacitated from active exertion by old age; it embraces, also, the widows and orphans of such regularly educated men, when they have been left in situations of great poverty and indigence." Such a charity, it would have been supposed, *à priori*, could not fail to become rich. It has such powerful claims on all—on those whose wealth places them above the fear of ever needing its kindly aid, and on those who, if they think at all, must think it *possible* that, one day, they or theirs may look for help at the hand of such an Institution. But, whatever expectations might have been entertained as to its success, *à priori*, the result is far different. The amount of the annual subscriptions is beggarly, considering the object the charity has in view, and those to whom it appeals; the income for the year ending June 30th, was 540*l.* 1*s.* 4*d.* only! It was with deep regret, that, in running our eye over the list of subscribers, we missed the names of almost all the most distinguished physicians and surgeons in London. Some 4*l.* or 5*l.* is all that is contributed by the President and Council of the Royal College of Surgeons; while the President, the Elects, the Censors, and the Regis-

trar of the ROYAL College of Physicians give some twenty shillings between them. Oh! liberal heads of the Profession—we trust when ye read this, ye will not only blush, but subscribe.

The Apothecaries' Society has given in its own name 50*l.*: at least, we think this must be the sum, and that the printer has omitted to place the 0 after the 5; we cannot suppose it possible, that the Society would hold it becoming its position to make a donation to such an Institution as this of a five-pound note—the sum, the printed Report states, it has added to the Fund.

Here are some of the short but touching annals of the poor, detailed in the Report of the past year:—

A medical man in London, in bad health, and himself and family in absolutely starving circumstances.

An aged medical man, his wife, and two children, in Lincolnshire, incapable of supporting himself, and deprived, by death, of the support of his son.

The widow and family of a valuable medical practitioner in Yorkshire, whose life was early cut short by cholera, and who are actually dependent on parochial relief, and on the proceeds of a little school.

A medical man in Gloucestershire, with a numerous family, totally unfit for practice for the last two years, in consequence of spinal irritation, and now reduced to the greatest possible straits.

A medical man in Bedfordshire, having a wife and family of six children, deprived by paralysis of the power of professional exertion of any kind, and reduced to the most pitiable state of want.

An aged and greatly afflicted surgeon, confined to his bed by organic disease of long standing, and in very straitened circumstances.

The sums given from the fund to these individuals varied from 5*l.* to 15*l.*

The insufficiency of these sums, even as the means of temporary relief, is evident. On this point, the Report says:—

"Your Committee acknowledge, that their relief has been inadequate; they have been obliged to vote 5*l.* or 10*l.*, where their judgment and conscience have told them a much larger sum was required; and they have done violence to their own feelings, because they had no more *in crumena*,—and this brings them to the humiliating acknowledgment, that your fund has not been supported by the Profession according to its merits; those who are above the risk of needing benevolent aid have, probably, thought that others were like themselves, or have been contented with *private charity*, forgetting that a society like yours was the very one to *investigate* cases, and to prevent that imposition to which each one in his private capacity must be subjected. While the coldness of the prosperous is probably thus to be accounted for, the apathy of the great mass of the Profession is only to be explained on the plea of wilful self-deception, believing that misery does not exist, because they do not see it."

It affords us pleasure to learn, that the Committee have determined on holding a public dinner during the next spring, as a means of making their proceedings more widely known. We trust that this dinner will be well attended,—that our Colleges will be represented at it,—that the opportunity will be seized by them, and by the chief men in the large medical schools, very few of whom subscribe, of adding to the Fund and aiding its progress,—that all who go to eat, will stop to subscribe.

DR. MAYNE'S LEXICON.

WE beg to call the attention of our readers to a Lexicon of medical terms, which is proposed to be published by Dr. Mayne, of Leeds. We understand, that the manuscript has

been completed, but that the issue of the work is impeded for want of subscribers. Only two hundred additional names are needed before the work goes to press, and we can hardly suppose that there will be any difficulty in procuring this small number. The Lexicon is the labour of twenty years, and from the specimen we have seen we can hardly speak too highly of its accuracy and learning. We heartily wish Dr. Mayne every success; and we are certain that the energy which has produced so great a work in the intervals of toil afforded by the life of a General Practitioner, will eventually meet with due appreciation and reward.

THE LATE BRANDING-ORDER IN THE ARMY.

It is with sincere pleasure we can now congratulate our brethren in the Army on the virtual abandonment of an Order upon which we lately felt it our duty to remark with some severity. It is now "*deferred until further orders.*" This being the case, any further strictures upon so disgraceful a proceeding on the part of the authorities is uncalled for.

We deeply sympathised with the Army Medical Staff upon the late occasion; and any repetition or renewal of so degrading an Order will meet with no mercy at our hands. Such, however, we feel convinced will not occur; and we cannot avoid thinking that the social position of the Medical Officers in the Army is much advantaged by the result of this "Branding-Order."

BLOOMERISM.

In the olden time, wise men are said to have come from the East, but in these degenerate days, wisdom seems inclined to beam from the West. Our American cousins have taught us how to build ships, and how to pick locks. They still further signalise the year by teaching us how to dress. Innovations of all kinds are invariably received with ridicule; forks and pocket-handkerchiefs were at one time laughed at as unnecessary luxuries; coaches were ridiculed by our forefathers as effeminate; and Jonas Hanway, the first who had the courage to carry an umbrella in London, was hooted, insulted, and even pelted. Our facetious contemporary, *Punch*, has certainly put a spoke in the wheel of Bloomerism. But *Punch* is open to conviction; and assuredly the changes sought to be introduced in female costume are not so absurd as at first sight they may appear, while, in a hygienic point of view, they certainly deserve consideration.

Dr. Tilt, in that very remarkable book which we recently noticed, advocates short drawers for women—Mrs. Bloomer is all for trowsers. However, perhaps we ought to say with the courtiers in "*Bombastes Furioso*,"—

Whiche'er your Majesty shall please to name
Long cut or short—short cut or long—to us is all the same.

In England it has been the custom to treat such garments as the Spaniards of old did the limbs they are destined to cover, and altogether to disbelieve in their existence. In the New World, however, the pleasant fashion of clothing the legs of pianos with neat trowsers from intense delicacy, has probably familiarised the minds of the Americans with such things. But our concern is less with them than with another part of this new dress. An essential in the Bloomerian creed is "*no corsets.*" That banner we nail to the mast; and, so far, heartily give our support. For many a weary year have medical men been preaching a crusade against stays, and in vain endeavouring to stem the tide of fashion which sets so strongly in their favour; but, in spite of all that has been written and said

upon the subject, and in spite of the sacrifice of the hundreds who have fallen victims to this odious fashion, the public have obstinately turned a deaf ear to our remonstrances. The tide may be about to turn. Mrs. Bloomer may cause it to run the other way, and we hope for her success.

As regards the other part of the dress, the idea of females wearing trousers may be scouted as ridiculous; but, as nine out of ten *do* happen to wear them, the fact of their being an inch or two longer can make no difference; and it becomes a mere question of common sense, whether a costume which clothes the body well, and yet allows free play to every part, is not a more rational habit than a pinched-up, wasp-like waist, and a cumbersome mass of horse-hair, hoops, furbelows, and flounces sweeping the mud in the streets, and doing part of the duty of Mr. Cochrane's orderlies; while they also invoke the anathemas of the gentlemen, as, when following ladies down stairs, they tread on their dresses, trip, swear, and apologise.

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF
MEDICINE AND SURGERY.

[EIGHTEENTH NOTICE.]

CONTINUING our review of the contributions to the Exhibition of the British Possessions, Mr. Arnold sends specimens from Jersey and Guernsey, illustrating the manufacture of iodine and iodide of potassium, which include the fuci, kelp, rough and commercial iodine, crystals of iodide of potassium, and the residual matter, containing salts of soda, potash, lime, magnesia, etc.

From Ceylon we have a large collection of drugs and other productions, among the chief of which we noticed cardamoms, cinnamon, ginger, nutmegs, gamboge, musk, tamarinds, sago, arrowroot, turmeric, and the cocoa-nut, castor, and croton oils; the volatile oils of cinnamon, cajuput, citronella, and spear-mint, with the form of still employed by the natives in extracting these oils.

The Ionian Islands send absolutely nothing of interest to the medical practitioner, and Malta is in the same predicament.

In the department allotted to the productions of the Cape of Good Hope, we find a long and interesting series of specimens of plants employed in that colony as remedial agents, the names of which we shall record, although we have been unsuccessful in ascertaining the medical properties of many of them by reference to the best authors. Fortunately, the botanical names are given throughout the whole series. We have among them, the leaves *osmitopsis astericoides*; the root of *garuleum bipinnatum*; the herb of *helichrysum serpyllifolium* and *nudifolium*; the leaves of *pelargonium anceps*, *ocullatum*, and *antidysentericum*, the second being employed as an emmollient at the Cape; the stems of *viscum capense*, which is perhaps the *viscum Æthiopicum* of Thunberg, employed as a succedaneum for tea, and as an astringent in diarrhoea; *elytropappus rhinocerotis* and *glandulosus*; *bubon galbanum*, which yields the well-known gum-resin; *melianthus major*, whose leaves have a fetid odour, resembling that of stramonium, and whose flowers yield a blackish honied liquid in such abundance, as to cover the leaves and soil with spots, which is considered to have cordial and pectoral properties; *artemisia afra*, which, we presume, possesses the bitter and tonic properties of the other species belonging to the genus; *pharnacum lineare*, a caryophyllaceous plant; another species of the genus, is noticed by Merat and De Sens, (*Dict. de Mat. Med.*), the *pharnacum cerviana*, as a sudorific and expectorant in coughs and asthma; *mesembryanthemum tortuosum*; *cliffortia ilicifolia*; *cassytha filiformis*, employed in gonorrhoea and strangury; *homeria collina*; *adiantum Æthiopicum*, employed for the same purposes as the European *adiantum capillus veneris*; *cyclopæa genistoides*; the extract of *aloe plicatilis* and *ferox*, two of the species of this genus, which yields the Cape aloes; *monsonia ovata*; *arctopus echinatus*,—the whole plant is impregnated with a white gum-resin; it is used in gonorrhoea,

and for other purposes; *stobæa rubricaulis*; *mohria thurifraga*; the gums of *acacia horrida*; *tanacetum multiflorum*, possessing, probably, similar properties to those of the *tanacetum vulgare* of England; *matricaria glabrata*, probably a bitter tonic; *hyenauche globosa*; *cissampelos capensis*, belonging to the order *menispermaceæ*, and probably used as a diuretic; *leonotis leonurus*; *mun-tia spinosa*; *salvia Africana*; *berbonia ruscifolia*, another species of this genus, *berbonia cordata*, is used, according to Thunberg, as a substitute for tea; *leysseria gnaphaloides* and *crocea*; finally, the leaves of *diosma crenata*, and *serratifolia*, known in European pharmacy as *buchu*. We have taken particular care to record the names of these plants, because they are indigenous remedies employed at the Cape, probably containing among them some active substances; and because they form one of the most complete collections of the kind sent from our colonies.

The only substances that deserve a passing notice in the collection from other parts of Africa, are palm-oil, arrowroot, shea butter from the *bassia parkia*, ginger, coffee, and cayenne pepper.

Canada sends little of interest to the Medical Profession; but, in common with Nova Scotia, it contributes specimens of maple sugar obtained by tapping the trunks of the sugar maple (*acer saccharinum*) in the spring, collecting and evaporating the sap. In its raw state it forms masses, or cakes, of a dark and dirty brown colour; but some specimens are exhibited in perfectly white granular crystals. It is identical, in composition and properties, with cane sugar. A mineral water is also sent by Mr. Mann, of Montreal; but the nature of its constituents is not stated. The only novel remedy is a fungus contributed by Dr. Macculloch, of Montreal, which is employed as a bitter tonic in Canada. The specimen is massive, white, weight several pounds; but it is imperfectly developed. It evidently belongs to the genus *polyporus*, and is found attached to the bark of one of the fir tribe. We found that it produced an intensely bitter and persistent impression on the tongue. It seems to be the *boletus (polyporus) laricis*, which is described by Merat and De Lens as white, with a flavour at first somewhat sweet, afterwards very bitter, friable, but not easily reduced to powder. De Laen asserts it to be a specific against the colliquative perspirations of phthisis, and it is probable that the Canadian specimen is the same, or a nearly allied species, to that employed for years in Europe.

Nova Scotia exhibits samples of cod-liver oil, maplesugar, and a collection of dried specimens of indigenous plants, which show that many of the wild flowers of this region belong to the same genera as those of Britain.

Newfoundland sends specimens of cod-liver oil. New Brunswick exhibits nothing. St. Domingo and St. Kitts are in the same case. Montserrat, a box of arrowroot. Grenada sends nutmegs, tapioca, and a root of a species of *zamia*, called *guayiga*. The Bahamas exhibit a beautiful collection of wax models of native fruits and flowers, worthy of attentive examination. Antigua sends absolutely nothing.

The natural productions of Borneo exhibited are numerous, consisting wholly of fruits and spices; among which we noticed the fruits of *Capsicum purpureum*, *C. cerasiforme*, *C. annuum*, *C. tetragonum*, *C. caribæum*; the cashew nut, from the *anacardium occidentale*; the mango, the produce of the *mangifera indica*; cocoa, the nut of the *theobroma cacao*; the banana, the fruit of *musa sapientum*, one of the greatest ornaments of our hot-houses; the bread-fruit, so important in the islands of the Pacific, from the *artocarpus incisa*; the sugar-cane, *saccharum officinale*, and the most interesting of all to us, the Barbadoes aloes, the produce of *aloe vulgaris*.

From the Mauritius we have cloves, and sugar perfectly white, in small granular crystals, obtained by simply filtering the syrup through a bed of animal charcoal, and subsequent evaporation.

From St. Helena we see coffee and crude pearl-ashes, or rough potashes, together with a whole series of relics connected with the residence of the Emperor Napoleon on that island, which however have no connexion with medicine, although the Emperor gave great encouragement to the practice of surgery.

Among the products of British Guiana was noticed coffee, capsicum, turmeric root, cassava starch, angustura bark, the bark of a rhizophora, probably astringent, and quassia wood from the river Essequibo.

The collection of the products of Trinidad is very ex-

tensive. It contains many specimens common to the other West India islands, such as nutmegs, mace, cloves, ginger, turmeric, cayenne, and black and white pepper, coffee, cocoa, and cocoa fat from the theobroma cacao and vanilla. Cocoa-nut and carap oil from the seeds of the carapa guianensis, and whale oil, are among the fatty substances. The starch of cassava, (*jatropha manihot*), arrow-root from the root of the maranta arundinacea; tous les mois from the seeds of canna indica; the tonquin bean (*dipterix odorata*), gum anime, the produce of *hymenaea coubaril*; sarsaparilla from a species of *smilax*, are the more interesting of the remaining vegetable products. The most important of the mineral products in a medical point of view, is petroleum, which seems to be extremely abundant in this island, being chiefly obtained from springs in the centre of the pitch lake—from which a mineral oil and naphtha are obtained by distillation, while the residue is pitch, which is also found native in seams. Perhaps the most interesting specimen of this series is mineral charcoal, prepared by Mr. Warner from Trinidad pitch, which is used as a substitute for animal charcoal in refining sugar. There are also some substances used as medicines, distinguished only by their native names, *semilia de sequa* and *semilia de guatemare*, used in cholics; *raiz de mato*, a stomachic; *fruta de burro*, a carminative; *barbusco*, a poison; and a kind of frankincense, from *trichilia trinitensis*. *Quassia* must not be omitted.

The Australian collection, like most of those from our colonies, contains few manufactured articles. South Australia presents only one specimen, but one that may hereafter prove of considerable value, as it intimates the commencement of attempts to introduce the plants and products of Southern Europe into this highly favoured land. The specimen to which we allude is olive oil, and the climate of many parts of Australia must be well adapted to the growth of the olive. New South Wales is altogether barren in specimens of medicinal substances. From Van Diemen's Land we have tobacco; arrow-root from some plant, not named, probably *maranta arundinacea*; a large box containing cayenne pepper of good quality; the bark of *atherosperma moschata*, employed as a bitter and stomachic; the resin of *xanthorrhoea australis* used as frankincense; kino the produce of a species of *eucalyptus*; the gum of the wattle tree, *acacia-mollissima* and *acacia dealbata*, analogous in its properties to gum arabic, and capable of being employed for the same purposes; crude potashes the product of the lixiviation of the ashes of Australian woods; alum occurring as an efflorescence from the clayey soils of caverns near Bridgewater; and sulphate of magnesia also found in caverns on the side of the Dromedary Mountain.

In this collection we observe the Australian truffle, *mylitta australis*, which grows to an enormous size when compared with the European fungi of the same tribe, the specimen in the Exhibition having weighed fourteen pounds when fresh. It is reported to have been eaten with relish by Europeans in soup and puddings; it was employed as an article of food, in a half roasted condition, by the aborigines.

From Western Australia are sent almonds equal in quality to those grown in southern Europe, and the cultivation of the almond will probably form a source of great profit; tobacco, which appears to be of good quality; two gums called maura and black-boy gums, and another gum from the *Ningisia floribunda*.

New Zealand yields us few specimens of interest: sulphur from the Bay of Plenty; kauri gum from the *dammara australis*; and a fucus serving the same purpose as the Carageen moss.

Our survey of the British dominions being completed, we shall follow the order of the Official Catalogue in our notices of the productions of other countries. First on the list is Austria, which has contributed very little in a medical or surgical point of view.

M. Batka, of Prague, exhibits some chemicals and drugs worthy of examination. Among them are molybdic and tungstic acids; oxide of tungsten; carbonate of lithia; sulphuret of cadmium; sesqui-oxide of chromium; oxide of copper for organic analysis; oxide of nickel; the protoxide and sesquioxide of uranium; silicate of potass; potassium, sodium, bismuth, cadmium, nickel, and selenium in the usual form of a medallion of Berzelius, its discoverer. M. Batka has also a series of drugs, among which we observed, the root and leaves of *aconitum napellus*, *anthemis pyrethrum*; the flowers and root of *arnica montana*; the roots and leaves of

atropa belladonna; the root of *polygonum bistorta*, and *dictamnus alba*; the leaves of *conium maculatum*; the leaves and seeds of *hyoscyamus niger*; the corm and seeds of *colchicum autumnale*; the roots of *helleborus niger* and *veratrum album*; the leaves of *digitalis purpurea*. In addition to these, M. Batka exhibits some chemical glass apparatus of the ordinary character.

M. Braun has a few specimens, consisting of stannate of soda, ferridcyanide of potassium, and albumen in the form of a fine white powder.

M. Brosche has a better collection of chemical products, although we cannot say much in their praise; and the same observation may be made on all the foreign contributions of chemical products, when compared with those of England. His collection embraces succinic acid said to be obtained from malic acid(?), and from amber in fine prisms; tartaric acid; tartrate of potass and soda; tartar emetic in crystals; trisnitrate of bismuth; peroxide and protochloride of tin; the golden sulphuret of antimony, and protoxide of antimony; the red suboxide and black oxide of copper; sesquioxide of chromium; chromate and carbonate of zinc; stannate of soda; peroxide of uranium; nitrate of baryta and chloride of barium; nitrate of lead; ferridcyanide of potassium; protochloride, periodide, and peroxide of mercury.

Wagenmann, of Wein, has also a collection of very ordinary chemical substances, which we shall content ourselves by simply enumerating. The sulphates of magnesia, soda, potass, ammonia, zinc, and copper; the chlorides of potassium and tin; hydrochlorate of ammonia, nitrate and acetate of lead, arseniate of potass, acetates of copper and soda, chlorate of potass, common phosphate of soda; stannate of soda, carbonate of ammonia, solution of ammonia, ferridcyanide of potassium, chloride of lime, tartaric and acetic acids.

M. Johann sends some bad specimens of sulphur, sulphate of iron, and alum, and some carbonate of magnesia of average quality is contributed from another source.

A variety of surgical instruments are said in the catalogue to be exhibited by M. Teufelmeyer, of Western Himmel; but, in our repeated peregrinations through this department, we were unable to discover them.

The contributions from Belgium are even more uninteresting than those from the Austrian dominions. The chemical and pharmaceutical preparations exhibited are so common, and of such an inferior character, that we feel ourselves compelled to pass them over without further notice. The surgical instruments, are an apparatus apparently intended for injecting vapour of acetic ether into the cavity of the tympanum, consisting of a very clumsy frame-work or stand, under which is a lamp for heating, and a close vessel for generating the vapour, furnished with a tube which leads to a common india-rubber bottle syringe for projecting the vapour. M. Champagne exhibits a mechanical hand and arm of ordinary construction, but efficient for the purpose for which it is intended. The only things of any particular value which belong to our particular department, are some excellent philosophical balances, exhibited by M. Sacre, of Brussels, one of which is said to carry above a hundredweight in each scale, and turn with twenty-five millegrammes, or about 4-10ths of a grain; the cost of which, however, is not less than 160*l*. Chemical balances, capable of weighing 7500 grains, and turning with half a millegramme, or about 1-140th of a grain. Others, again, still more delicate, carry smaller weights, but turn with a tenth or a twentieth of a millegramme. These balances are well finished, but of course no opportunity is afforded of testing the truth of these statements.

The Brazils and Chili have furnished absolutely nothing, and the only objects of interest from China are arrow-root, from the root of *nelumbium speciosum*, and a series of drawings illustrating the growth of the tea-plant and the manufacture of tea.

Denmark is represented by a model of a patent apparatus for spinal curvature, mounted by M. Langgaard; artificial legs, spinal apparatus, and an osteotome, by Nyrop; metallic thermometers, by Jurgensens, and some philosophical apparatus, by Nissen.

Egypt, as may be anticipated, sends only natural, or, at most, artificial products prepared by the most simple processes. We have specimens of sulphur, nitre, natron or carbonate, mixed with variable proportions of sulphate of soda and chloride of sodium, which is a natural product of

some lakes in Lower Egypt; the fruits of *cassa fistula*, gum ammoniac, colocynth, senna, the produce of *cassia lanceolata*, castor oil and seeds, opium grown in Lower Egypt, tamarinds; cummin, fennel, anise, and poppy seeds; saffron, cardamons, and oil of mint, which are the more important of the substances in this collection.

France certainly ranks next to England in the medical, and surgical, and philosophical apparatus and instruments. In chemical products, however, she is far below her ancient rival, most of them being of the most common character, and many of the specimens of inferior quality. We shall enumerate the principal collections as a contrast to those of our own country. M. Kuhlemann, of Lisle, exhibits carbonate and sesquicarbonate of soda; effloresced sulphate of soda; baryta, its carbonate, and the chloride of barium; fine specimens of the sulphites of soda and lime, sesquisulphate of alumina; sulphuric acid, coloured by organic matter; common commercial hydrochloric acids, chloride of lime, and animal black.

MM. Couverene and Co. exhibit excellent specimens of iodine, iodide of potassium, iodide of lead, and biniodide of mercury; chloride of potassium, bromide of potassium, and bromate of potass; sulphate of potass, somewhat coloured by impurity; the same salt in powder, colourless; and chloride of sodium.

M. Dupré has some very bad specimens of sulphate of iron.

MM. Drouin and Brossier present to our notice stannate of soda, protochloride of tin,—a poor specimen,—ferridcyanide of potassium, caustic potass, and carbonate of potass.

M. Anthelme contributes a large specimen of alum, which appears to be very pure, but sinks into insignificance before the English specimens.

M. Rocher exhibits a very inferior coloured specimen of chloride of magnesium, good carbonate of manganese, carbonate of potass, the double chloride of potassium and magnesium, chloride of potassium, the double sulphate of potass and magnesia, and a bad specimen of sulphate of soda.

M. Collas exhibits a very considerable specimen of digitaline, prepared according to Quevenne's process. It is a dirty-white powder, and we may infer that the proximate principle has not as yet been obtained absolutely pure.

M. Bataille exhibits a series illustrating the manufacture of acetic acid from wood, including the original fluid obtained by the distinctive distillation of wood, tar, crude acetate of lime, wood naphtha, and acetic acid.

M. Javal has in the same case solution of sulphureous acid; solution of ammonia, somewhat coloured, and therefore impure; good specimens of nitric and sulphuric acids, and commercial hydrochloric acid.

M. Bobée exhibits sulphuric and acetic ethers.

M. Brière presents arsenious acid, the arsenite of copper, and Schweinfurt green, a combination of arsenite and acetate of copper, crude pyroligneous acid, and acetate of lead; a series of specimens of acetic acid of different strengths, purified wood naphtha, acetone, chloroform, crystallizable acetate of copper, nitrate of lead in bad crystals, carbonate of soda, crystals of tartrate of potass and antimony, and an excellent specimen of tannin.

M. Maire, of Strasburg, exhibits alcohol, crude wood-vinegar, verdigris, or impure acetate of copper; carbonate of lead, and the acetates of soda, lime, and lead.

M. Fouché Lepelletier's collection is the largest of any in the French department. It contains binarsenate of potass, sulphuret of potassium, chlorate of potass, chloride of tin, binoxalate of potass, oxalic acid, tartaric acid, nitrate of strontia, chloride of strontium, nitrate and carbonate of baryta, and chloride of barium; carbonate, sesquicarbonate, and phosphate of soda; sulphate of soda in acicular and prismatic crystals, and anhydrous sulphate of soda, sulphate of zinc, hydrochlorate and sulphate of ammonia, and impure liquid ammonia obtained from urine; phosphate of lime from bones, chloride of lime, and ferridcyanide of potassium.

M. Conrad exhibits excellent specimens of iodine and iodide of potassium, the latter in fine crystals; also two large cases of very pure camphor.

The Administration of the Mines of Bouxweller sends ferro- and ferridcyanide of potassium, ferrocyanide of iron or prussian blue, and fine octahedra of alum, in which the edges are replaced by narrow planes, and the angles by quadrilateral planes.

M. Poissat exhibits alumina, sesquisulphate of alumina, stearic and oxalic acids.

M. Steinbach presents us with specimens of starch, starch-gum, and dextrine, the latter usually known in the market as British gum. The foregoing is a summary of the chemical collections exhibited by our neighbours of France. A simple inspection of the specimens will at once justify the adverse opinion we have felt ourselves compelled to pass upon them.

The collections of philosophical instruments are by no means large, but the workmanship is good, and, in some cases, excellent. We do not, however, discover any great novelties among them. M. Deleul, of Paris, exhibits several good chemical balances, the delicacy of which is not stated. He has also a large galvanic battery, composed of a series of jars on Daniell's principle, zinc being employed as the exciting, and plumbago as the collecting plate. He has also a large air-pump with a lever handle in the nave.

M. Fastee exhibits a series of apparatus employed by Regnault in his researches on heat, consisting of thermometers; vessels for holding liquids of various shapes, and some other forms of apparatus, which we did not recognise, nor had we an opportunity for examining their construction. The whole of them appear to have been constructed with the greatest care.

M. Grosse exhibits a number of platinum crucibles, and hydrometers apparently of the same metal; but his apparatus is cast into the shade by that of M. Quenessen, who exhibits a large still capable of containing several gallons, of exquisite finish; also basins and crucibles of large size, and tubes of half an inch or more in diameter, and a yard long. In addition to the manufactured platinum, are specimens of the crude platinum or ore, the ammoniochloride of platinum, palladium, and iridium. We are indebted to our countryman, Dr. Wollaston, for the process by which platinum is obtained in form capable of being worked; and few persons are aware of the great value of this discovery, not only to scientific chemistry, in which apparatus, formed of this metal, has proved invaluable, but also in certain manufactures, that of sulphuric acid, for example, in which the vessels for boiling down or concentrating, and for distilling the acid, are formed of platinum, instead of glass, which was constantly liable to fracture.

M. de la Molt exhibits a constant battery, similar in construction to that of M. Deleul.

M.M. Dabosc, Soleil, Bernard, and Natchet, each exhibit microscopes of various forms and powers. Those who are familiar with the English and French microscopes, will at once see the peculiarities of each, one of the most striking of which is, the shortness of the tube in the French microscopes, which appears to depend on the fact, that the French achromatic object-glasses are incapable, in most instances, of giving a clear image, when used with the longer tubes of the English manufacturers. Hence, we seldom see the body of a French microscope exceeding six inches in length, while the larger English ones are nine inches. Occasionally, however, we meet with a French achromatic object-glass, which gives an excellent and defined image, when used with the longer tube.

In connexion with the microscopes we have noticed, M. Bourgogne exhibits a large collection of microscopical preparations, illustrating the structure of insects, and among them a beautiful dissection of the tracheæ of a caterpillar, sections of human and other bones and teeth, and a number of sections of minerals for the polarizing apparatus. All of them are well mounted.

When reviewing the anatomical models in the British Department of the Exhibition, we fully expressed our opinion of the advantages, disadvantages, and amount of utility of these aids to a correct knowledge of anatomical science. We have now to pass briefly in review a most extensive and magnificent collection of models, not restricted merely to the structure of the human body, but extended to all the four orders of vertebrate animals, and illustrative of several orders of invertebrata. There are many organs and tissues that cannot be preserved in their integrity by any anatomical means, so as to exhibit their peculiar structure and arrangement; and again, there are parts of animals so small, that it is utterly impossible to demonstrate them to a class, except by means of either diagrams or models. In either of these cases, anatomical models supply the deficiency, and enable the teacher to demonstrate and the pupils to comprehend with greater force than mere description could convey, what

the teacher is desirous of inculcating. Here such models as those of Dr. Auzoux afford the most effective aid. The model of the entire human body, of the natural size, consisting of 130 pieces, and showing the minute branches of arteries, veins, nerves, &c., is very costly, the price amounting to 120*l.*; but smaller figures, with less detail, may be obtained for 40*l.* and 20*l.* Models of the impregnated uterus, with its contents at various periods of pregnancy and of tubular and ovarian pregnancy, are contained in this collection. Another series of models of the ovum, in its various stages, from the first to the thirtieth day, that is, from the unimpregnated condition in the ovary, to the distinct appearance of the foetus, must prove of great utility to the teachers of physiology and midwifery. Models of the male and female pelvis, with the contained organs, are also very beautifully executed. Among those of the viscera and separate organs, we see the adult and foetal heart; the adult brain; the cerebellum and spinal cord, exhibiting the origins of all the spinal nerves; the cerebrum, cerebellum, and medulla oblongata, with sections showing the course of the fibres from the medulla oblongata to the hemispheres; a much-enlarged model of the eye, with part of the orbit and the adjacent vessels and nerves, and a vertical section of that organ; the temporal bone, showing all the parts of the auditory apparatus; the larynx and the trachea, with the ramifications of the bronchi; a vertical section of the head, showing all the cavities, with the muscles, vessels, and nerves accurately depicted; and, finally, a full-length model exhibiting the arrangement of the lymphatic system of vessels.

The models illustrating comparative anatomy are both important and unique. No models capable of being employed for demonstration in lectures on this science have been made by other modellers, at least, none such have come to our knowledge; and this is, more especially, a branch of natural science which requires magnified illustrations. In this department we find illustrative models of the organs of hearing in birds and in fishes on a large scale. The series illustrative of the anatomy of the horse are very beautiful and complete. The large model of the animal consists of two hundred pieces, exhibiting the whole of the structures of the animal, its muscles, arteries, veins, &c. A series of thirty models of the jaws and teeth illustrates the changes in the latter organs at different ages. A similar series of models, fourteen in number, of the jaws of the ox, shows the changes in the teeth of this animal at different ages. The structure of the foot of the horse is exhibited by a separate model, with the vessels and nerves. Other models depict the nature of wind-galls and some affections of the bones in this animal.

The anatomy of reptiles is demonstrated by a model of the boa constrictor, seven feet in length; of fishes, by a similar model of the *sciæna aquila*, four feet and a-half in length; of coleopterous insects, by a very beautiful and complete model of the cockchafer, (*melalontha vulgaris*), magnified twelve diameters; of the lepidopterous insects, by greatly enlarged models of the silk-worm caterpillar, and moth; the hymenopterous insects, by models of the queen bee, the drone, and the neuter, or working bee, about three inches in length, exhibiting the whole of the internal structure in detail, with surprising accuracy.

The mollusca are represented by several models of the *helix pomatia*, a large snail, indigenous to some parts of the Continent, and found in England chiefly in the neighbourhoods of old Roman stations, and supposed to have been introduced by the Romans. One model shows the perfect animal in the shell, which is capable of removal, to exhibit the organs; another gives the organs without the shell; and a third beautifully demonstrates the circulatory system. The annelides are represented by the common leech, *hirudo medicinalis*, two feet in length. Dr. Auzoux has also a collection of models, to illustrate the functions of digestion, circulation, innervation, and respiration, in the primary divisions of the animal kingdom,—viz., mammalia, birds, reptiles, fishes, mollusca, insects, and radiata. All these models are beautifully executed in a material which will bear very rough handling without injury; the models may be taken to pieces and replaced as often as necessary, for the purposes of demonstration or study, without fear, and with great facility. They are also accompanied by an explanatory sheet, each separate piece being numbered, and, in some cases, the name of the part being placed on the piece by which it is represented. We hope that Dr. Auzoux

will be encouraged to extend the subjects of his models, a vast field for which is presented by the animal kingdom.

Errata.—At page 314, first column, line 19 from the bottom, for *nicotiania*, read *nicotiana*; and at line 18, for *senna leaves the produce of the root of aconitum ferox*, &c., read *senna leaves the produce of cassia lancifolia*; the roots of *aconitum ferox*, &c.

REVIEWS.

Guide du Médecin Praticien ou Résumé Général de Pathologie Interne et de Thérapeutique Appliquée. Par F. L. J. VALLEIX, Médecin de l'Hôpital Sainte-Marguerite (ancien Hôtel-Dieu annexe), &c. &c. 2nd Edition. 8vo. 5 Vol. Paris: 1851.

The Medical Practitioner's Guide; or, General Résumé of Internal Pathology and Therapeutics. By F. L. J. VALLEIX, &c. &c.

The concluding volume of this work having reached us, we shall fulfil our promise, and endeavour to give our readers some idea of its excellence. The "Guide" is now condensed into five volumes, each volume containing about 700 pages; the type, paper, and general getting-up of the book are unexceptionable. In France, as in England, the demand for practical works has, of late years, greatly increased. This M. Valleix considers the consequence of the overthrow of the systems of medicine which, in times past, by turns ruled the physician, to the disappearance of all trust in traditional medicine, and to the fact that time has not yet elapsed, since Louis led the way, for induction to guide us to knowledge in therapeutics.

"Always present, always active, disease demands prompt treatment, and cannot wait till modern research has settled absolutely which is the best remedy for it."

It was to answer a want thus generally felt, that M. Valleix planned the great work before us; and he seems to have constantly kept in view the fact, that it was for practitioners of medicine that he was writing. The first volume treats of diseases of the respiratory and circulatory organs; the second of diseases of the digestive organs; the third concludes the consideration of the diseases of the digestive organs, and commences those of the genito-urinary organs; the fourth concludes the latter, and the diseases of the nervous system; the fifth treats of diseases of the cellular tissue, and of the organs of the senses, cutaneous diseases, fevers, and chronic and acute poisonings.

We propose briefly to analyse the section on diseases of the nerves, as by an analysis of a single chapter the real character of the work will be more apparent than it would be from any general description we could frame.

M. Valleix divides diseases of the nervous system into diseases of the nerves, diseases of the brain and its membranes, diseases of the spinal cord and its membranes, and nervous affections, the exact seat of which is uncertain.

Diseases of Nerves.—This chapter embraces neuritis and neuralgia. Neuritis includes inflammation of the nerve and of the neurilemma; it is a disease of which little is known. Seven pages are devoted to its consideration. The observers to whom M. Valleix is chiefly indebted for his material on this subject, are Dugès, Martinet, Cruveilhier, Beau, and above all, M. Charles Dubreilli. It is treated of, as is every disease, under the following heads:—1st. Definition, Synonyms, Frequency, Division. 2nd. Causes. 3rd. Symptoms. 4th. Cause, Duration, Termination of the Disease. 5th. Anatomical Lesions. 6th. Diagnosis, Prognosis. 7th. Treatment.

Neuralgia in General:—

1. *Definition*, synonyms, frequency. "Neuralgia consists in a more or less severe pain, having its seat in the course of a nerve, and disseminated in distinct points; true centres of pain, from whence extend, at uncertain intervals of time, darting or analogous pains, and in which pressure, properly made, produces more or less pain." Tic douloureux, sciatica, etc., have, since the publication of Chaussier's writings, been included under the general name of neuralgia. Neuralgiæ are exceedingly frequent.

2. *Cause*, predisposing. Age: Very rare before the age of ten. It is between the ages of twenty and fifty years that neuralgia is the most common. Sex: Women are more

subject to some, men to other forms of neuralgia. Nothing definite is known of the effect of constitution, temperament, place of residence, climate, diet, or profession. Neuralgia is twice as common in cold as in warm weather. Exciting causes, prolonged exposure to cold, suppression of the menses, sudden movements, and mechanical violence.

3. *Seat of the Disease. Painful Spots.*—The painful centres are seated at four principal parts in the course of the different nerves. 1st. At the point where the nerve escapes from any canal or foramen. 2nd. At the spots where a nervous twig traverses the muscles to reach the skin to which it is to be distributed. 3rd. At the points where the terminal branches of a nerve are lost in the integuments. 4th. At the parts where the trunks of nerves are very superficial. Neuralgia is limited to nerves of sensation.

Symptoms.—Neuralgia ordinarily makes its first attack more or less gradually. Pain is almost the only symptom of neuralgia; it may be continuous, or intermittent. The former, M. Valleix says, is often overlooked—it is troublesome without being violent. Intermittent pain may be lancinating, tearing, or pricking; the pain may recur many times in a minute, or some time may elapse between the attacks. There are often centres from whence the darting pains proceed. Sometimes the pain shoots from one centre to another. Sometimes the pain appears limited to these spots, commencing at several places at the same time, in the course of the nerve.

Pressure over a large surface, as when made with the palm of the hand, does not increase the pain; but if pressure be made with the tips of the fingers only, in the course of the diseased nerve, one or more spots will be found at which pressure excites pain, sometimes very severe. Renewal of the pressure on the same spot, often fails to reinduce the pain. The centres from which the pain spontaneously shoots, are the spots at which pain is experienced on pressure. M. Valleix has known but one exception to this rule. Sudden movements of the part affected increase the pain; the same increase of pain is experienced in some cases from the application of hot or cold bodies; disturbance of function is an occasional consequence of neuralgia of the nerve distributed to an organ.

5th. *Course. Duration. Termination of the Disease.*—The paroxysmal character of neuralgia is one of its most constant features. In one case only has M. Valleix known the paroxysm of pain absent. Occasionally the paroxysms occur after the same intervals of time, in its periodicity alone; in these cases the neuralgia resembles an intermittent fever.

Neuralgia has no definite duration; it may disappear in a few days, or continue at intervals till the death of the patient. In a large majority of cases its termination is favourable. In one-ninth of M. Valleix's own cases, marked relief was afforded; one-ninth were not benefited, or very slightly so, by treatment; while seven-ninths were cured.

6. *Anatomical Lesions.*—There are none proper to neuralgia; swelling, atrophy, softening, induration of the nerves, etc., occasionally found, are treated of by M. Valleix, when describing the different varieties of neuralgia.

7. *Diagnosis—Prognosis.*—For the former the reader is referred to the description of each form of the affection. Long duration of the disease, the advanced age of the patient, and an extreme degree of violence in the disease, are the conditions which lead to an unfavourable prognosis.

8. *Treatment.*—"in a practical work, it would be," says our author, "out of place to treat at length on general questions, therefore I shall here speak in the most succinct manner, dwelling only on those remedies which have been proposed as very efficacious in neuralgia, whatever its seat."

Narcotics, given internally, are, M. Valleix says, useless; but administered endermically, they are of the greatest service. The opinions of M. Rougier on this subject are then examined and criticised at some length. M. Lafargue's method of inoculating morphia is described, and M. Valleix bears testimony from his own experience to its value in some cases. Chloroform applied externally, given internally in the form of a draught, or inhaled, has been of considerable use in some cases of neuralgia. The repeated application of "flying" blisters, is the means M. Valleix has found the most efficacious in the treatment of neuralgia. The transcurent cauterization of M. Jobert de Lamballe is described at some considerable length. M. Valleix has applied the cautery more than 150 times, and with constant success, in cases of simple neuralgia. About four pages of

the work before us are occupied with the description of transcurent cauterization, and its results in M. Valleix's own practice. Electricity in our author's hands seems to have produced but little benefit. Acupuncture at one time enjoyed a great reputation. Dautic reported forty-seven cases of neuralgia occurring in the practice of Cloquet, thirty-seven of which were cured by this remedy. Sham-pooing and percussion, produce no permanent benefit. Mr. Hutchinson's great remedy, the sesqui-oxide of iron, M. Valleix has found of use chiefly in patients who were anæmic, and in these even the local pain may be removed by other means; the iron only renders the cure permanent. Periodicity affords no indication for the employment of sulphate of quinine. About half the cases only in which this peculiarity was marked, our author found to be benefited by the quinine. He is unable to point out any difference between the cases benefited and those which experienced no relief from its employment. Quinine M. Valleix regards as far superior to the other anti-periodics, such as arsenic and salinum, and of them accordingly he has had little experience. The method of administering the oil of turpentine adopted by M. Lerisch is then described. For the mode of using and the value of the pills of Meglin, valeriate of zinc, belladonna, and aconite the reader is referred to the section on the treatment of facial neuralgia.

A *résumé* of the foregoing, and some excellent remarks on the difficulty of appreciating the real value of the remedies employed by different writers, in consequence of the few details they give of their cases, close this article. In the next, M. Valleix divides neuralgia into different species, and each species into certain varieties, the species being named from the nerve affected, the varieties from the branch of the nerve. Thus, his first species is trifacial neuralgia; its varieties, supra-orbital, sub-orbital, infra-maxillary, nasal, temporal. The two last named varieties are extremely rare. An article is devoted to the consideration of each species of neuralgia, and the definition, synonyms, frequency, causes, symptoms, course, duration, termination, anatomical lesions, diagnosis, prognosis, and treatment of each, given at length.

Under the head of diagnosis, M. Valleix has given here, as elsewhere, very useful Tables, one of which we copy entire.

SYNOPTICAL TABLE OF THE DIAGNOSIS.

1. <i>Distinctive Signs of Sciatic Neuralgia and Coxalgia.</i>	
<i>Sciatic Neuralgia.</i>	<i>Coxalgia.</i>
Pain on pressure in the vicinity of, and chiefly behind the great trochanter.	Pain on pressure on the great trochanter.
Little or no pain excited by flexion and extension of the thigh.	Pain extremely severe on flexion and extension of the thigh.
The patient is able to walk, but with pain.	The patient is unable to walk in consequence of the pain produced by the effort.
No symptoms of hectic fever.	Symptoms of hectic fever.
2. <i>Distinctive Signs of Double Sciatic Neuralgia and Paraplegia, with Pain.</i>	
<i>Sciatic Neuralgia.</i>	<i>Paraplegia.</i>
The pain follows the whole course of the nerve.	Ill-defined pain about the soles of the feet and the middle of the limbs.
Pain dull, continuous, now and then darting.	Pain chiefly creeping and pricking.
Pain generally very sharp.	Pain generally much less sharp.
Pain increased considerably by movement, and especially during the act of walking.	Pain little or not at all increased by movement, or during the act of walking.
No rigidity.	Rigidity of the limbs at a certain stage of the disease.
Semi-paralysis, which renders the limbs weak, but does not affect the precision of the movements.	Paralysis, flaccidity, want of precision in movements of the inferior extremities.
No symptoms referable to the rectum or bladder.	Difficulty in defecation and micturition.
3. <i>Distinctive Signs of Sciatic Neuralgia and Muscular Rheumatism.</i>	
<i>Sciatic Neuralgia.</i>	<i>Muscular Rheumatism.</i>
Pain, especially sharp, when the limb supports the weight of the body.	Pain sharp, especially when the limb is flexed and extended.

Tenderness at defined spots, and along the course of the nerve.

Pain arising spontaneously follows the course of the nerve.

Tenderness over a large surface, and not in the course of the nerve.

Pain occurring spontaneously does not follow the course of the nerve.

At the end of each article is a brief *résumé* of the treatment: thus, after describing, at considerable length, all the means that have been employed in the treatment of sciatic neuralgia, we have general precautions to be observed in the treatment of sciatic neuralgia:—

"During the treatment by blisters the patients ought to remain in bed, warmly clad, and in a very dry room. The bowels should be kept gently open. The diet should be pretty good. Stimulants, however, must be avoided."

In the treatment by transcurrent cauterisation, the above precautions need not be observed.

Résumé.—It follows, from the preceding, that the only remedies that can be regarded as having a general efficacy, are,—1st. Those previously mentioned when speaking of neuralgia in general (blisters, cauterization, etc.); and, 2ndly. The essential oil of turpentine. There are, however, certain drawbacks to the latter. It is disagreeable, is borne with difficulty by some patients, whatever precautions are taken; and, what is of still greater consequence, its efficacy is less than that of the first set of remedies.

As to the other medicines mentioned above, they have appeared to be of use in some cases; but this is not enough to warrant us to make them the basis of our treatment.

Summary Résumé of the Treatment.—1. *External Remedies.*—Blood-letting; blisters, ordinary and "flying;" the actual cautery, transcurrent cauterization, moxa, sinapisms, numerous external irritants, heat, cold, hydropathy, sea-bathing, electricity, acupuncture, narcotics applied externally, mercurials applied externally, section of the nervous filaments on the toes.

2. *Internal Remedies.*—Essential oil of turpentine, narcotics, mercurials, anti-spasmodics, sulphate of quinine.

Multiple and erratic neuralgia, general neuralgia, and dermalgia, are treated of in the three last articles of this Chapter.

Eighty-six pages are devoted to the consideration of neuralgia, and every other class of diseases is treated of equally fully.

As a whole, we are unacquainted with any work on the Practice of Medicine so full,—so up to the present state of knowledge, and at the same time so practical. It is indeed what its name claims it to be—*A Guide for the Medical Practitioner*.

A Defence of Ignorance. By the Author of "How to make Home Unhealthy." Pp. 111. London, 1851.

This little book contains much sound sense in a merry form. Its gay blue cover and gilt letters seem to say, Here you have light reading for a leisure hour, and yet in it are deeper truths than in many solemn-looking royal octavos. A keen but playful satire plays in every page. The author is a staunch advocate for women to be educated in something more than silly opera music, bad French, lascivious dances, and the art of making pastry, and sewing on shirt-buttons.

The following is a specimen of his method of treating this and other subjects:—

"Buho: I enjoy a waltz.

"Civetta: Certainly; and, above all, it is for ball-practice that ladies should be trained; I do not say for ball-practice alone, because their sphere of duty also should include shirt-buttons and pastry. There we (*i. e.*, the advocates of ignorance) stop, however. When the German Emperor, Charles IV., married at Prague, the father of the bride brought to the festival a wagon-load of conjurers. Two of the most eminent of these—Zytho, the Bohemian, and Gourin, the Bavarian—were pitched against each other. Zytho then, opening his mouth, it is said, from ear to ear, ate up his adversary till he came to his shoes, and spat those out, because they were not clean. Now we, like Zytho, can devour all the charms and graces of a woman till we come upon her understanding, and we spit that out. We do, I say, and represent the mouth-piece of a nation."

Miss Martineau and her mesmeric follies are "pleasantly rubbed," and homœopathy and other offsprings of ignorance jocundly whipped:—

"Buho: But I won't hear Miss Martineau abused. She has

proved mesmerism in the teeth of opposition. The case of her pet cow, that she brought forward last year—

"Aziola: And this year, her pet donkey.

"Buho: Eh! I haven't heard of that.

"Ulula: A fact, Sir; she has been seen, seated in mesmeric state, upon a most enormous donkey, that eats Bibles up instead of thistles.

"Buho: Bless me! Doesn't it choke itself?

"Aziola: O no! mesmeric animals have enormous width of swallow."

FOREIGN CORRESPONDENCE.

INDIA.

By JOHN BARCLAY SCRIVEN, M.R.C.S.,
Assistant-Surgeon H.E.I.C.S.

IN compliance with your wish, that I should furnish you with a few reports on tropical diseases, I have selected one of the most important cases that have come under my notice, for publication in your valuable Journal. My opportunities have, as yet, been very limited, having been stationed, ever since my arrival in Calcutta, with the European corps of Artillery, at Dum Dum, seven miles from the Presidency, where the small number of troops, and still smaller proportion of sick men, renders the duties of an assistant-surgeon, temporarily attached, almost nominal.

The present season of the rains is usually an unhealthy one; but towards their termination it is that dysentery and cholera fully develop themselves, and prostrate such numbers of recruits and others lately arrived from Europe. Of the former, however, we have already had a few cases, as well as of continued and intermittent fever. Of these last, I shall feel better able to speak on some future occasion, and will, therefore, now proceed with the following

CASE OF CHRONIC DYSENTERY.

Edward Leurie, gunner, aged 26, admitted to the Artillery Hospital, July 21, 1851. Has been one year and nine months in India; of spare habit and cachectic countenance; is employed in the band. He is a careless liver, but says he is always very moderate in his proportion of drink. Before he left England he used to enjoy tolerable health; but for several years has been subject to cough and dyspnoea, which he partly attributes to an attack of inflammation of the right lung a long time since. About ten years ago he was subject to hæmoptysis to a considerable amount, but of late has had no return of this. After his arrival in this country, he says that his health improved, but that he appeared nevertheless to lose flesh. However, he was able to do his duty with the band without inconvenience up to the beginning of this year, with the exception of a few days in October last, during which he was confined to hospital with fever. His first attack of dysentery commenced in January of the present year; and I find, on referring to the hospital books, his state on admission thus described:—"Motions frequent, muco-purulent; cough severe; tongue loaded." He was treated with Twining's pill, (ipecacuanha and gentian,) with occasionally a little blue pill or calomel, and anodyne injections, and was discharged, pretty well, on March 27. He says, that he even got fat during convalescence, but has never considered himself perfectly restored to health, being perpetually subject to a return of the symptoms, more or less severe.

On June 16 we find him again upon the sick list, and his present state detailed as follows:—"Frequent stools, consisting of slime mixed with blood; tormina and tenesmus." Treatment similar to last time,—blue pill, ipecacuanha, and gentian, and anodyne enemata. He was discharged and reported fit for duty on July 3.

Present Attack.—Has been ill six days; has taken two full doses of castor oil, and eaten a great quantity of guavas and other things, which people persuaded him were "binding." Says he has passed no blood this time, but the motions consist entirely of slime, and are attended with a great deal of griping and tenesmus; tongue thickly coated with a brown fur; pulse sharp, 116; skin dry; cough troublesome, but not worse than usual. Complaints of pain and tenderness all over the lower part of the abdomen, but especially in the lower part of the umbilical region. No pain or tenderness in the region of the liver, nor can any enlargement of this organ be detected. Examination of the chest gives no decided evidence of disease. Only mucous râles, with deficiency of respiratory murmur over the base of both lungs.

Treatment.—R. Pulv. jalapæ compos., ðij; hydrarg. protochlorid., gr. iij. M. ft. pulv. statim sumend.

℞ Pil. hydrarg., gr. v.; pulv. ipecac.; extract. gentianæ., aa gr. iv. M. In pil. iij. divide ter die sumend.

To have an opiate enema night and morning; a fomentation and flannel bandage to the abdomen.

This treatment was continued for two days, but the evacuations becoming first bloody, then purulent, and containing large flakes of mucous membrane, the pills were discontinued on the morning of the 23rd, and the following was prescribed.

℞ Hydrarg. protochlorid., ʒi.; pulv. opii., gr. ij. M. Fiat pulv. statim. sumend.

℞ Ol. ricini., ʒss. post horas sex.

This was followed in the evening by several apparently healthy evacuations, containing plenty of bile and no blood; the man reported himself better, but still complained of tenesmus. Rep. enema opii.

On the following morning, July 24, all the bad symptoms had returned; very frequent calls to stool during the night. Motions consisting entirely of blood and purulent matter; pulse small, 120; tongue still much loaded; complained of great thirst. The gums were slightly touched by the mercury.

℞ Pulv. ipecac. compos. gr. x. statim.

℞ Cupri sulphat. gr. i, pulv. opii gr. ʒ. Mist. acaciæ q. s. ut fiat pilula ter die sumenda.

To continue the opium injections night and morning. After the Dover's powder perspired freely, and seemed in better spirits.

Rep. pulv. Doveri, vesp.

July 25.—Had had some sleep during the night, and perspired freely. Motions still very frequent, watery, and contained blood, but also faecal matter; complained greatly of pain in the abdomen below the umbilicus.

To have a mustard poultice to the abdomen, and continue the pills and opiate enemata.

During the remaining few days of his life, he became gradually weaker, was very irritable and discontented, and had great difficulty in passing his urine. Some of his symptoms occasionally seemed slightly mitigated. On the 28th, however, the pain in the abdomen became very severe. It was relieved by tinct. opii mxxx., but afterwards he began to sink; all pain subsided, distressing hiccup supervened, and he died on the morning of the 30th.

Post-Mortem Appearances Four Hours after Death.—Body still warm, emaciation not excessive. *Thorax.*—Old pleuritic adhesions on both sides; apparent small cicatrices at the apex of each lung; considerable engorgement of the right lung, some old-standing condensation at its base, and a little tuberculous deposit; lower lobe of left lung emphysematous; concentric hypertrophy of the left ventricle of the heart, and slight thickening of the mitral valve. *Abdomen.*—On opening this cavity, the transverse colon was found drawn down, forming a sort of arch, with the convexity downwards, extending to within about three inches of the pubes. The omentum was adherent to the brim of the pelvis on the left side. On raising it, a portion of the sigmoid flexure of the colon was found adhering to the bladder by a thick coating of coagulable lymph. The usual sacculations of the large intestine were absent. The rectum was doubled upon itself, and retained in this position by effused lymph. On opening the cæcum we found extensive ulceration of the mucous coat, and great thickening of the other coats. The colon was extensively ulcerated throughout; the mucous membrane in many parts completely disorganised, and hanging in threads: in these places the other coats were generally thin, and easily torn. In other parts the circular form of the ulcers was apparent, and thick flakes of lymph were deposited on the surface. In other parts, again, there seemed to be general thickening of all the coats; this was most marked about the attachment of the meso-colon. The mucous membrane of the rectum was entirely destroyed by ulceration, and its other coats were very much thickened and softened. The peritoneal coat was deeply injected with blood. The mesenteric glands were enlarged. The stomach and small intestines to their very end were healthy—liver, kidneys, and spleen, also healthy.

Artillery Hospital, Dum Dum, near Calcutta.

GENERAL CORRESPONDENCE.

ALLOPATHY AND HOMŒOPATHY.

[To the Editor of the Medical Times.]

SIR,—As many persons read and use these terms without a knowledge of their meaning, and more especially of the *object* for which they were invented, it is well that they should be understood. These words were coined by Hahnemann. The former has

been used by him and his followers to designate ordinary medical treatment; or, it would be more correct to say, that it is a nickname invented by Hahnemann, and used by the homœopaths to stigmatise all scientific medical practice.

First. Allopathy is derived from two Greek words, *αλλοῖος* which may be translated "dissimilar," and *παθος*, "diseases different or dissimilar to the disease." But the *application* of this word to ordinary medical treatment is what I wish to direct attention to. Hahnemann's object was to induce the public to believe, that upon this single principle physicians invariably treated all disorders, namely, by the application or exhibition of remedies which were considered dissimilar in their qualities or nature to those of the disorders or diseases for which they were prescribed.

With the same view the phrase "*contraria contrariis curantur*," contraries are cured by contraries, such as heat by cold, cold by heat, &c., &c.; I say, with the same view this phrase has been applied by Hahnemann and his followers to ordinary medical practice, as if it always had been, and still continued to be, a recognised and an appropriate motto. This phrase is found in the writings of Galen, who lived about 1600 years ago. Now, whilst applying this motto to ordinary medical treatment, and calling it Allopathy, Hahnemann selects another motto, diametrically opposed, namely, "*similia similibus curantur*," like cures like, and this he calls homœopathy, which is derived from two Greek words, *ὅμοιος*, "like," and *παθος*, "disease." As a matter of course, he pronounces the latter to be the right, the former the wrong principle. Here, then, is the origin of and motives for giving an opprobrious or nickname to the medical Profession. Hahnemann and his followers have most unjustly stigmatised the Profession, by applying to it the above epithets, since nothing can be more remote from truth than the ideas which, by these terms, are intended to be conveyed to the public mind in reference to the leading doctrines and general principles of modern medical practice. The phrase, "*contraria contrariis curantur*," as a motto, is as obsolete as it is ancient; physicians of the present day recognise no such doctrine, and nothing can be more unjust or libellous than to attribute, as a leading and universal doctrine, such trash to the Medical Practitioners of the Nineteenth Century. A word more. The term allopathist has been applied by Hahnemann as a nickname to all regular Medical Practitioners. The phrase, "*contraria contrariis curantur*," (raked out of one of the oldest medical writers,) he avers to be the leading principle upon which all diseases have been, and still continue to be, treated by regular practitioners. Hahnemann was well aware that the majority of the public could know nothing of the fundamental principles of the practice of physic; and, taking advantage of this circumstance, adopts this most disingenuous and insidious method of stigmatizing the whole Profession. At the same time he assumes, as a motto, another Latin phrase, "*Similia similibus curantur*," and affirms, that upon this opposite principle all diseases ought to be treated. Nothing can be more absurd than would be the adoption of either the one or the other of these phrases or mottoes, as being explanatory of the groundwork of scientific medical practice. As to the infinitesimal dose, it is too insignificant to require any comment, further than that its adoption would be that of the "shadow for the substance." To the above observations I take this opportunity of expressing my surprise that regular members of the Medical Profession should be continually using the words allopathist and allopathy to designate themselves and their practice, both in speaking and writing; and more especially to find the conductors of our Medical Journals, whom it behoves to be most careful in the adoption or adaptation of terms, falling into the same error. Surely it is enough for the enemies of the Profession to be giving it nicknames without the members themselves joining, and, as it were, acquiescing in the abuse. I am, Sir, &c.

A PROVINCIAL PRACTITIONER.

THE HOMŒOPATHIC DOSE OF GOLD IN IMPECUNIOSITY AND SUICIDAL MANIA.

[To the Editor of the Medical Times.]

SIR,—I have read in a review in the *London Journal of Medicine* for October, that gold in the form of guineas is the homœopathic doctor's specific for impecuniosity. There must be some mistake here, for I find that Hahnemann, even in cases in which the impecuniosity leads to suicidal mania, considers one infinitesimal dose of the metal as a certain cure. I am not yet a convert to homœopathy; but I was lately in very depressed spirits, with suicidal impulses, for want of gold; and if I had then heard of the Hahnemannic remedy, I would certainly have made trial of it. As the quacks say, they are getting all our fees, it may be con-

solving to some of your readers now in the agonies of despair, to read the following passage from the pen of the wondrous sage, whom Lord Robert Grosvenor (also a very wise man) calls that "great and good old man." Let us free ourselves from all prejudice, and remember *fas est ab hoste doceri*.

Hahnemann, after describing "the propensity to self-destruction" as endemic in England, writes as follows:—"This most unnatural of all human purposes, this disorder of the mind that renders them weary of life, might always be with certainty cured, if the medicinal powers of *pure gold* for the cure of this sad condition were known. The smallest dose of pulverised gold attenuated to the billionth degree, or the smallest part of a drop of an equally diluted solution of pure gold, which may be mixed in his drink without his knowledge, immediately and permanently removes this fearful state of the body and mind, and the unfortunate being is saved."—[*Hahnemann's Lesser Writings*, translated by Dr. Dudgeon, Pp. 781. London, 1851.]

Mr. Leaf ought, when on 'Change, freely to dispense some of this "medicine of love," as his friend, Mr. Everest, calls it.

I am, &c.,

CANDIDUS.

THE BRANDING-ORDER IN THE ARMY.

[To the Editor of the Medical Times.]

SIR,—Several papers relating to the late order from the Horse Guards, that the branding of deserters shall be performed by the surgeon of the regiment, have appeared in your journal. It appears to me, however, that a most important point in the discussion has been left untouched. There is an Act of Parliament against any one mutilating another, constituting it felony; and I have a distinct recollection of some medical man a few months ago having marked with lunar caustic B, on the forehead of some mischievous urchin, who constantly annoyed him by ringing his door-bell, and thereby rendering himself liable to seven years' transportation without the possibility of appeal, and which would certainly have taken place, had not the said medical gentleman satisfied the complainant, and thereby stopped the prosecution. Now, it is to be asked, "Can any order from the Horse Guards supersede an Act of Parliament?" I apprehend not.

Next: Suppose any regimental-surgeon should comply with the order, and the mutilated person proceed to law for redress, who is to be prosecuted—the surgeon who committed the offence, or the Commander-in-Chief, who gave the order? These are very grave questions, which should be represented to the authorities. I strongly suspect that nothing could save the surgeon from the prosecution, and the consequences under the above-mentioned Act.

I am, &c.,

"AN OLD SURGEON IN THE NAVY,"

Where they do things in a more Christian-like manner.

DR. JENNER'S FEVER VIEWS.

[To the Editor of the Medical Times.]

SIR,—Some time ago, Dr. Jenner concluded in the *Medical Times* a series of papers on the subject of fevers. On reading those papers I am led to conclude, that it is his wish to draw a distinction between typhoid and typhous fevers, and to point out that they are each marked by distinct symptoms; have different morbid appearances; and arise from two specific poisons, as do scarlatina and rubeola.

I wish to remark, that these distinctions do not hold in practice; or at least, if they do, out of the very many cases which I have witnessed, I hold, that I have seen only three cases of pure typhoid fever, and not one of pure typhous. If cases of typhoid and typhous fevers exist or occur like Dr. Jenner's model cases, I object to his use of the terms; for I have seen continued fever, small-pox, remittent fever, and scarlatina, all fall into the typhoid or typhous states, and when there has been no rash or spots such as he describes. If we look to the derivation of the words, we may come to something like a correct conclusion. The word typhous, comes from a Greek word meaning to slumber; and the word typhoid, from two Greek words, meaning a resemblance to the slumbering form: *ergo*, one state is milder than the other; or, if you like, typhoid fever is a modification of typhous fever. In the four forms of fever I have named above, I have seen spots of a mulberry colour, not existing as a rash, but which I regard as purpura; and, if these are the same as Dr. Jenner's mulberry-rash, I am satisfied he is in error, for the spots are not a rash. I think it will be obvious from what I have now said, that, if he wishes the Profession to understand that he has seen two diseases, one with febrile

symptoms of a typhoid form, and with rose spots, and the other with febrile symptoms of a typhous form, with a mulberry rash, and each disease running a determinate course,—it will be necessary for him to change the names; one he might call rose fever, and the other, mulberry fever—for they will be as different as scarlet fever is from measles, and these from roseola, and roseola from the secondary eruptions of syphilis.

If Dr. Jenner or you will inform me whether I am right or wrong, I shall be obliged; for I have long discussed the matter, and with no satisfaction to myself or others, only so far as, that my views, in the main, accord with those who have seen fever as it exists in this town.

I am, &c.

S. GIBBONS.

North Dispensary, Liverpool.

P.S. Is it not possible that the rose spots are flea-bites?

[We should say, that it is not possible Dr. Jenner can have confounded rose spots with flea-bites, seeing that the latter in no single physical character resemble the former.]

Our Correspondent will do well to read the article on the 'Diagnosis of Fever in the July number of the *British and Foreign Medico-Chirurgical Review*.—Ed. *Medical Times*.]

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 3rd inst. :—

ABBOTT, CHARLES THOMPSON, Nenagh, Co. Tipperary.

COATES, CHARLES, Leeds.

COMPLIN, EDWARD JOHN, Charterhouse-square.

DAVIES, JOHN, Brecon.

GRAHAM, GEORGE, Cootehill, Co. Cavan.

GRIESBACH, HENRY JOSEPH HERSCHEL, Millington, Yorkshire.

HANKS, HENRY, Malmsbury, Wiltshire.

HOLTHOUSE, THOMAS LE GAY, Australia.

HOLLINGSWORTH, THOMAS SMITH, Leicester-square.

MAHONY, LAWRENCE FRANCIS, Bedford-square East.

WHITEFIELD, THOMAS, Millman-street.

WRIGHT, JOSEPH COLEMAN, Dublin.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, October 2 :—

BOOR, LEONARD GEORGE, London.

CHALDECOTT, CHARLES WILLIAM, Dorking, Surrey.

CUTTS, WILLIAM HENRY, Chesterfield.

DOWLING, JAMES HARNETT, Cerne Abbas.

GRAMSHAW, HENRY, Gravesend.

GRABHAM, JOHN, Rochford, Essex.

NUTTALL, FRANCIS, Bury, Lancashire.

SCOWCROFT, JAMES PARKINSON, Bolton-le-Moors.

WHITING, JOHN JOSEPH, Lynn Regis.

QUEEN'S UNIVERSITY, IRELAND.—The Examiners in the Medical Sciences are:—George J. Allman, M.D., professor of botany, T.C.D.; James J. Apjohn, M.D., professor of chemistry, T.C.D.; Hugh Carlisle, A.M., M.D., professor of anatomy and physiology, Queen's College, Belfast; Alexander Fleming, M.D., professor of materia medica, Queen's College, Cork; John Hamilton, F.R.C.P.I., surgeon to the Richmond Hospital; Cathcart Lees, M.D., physician to the Meath Hospital; Thomas McKeever, M.D., Hon. Fellow K. and Q. College of Physicians, ex-assistent-physician Lying-in Hospital, ex-lecturer on Midwifery, T.C.D. There are eight candidates for the degree of M.D. The fee for the diploma is 5*l.*—no stamps requisite. Two exhibitions of 30*l.* each will be given to the best respondents for the degree of M.D.

OBITUARY.—On the 2nd inst., at St. Margaret's-terrace, Cheltenham, John Baron, M.D., F.R.S.

MILITARY APPOINTMENTS.—83rd Foot: Assistant-Surgeon Edward Touch, M.D., from the staff, to be assistant-surgeon, vice Innes, who exchanges. Hospital Staff: Assistant-Surgeon John Harry Kerr Innes, from the 83rd Foot, to be assistant-surgeon to the forces, vice Touch, who exchanges.

NAVAL APPOINTMENTS.—Surgeon, Thomas R. H. Thomson, M.D. (1851,) to be surgeon-superintendent of the Marion convict-ship. Surgeon, Frederick W. Le Grand (1839,) to be surgeon-superintendent of the Marion convict-ship, in the room of Thomas R. H. Thomson.!

MEDICAL APPOINTMENTS AND VACANCIES. — HANDSOME OFFERS.—A dispenser and dresser is wanted for the Wiveliscombe Infirmary and Dispensary; salary, 25*l.* a year, with apartments, coals, and candles. A hint is thrown out, that this paltry remuneration may be increased, if a suitable candidate be obtained. The better plan would be, to increase the salary first, and then an efficient officer may be secured. 25*l.* a year, and the dispenser to board and clothe himself! in fact, to pay all his expenses, except lodgings,—and it is not stated whether those are furnished or not,—coals, and candles, out of that small annual payment! Why, the head porter of a union workhouse would get as much, and his rations besides! The Governors must be very poor in spirit and in pocket, to offer so shamefully paltry a remuneration. Election on the 18th inst.—The township of Manchester requires two medical officers and vaccinators, for the districts of St. George and St. Jude. They are to devote their whole time to the office, and are not allowed private practice while in office. Salary for each district, to include extra medical fees, 120*l.* a year, with 1*s.* 6*d.* for each successful vaccination, the officers having to provide, at their own cost, such number of stations for vaccination as the guardians may deem necessary. Election on the 15th inst. We trust that here, also, there will not be any candidates. The salary offered is preposterously small, and, especially with the restriction against private practice, must be absolutely insufficient for any gentleman to support himself. How can any one expect, that 120*l.* a year would be sufficient for a gentleman's maintenance, apartments, clothes, servant's board, lodging, and wages, even if the rent of the vaccination-stations were paid by the township—which, however, is to be paid by the officer himself. Such proposals are most disgraceful and insulting to the Profession. We earnestly urge our brethren not to apply for either of these appointments.

DR. GAVIN, the Medical Inspector appointed by the Home Government to visit the different West India colonies, had arrived in Trinidad, and had placed himself in communication with the local Government.

ELECTION OF CORONER FOR WEST SOMERSET.—On Tuesday, the 30th ult., the election of coroner for the third, or western district of this county, took place in the County Court, at the Castle, in this town. A numerous body of electors were assembled; but Mr. Trevor having last week withdrawn from the contest, and no other candidate appearing, the proceedings were but of very short duration. J. Nicholletts, Esq., the Under-Sheriff, having duly announced the purport of the meeting, R. K. M. King, Esq., in an address explanatory of his opinion of the requisites of character which ought to be found in an officer exercising the important functions of a coroner, avowed his belief in the peculiar fitness of Mr. Munckton, Deputy Coroner and surgeon, for that appointment; and, in the course of an address, which was received by the meeting with repeated demonstrations of its hearty concurrence in the justice of the encomiums bestowed on Mr. Munckton, the worthy magistrate sat down amidst lively cheers, by proposing Mr. Munckton to fill the vacant office of coroner. Burchell Perrin, Esq., in a very appropriate address, seconded the nomination. No other candidate appearing, Mr. Munckton was unanimously elected; and, having addressed the meeting in becoming terms of respect and thankfulness, the usual oaths were administered to him by the Under-Sheriff, to whom the thanks of the meeting having been expressed and acknowledged, the business was concluded.

TORBAY.—The new infirmary and hospital at Torbay is so far completed, that the Committee are able to hold their meetings there. The building is said to be a very handsome one.

SOMERSET COUNTY ASYLUM.—A number of patients from this asylum were lately taken on a pleasure trip to Cheddar. How much better is this than the old system of chains and cold, dark cells.

LIFE ASSURANCE AND MEDICAL FEES.—The Profession, smarting under repeated acts of injustice and insult, will welcome the following resolutions. They should make a unanimous call upon their *Almæ Matres* to adopt a similar determined position. If the plan propounded were generally adopted, the life assurance offices must yield to the demands of medical men, based on justice and honour. In every instance their medical officers should do their utmost to enforce the adoption of the principle—"The labourer is worthy of his hire":—"Resolutions adopted at a meeting of the Faculty of Physicians and Surgeons of Glasgow, held upon the 1st of September, 1851, in reference to the payment of fees to medical referees by life assurance companies:—1. That this Faculty has long maintained the principle, that medical referees, the ordinary attendants of the parties desiring life assurance, ought to be suitably remunerated for their trouble in replying to the usual queries

on behalf of the assuring companies; and that the parties granting the assurance ought to pay this fee, as it is obviously for their safety and guidance that such information is afforded. 2. That, in conformity with these views, the Faculty, so long ago as 1st June, 1835, passed a law, requiring every member of their body to refuse replying to these queries unless a specified fee were transmitted along with the schedule, and this law has, from that time, been steadily adhered to and acted upon. 3. That in carrying out the above views, the Faculty regret being obliged to record, that till of late, with a few honourable exceptions, they have met with the most uncompromising opposition from the insurance companies, especially those of more early establishment; and although, within the last two years, several even of these have made a movement in the right direction, yet this has been so long deferred, and so obviously only a yielding to the pressure of circumstances, as to deprive the concession of much of its value. 4. In this position of affairs, it has given the Faculty much pleasure to observe some of the more recently established insurance companies, not only frankly acknowledging the justice of the principle so long contended for, but spontaneously offering a liberal compensation to the members of the Medical Profession for the very valuable information and opinions it is not unfrequently in their power to afford; and to such companies the Faculty beg, in this public manner, to offer their best thanks. 5. The Faculty also take this opportunity of recording the sense they entertain of the important services done to the Profession in this matter of remuneration to private referees, by the Editors of the *Lancet*, *Medical Gazette*, and *Medical Times*, to whose intelligent and steady advocacy, they are aware, they mainly owe whatever favourable change may have taken place in the conduct of the assurance companies towards the Profession. 6. The Faculty beg also to state, that whilst, in 1835, in their anxiety to have the principle of remuneration established, they were indifferent as to the actual amount conceded; they now feel called upon, in justice to themselves, to intimate to the agents of all assurance companies, that the Fellows of their body will not, in time coming, pay attention to any schedule of queries submitted to them with a reference to any species of life assurance, unless such schedule of inquiry be accompanied by the fee of one guinea, if the sum proposed to be insured exceeds 300*l.*, and 10*s.* 6*d.* if the sum is 300*l.* or under. 7. The Faculty order these resolutions to be printed, and copies sent to the editors of the London and provincial medical press, to the agents of the various insurance companies, and to the Presidents of the Royal Colleges of Edinburgh, and the other medical corporations throughout the Kingdom, inviting their concurrence and co-operation.—Extracted from the records of Faculty, by LAURENCE HILL, Clerk."

EPIDEMICS.—The news from Jamaica are more satisfactory than of late, and cholera has almost entirely disappeared. Small-pox, however, has appeared in Trelawny, but it does not spread extensively; it seems to be confined to that locality. The yellow fever, which had raged so severely in Surinam, is rapidly on the decline; it has also apparently entirely ceased in Oporto. The influenza is still very prevalent in the West India Islands, especially in Trinidad, Antigua, Barbadoes, and Grenada. In Barbadoes and Grenada its ravages are to a serious extent, even to the interruption of business. From the communications made to the Académie des Sciences in Paris, it appears, that the disease in grapes was first noticed in Tucher's hothouses, in Margate, in 1845, and afterwards in hothouses in Belgium. It next showed itself in France, in 1847, in the hothouse of Baron de Rothschild, at Sursennes, near Paris. From this place it spread to the adjacent vineyards, increasing in extent every year. It has been denominated the *odium Tucher*, and is said to consist of a microscopic mushroom, or rather fungus, developed on the fruit itself. It is supposed to have originated from the forced cultivation of the grape in hothouses, and may lead to their prohibition, at least on the Continent, where the outfield cultivation of this fruit extends over millions of acres, and gives employment to an immense number of persons, besides being an article largely entering into commerce, both *per se* and in the form of wines. It has been ascertained, that the diseased fruit is fit for food for the lower animals. The wood of the affected vine is also diseased.

POISONING BY ACONITE.—An excise officer, named Bolton, recently perished through incautiously tasting the contents of a bottle containing "Fleming's tincture of aconite," forwarded from Scotland, which came under his notice in the course of his duties. He was, it appears, totally unacquainted with the character of the preparation, which was incautiously only entered as medicated spirits, the label, "poison," being attached to the bottle only, and not to the wrapper. How much was swallowed is uncertain, but apparently only a small quantity; and we advert to the subject here to advise great caution in using this tincture. The late Dr.

Male, of Birmingham, some years since, lost his life, when in advanced age, from taking this drug, in accordance with the directions in Dr. Fleming's work. Aconite is evidently a drug which it will not do to tamper with. A variety of aconite, the Indian *aconitum ferox*, was used by the Nepaulese to poison their wells when our troops invaded their country, and our soldiery suffered heavy losses before the villany of the inhabitants was discovered. In Bolton's case the jury returned a verdict of accidental death, but recommended that, in future, when any article of a poisonous nature was imported, the permit should have the word "poison" inserted, as well as the nature of the article itself. In this we cordially coincide.

FIVE PRISONERS in the hospital at the bagnes, in Toulon, lately died from poison, in consequence of an error committed by the head apothecary of the establishment, who had placed on one bottle a direction intended for another. Four died the same night, and the fifth the next morning.

MEDICINE AND ITS KINDRED SCIENCES!—The *Times* lately contained an advertisement addressed to "Graduates in Medicine and Members of the College of Surgeons," stating that a well-educated gentleman was wanted in a preparatory medical school, to give elementary instruction in comparative anatomy, astrology (!) and other kindred (?) subjects—stipend 50*l.* a-year, with board and lodging. Have we suddenly fallen back on the dark ages, that astrology is deemed a kindred subject with medicine? The mediæval pranks of the present age seem to be extending to medicine.

HOMEOPATHY AND THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The following requisition to the Council of the Royal Medical and Chirurgical Society, is in course of being signed. We understand that it will be presented at the commencement of the Session in November:—"We, the undersigned Fellows of the Royal Medical and Chirurgical Society being convinced that the doctrines of homœopathy and mesmerism are utterly fallacious, and inconsistent with the facts of medical science, hold that they are unworthy to be professed, or in any way countenanced by members of this Society, the object of which is the promotion of a sound knowledge of medicine and Surgery. We therefore request the Council to take this subject into consideration, with the view to prepare regulations whereby all homœopathic, mesmeric, and similar irregular practitioners shall be excluded from the Fellowship of this Chartered Corporation. And we hereby request the Council, with as little delay as possible, to summon a special general meeting of the Fellows to resolve on the same."

THE HOMEOPATHS.—We understand that a motion is to be brought forward this evening, at the Medical Society of University College, to expel certain members who practise homœopathy. We hope to find room next week for a report of the proceedings.

DEATHS in the Metropolis for the week ending Saturday, October 4, 1851.

CAUSES OF DEATH.	Oct. 4.				Sum of Ten Weeks.
	0	15	30	All Ages	
ALL CAUSES	463	331	210	1014	9803
SPECIFIED CAUSES	462	330	210	1004	9743
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	197	49	14	260	2779
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	1	15	17	33	510
3. Tubercular Diseases. ...	57	105	5	167	1675
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses, ...	55	28	31	115	1114
5. Diseases of the Heart and Blood- vessels ... ..	...	20	19	39	279
6. Diseases of the Lungs, and of the other Organs of Respiration ...	45	22	31	98	988
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	20	31	14	65	708
8. Diseases of the Kidneys, &c. ...	1	7	5	13	80
9. Childbirth, Diseases of the Uterus	...	3	1	4	95
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	6	1	8	62
11. Diseases of the Skin, Cellular Tis- sue, &c. ... ..	...	1	1	2	11
12. Malformations	5	...	...	5	23
13. Premature Birth and Debility ...	24	3	...	27	228
14. Atrophy	18	...	...	18	187
15. Age ... ..	...	...	49	49	451
16. Sudden	10	...	11	27	146
17. Violence, Privation, Cold, and In- temperance	28	34	11	74	465
Causes not Specified	1	1	...	10	60

TO CORRESPONDENTS.

Mr. McElheran's letter having already appeared in print, cannot in its present state re-appear in our pages.

Decalous.—Squire's Pharmacopœia; Beasley's Formulary and Druggist's Receipt-book; and Cooley's Cyclopædia of Practical Receipts.

Unpaid letters addressed to the Editor are invariably refused.

Tell me Why?—

"Time in his mantle's sunniest fold
The babe enrolled."

Mr. Henry V. Vaughan.—Apply to the Dean of the College.

A Young Microscopist.—The first part of Quain and Sharpey's Anatomy. No work in this or any other language contains a description of the tissues to be compared with that in the work we have named. This part is, we believe, the work of Dr. Sharpey. Professor Ellis's book is, we believe, now acknowledged to be the most perfect dissector's manual.

A Country Surgeon.—Mr. Lawrence.

One of the Parties.—We must have a more detailed account of the origin of the misunderstanding, before we can pronounce an opinion on the matter.

Ol. Jec. As.—Some say one; some say the other. All that is known on the subject is contained in De John's work, translated by Dr. Cary.

Scribo.—"Thou canst not say I did it." We never undertook to write poetry equal to Wordsworth's, by the yard, "according to order."

Mr. Johnson.—We never publish either Clinical Lectures or Hospital Reports without the sanction of the physician or surgeon concerned.

Dr. John Davy's *exposé* of the humbug of Warburg's fever drops has been received, and will appear next week.

An Old Surgeon in the Navy.—We publish our Correspondent's communication, although the occasion for it is happily at an end.

Dr. John Taylor, of Huddersfield, will kindly accept our apologies. His communication on "The Frequency of Pericarditis,"—a continuation of the admirable papers which have already appeared in our columns on the subject,—though for some time in our possession, unfortunately, amidst a mass of original articles, escaped attention. It has now been passed to the printer, and no further delay will occur.

F. R.—As we have frequently said, we can, on no account, give professional advice in our columns.

S. P.—Medical law is the most uncertain and obscure thing to which human interests are subjected. It is very difficult to say beforehand what is law or what not, as much of what is called medical law is judge-made. The decision of the judges are, from mere ignorance, frequently contradictory, so that the poor litigant is compelled to float on a sea of uncertainty. In the course of another hundred years a sufficient number of precedents will have been established to give precision to the subject; but we trust, before that time, we shall be under a better regime. Your remarks upon the herb-doctor's case are most just.

A Union Surgeon.—Our Correspondent desires to know whether the Board of Guardians is not required to appoint a surgeon to exercise an oversight over pauper lunatics. We answer, No; not absolutely. The Boards of Guardians are by Act of Parliament empowered to appoint such an officer, but they may consult their own judgment as to the expediency of the appointment. We cannot refrain, however, from observing that there is great mismanagement of pauper lunatics in many instances, and that a more stringent supervision is required. If our Correspondent can make out a case in his own Union, he will do right to call the attention of the Board to the powers they may so beneficially exercise.

M. D.—You would be practising in London in violation of the law; but law, in such a case, is not justice, and no one would venture to interfere with you.

A Country Surgeon.—We have not the information at hand to answer your inquiry; but if we should hereafter come to a knowledge of the facts, we will write to you by post.

Baby.—Run your eye over the names of those constituting the Committee. Having done so, state yourself, if those belonging to members of the medical Profession do not inspire confidence. The Children's Hospital is worthy of the support of every man, woman, and "baby" in the kingdom. If it did not receive aid from the Medical Profession, we should indeed be astonished.

Mr. C. H. Smith.—If Mr. Smith will forward us the name of the physician to whom he alludes, as being in the habit of meeting the homœopath in consultation, we will pillory him.

COMMUNICATIONS have been received from—

Mr. LACY, of Poole, Dorset; Mr. VALLANCE, of Jersey; Dr. EDWARD SMITH, of Norfolk-terrace, Westbourne-grove; Mr. WIBLIN, of Southampton; Mr. GIBBONS, of the North Dispensary, Liverpool; DECALOUS; Dr. BORRETT, of Great Yarmouth; A SURGEON IN THE NAVY; Mr. ALFRED EVANS, of Walthamstow; Dr. BENICE JONES, of Brook-street; Mr. PARKER, of Birkenhead; A COUNTRY SURGEON; CANDIDUS; Mr. MUNCETON, of Curry Rivel; SECOND YEARS' STUDENT, London Hospital; TELL ME WHY? Mr. HENRY V. VAUGHAN; A YOUNG MICROSCOPIST; ONE OF THE PARTIES; OL. JEC. AS.; SCRIBO; Mr. JOHNSON; F. R.

ORIGINAL LECTURES.

LECTURES ON PUBLIC HEALTH.

ADDRESSED TO THE STUDENTS OF THE
THEOLOGICAL DEPARTMENT OF
KING'S COLLEGE.

By WILLIAM A. GUY, M.B. Cantab.,

Dean of the Medical Department of King's College, Professor of Forensic Medicine, and Physician to King's College Hospital, &c.

CONTENTS.—Additional Facts in illustration of the Connexion of Filth, and Defective Drainage and Sewerage, with Fever.—Examples of the Removal of Fever by Cleanliness and Ventilation.—Evidence of Mr. Liddle, Dr. Arnott, and Dr. Alison.—Dr. Currie's Proposal for Superseding Fever-hospitals.—Moral Re-actions of Fever, and of its Causes.—Analogy of former Plagues and Pestilences.—Their Demoralizing Effect.—Debasing Effects of Filthy Habitations.—Evidence of Mr. Hawksley and Dr. Southwood Smith.—Testimony of the Rev. C. Girdlestone.—Résumé of the Facts and Principles established in reference to Typhus Fever.

In my last lecture I informed you, that there exists a difference of opinion among medical authorities as to the true cause of typhus fever, some of them tracing every case, without exception, to contagion, as the true and essential cause, while others are disposed to trace the disease to filth and defective drainage and sewerage. After stating that, according to my own view of the case, filth was to be regarded rather as the nurse than as the parent of fever, I proceeded to quote a case reported by a very distinguished medical authority, Dr. Christison, which appeared to establish, beyond the reach of doubt, the possible origin of fever in filth without the aid of contagion. This case, if you recollect, occurred in an isolated farm-house, to which it was in the highest degree improbable that the fever could have been conveyed by contagion. The same coincidence of filth and fever is very common in town populations; but here the probability of contagion is always so strong that it is not possible with any certainty to connect the two, filth and fever, as cause and effect. In the majority of such cases, moreover, filth is accompanied by that overcrowding which has been shown to be so favourable to the reception and spread of contagious fevers; so that the question of the true agency of filth in the production of fever is still further complicated. There is, however, a class of cases in which, overcrowding being out of the question, the agency of filth in promoting, if not producing, fever, is very obvious. One such case occurred in my own experience. Typhus fever ran through an entire family residing in a large airy house in a spacious open London square. The family consisted of a father, mother, and five children, of whom the mother and one child died. I could not trace the disease from without, nor did it spread among the attendants, servants, or other inmates. This house was undrained, and constituted a receiver of offensive and poisonous gases from cesspools in the basement. I remember two other cases of fever which occurred on opposite sides of a decent, well-paved court; but the houses were receivers inverted over cesspools, and the inmates were cheated into a false security by badly-constructed and ineffective drains. Such cases as these are of very common occurrence in our large towns, and they go far to connect filth with fever, if not as its cause, at least as its most efficient promoter. We may, therefore, feel assured that, by promoting cleanliness and a sound system of drainage and sewerage, both in our large towns and rural districts, we are using very effectual means to diminish the number of fever cases, and check the spread of a most loathsome, dangerous, and costly malady.

I must now, in accordance with my promise, and in order to carry out another point of the analogy between gaol fever and typhus fever, give you one or two instances to prove that typhus fever may be banished from its favourite haunts by very simple means,—by the very same means which have proved effectual in expelling the gaol fever from our prisons: and I shall make no apology for citing instances already familiar to those who have made the public health their study.

The first case which I shall quote is on the authority of Mr. Liddle, a very active and intelligent medical man, practising in the east of London. He says:—

"Windmill-court, in Rosemary-lane, was one of the most unhealthy in my district. It was unpaved and filthy, and

with stagnant water before the houses. I used to visit it sometimes two or three times a day for fever cases. About twelve months ago it was flagged; it was well supplied with water from a large cast-iron tank, which enables the inhabitants to have a constant supply instead of an intermittent one, on three days a-week. The court is regularly washed down twice a-week, and the drains are so laid that all the water passes through the privy and carries off the soil, which was formerly a most foul nuisance, and a constant expense to the landlord. In the seven months ending March, 1843, I attended forty-one new cases of sickness in that court; in the last four or five months I have had but two cases."

I think that I can scarcely be wrong in assuming, that some at least of these forty-one new cases of sickness were cases of fever; and I shall therefore consider this as an example of fever washed away. I will now give you, on the authority of Dr. Arnott, a case in which fever was blown away.

"When I visited Glasgow with Mr. Chadwick," says Dr. Arnott, "there was described to us one vast lodging-house, in connexion with a manufactory there, in which, formerly, fever constantly prevailed; but where, by making an opening from the top of each room, through a channel of communication to an air pump, common to all the channels, the disease disappeared altogether. The supply of pure air obtained by that mode of ventilation was sufficient to dilute the cause of the disease, so that it became powerless."

To the same effect is the following quotation from Dr. Alison:—"I can," he says, "point out one hundred houses where only one case of fever has occurred, where the patient has speedily been removed and the place cleaned," (such cleaning combining both the removal of filth and free ventilation,) "but we cannot find five houses, in all the closes of the old town of Edinburgh, in which a patient in fever has lain during the whole, or even half of his disease, in which other cases of the disease have not shown themselves." (a)

The possibility of extinguishing typhus fever altogether by such simple means as these was long since admitted by eminent members of the Medical Profession, and urged, though unsuccessfully, on the attention of the public. Dr. Currie, of Liverpool, for instance, so far back as the year 1797, after advocating the self-same sanitary measures which are now being slowly carried out, under the superintendence of Dr. Duncan, expressed himself in these terms. "A vigilant exercise of all the means of prevention and of cure might, indeed, in a short period, supersede the use of hospitals for fever by extinguishing the disease; a prospect in which the philanthropist might indulge with more safety, if he could calculate with equal confidence on the wisdom as on the power of his species." The late witty Canon of St. Paul's took a more sanguine and consolatory view of the future than Dr. Currie's experience seemed to warrant.

"All degrees of nations," he says, "begin with living in pigsties. The king or the priest first gets out of them; then the noble, then the pauper, in proportion as each class becomes more and more opulent. Better tastes arise from better circumstances; and the luxury of one period is the wretchedness and poverty of another."

As we are indebted to the Church for pointing out this law of progress, I hope that we may count with safety on her active co-operation in carrying it, with all convenient speed, into practical operation.

There is still one point of view in which it is most important that I should place this chronic pestilence and the causes which tend to foster and promote it,—I mean their moral re-actions.

There are many persons for whose characters and motives I am bound to entertain a profound respect, who cannot bring themselves to look upon pestilences in any other light than as agents sent by Providence to thin redundant populations, or as special and miraculous marks of God's displeasure; instead of being, in part at least, as most men are now beginning to regard them, the natural and necessary consequences of man's negligent observance of, or perverse disobedience to, the laws revealed in our frames, and in the world by which we are surrounded.

The first theory, which was adopted by that great hypochondriac of political economy—Malthus, and his disciples, admits of a very easy and conclusive reply; for all recent experience goes to prove, that, so far from fevers, and consumption, and other fatal diseases which

(a) *Edinburgh Medical and Surgical Journal*, Vol. XXVIII., p. 241.

attack the young and vigorous adult, having the effect of thinning the population, they rather tend to its increase; the only constant and certain result being the substitution of a young, weak, and helpless population, for one capable of supporting and increasing the national strength and prosperity. Malthus and his followers thought that, but for plagues and pestilences, sent by Providence with the express design of reducing redundant populations, mankind had so strong a tendency to increase faster than the food by which they were supported, that they must perish miserably by famine. The theory, from first to last, was a melancholy and dangerous mistake; for, as I have just stated, plagues and pestilences do not (except in the most extreme cases) tend to lessen the population; and men do not, and *cannot*, increase faster than their food, unless men continue to do that which, since the world began, they have, in ignorance, been always doing, namely, throwing the raw material of their food into the sea, and placing obstacles in the way of that commerce which seems to have been expressly designed to meet exceptional failures in the supply of food. In this bad habit, and most strange mistake, is to be found the true key to the Malthusian fallacy.

The theory which regards plagues and pestilences exclusively as miraculous interpositions of Providence, either as means of evincing God's anger against sinful nations, or as instruments for thinning redundant populations, seems to me to demand a little further consideration; and though I feel that, in discussing this subject, I am treading on tender ground, I do not think that I ought to pass it by in silence in a course of lectures devoted, in part at least, to the *moral bearings of the sanitary question*.

In the first place, it would not seem to be inconsistent with sound analogy to attribute the good gift of health, with everything which tends to its preservation, to the Giver of all other good, and to try to trace disease to some infringement of his laws revealed to us in creation, but which can neither be discovered without industry, nor obeyed without constant watchfulness. Such, at least, if not the true, would certainly be hailed as the more welcome theory, and assuredly it is the only one that can be practically carried into effect. Nor is it without strong support from a part of the ancient Scriptures, which, though not received among Christians as the highest authority, is, nevertheless, universally admitted to be worthy of attentive and respectful consideration,—I mean the wisdom of Solomon.

In that ancient writing, we find the question I am now discussing solved in a very authoritative manner, in the following words:—

"Seek not death in the error of your life; and pull not upon yourselves destruction with the works of your hands. For God made not death; neither hath he pleasure in the destruction of the living. For he created all things, that they might have their being: and the generations of the world were healthful; and there is no poison of destruction in them, nor the kingdom of death upon the earth."

How favourably does this specimen of ancient wisdom contrast with the melancholy theory to which I have been adverting! How consolatory and inspiring this wisdom of Solomon compared with the hypochondriac folly of Malthus and his followers!

But, leaving this delicate ground, let us interrogate history as to what has actually taken place. Has pestilence ever worked any real reformation? Are not its effects either morally bad, or at the best evanescent, and followed by a re-action of crime and disorder?

I turn to the best history of the great plague of the 14th century,—the Black Death,—and take a few passages from it at random.

I read that, "parents abandoned their infected children, and all the ties of kindred were dissolved." "Morals were deteriorated everywhere, and the service of God was, in a great measure, laid aside." Fanaticism, revenge, avarice, and desperation, formed a fearful league. "The authority of every law, human and divine, vanished, and vice and dissipation revelled unchecked. Some, who practised abstemiousness during the visitation, relapsed as soon as it ceased, into unbridled indulgence; just as the Byzantines, who, on the shock of an earthquake in the year 529, prostrated themselves before their altars by thousands, and sought to excel each other in Christian self-denial and benevolence, no sooner did they feel the ground firm beneath their feet, than they again abandoned themselves, without remorse, to all the vices of the metropolis." No doubt there

was a bright side to these dark shadows. Self-denial, heroism, and Christian charity shone brightly forth in some. But, as a general rule, the moral effects were very far from favourable. To this fact Lord Ebrington adverts in an excellent lecture delivered at the Plymouth Literary and Scientific Institution. "All witnesses, and a knowledge of our common nature, tell us that the continual recurrence of these scenes of sickness and death, instead of softening the heart, usually hardens it. Read the accounts of all great plagues—the plague at Athens—the plague at Milan, as described, either in the historians of the day, and the biographers of Cardinal Borromeo, or in the more popular pages of the best Italian novel, the *Promessi Sposi*—read the account of the plague in London—and you will see that in all these cases the bulk of the people become more reckless and profligate than ever."

But what is the effect of our own plague,—our own filth-produced and filth-fostered typhus fever—on the *morale* of the people whom it attacks? What, but to generate an appalling indifference? A single fact will suffice to prove this: "In the year 1836," says one of the medical officers of the West Derby Union, "I attended a family of thirteen, twelve of whom had typhus fever, without a bed in the cellar, without straw or timber shavings—frequent substitutes. They lay on the floor, and so crowded that I could scarcely pass between them. In another house I attended fourteen patients: there were only two beds in the house. All the patients lay on the boards, and during their illness never had their clothes off. I met with many cases in similar conditions; yet, amidst the greatest destitution and want of domestic comfort, I have never heard, during the course of twelve years' practice, a complaint of inconvenient accommodation."

The effect, then, of fever, and of the circumstances which favour its production and extension, is to degrade and brutalize the sufferers,—to produce a reckless indifference to their fate,—a dead insensibility, which no motives can excite to action, no appeals warm into exertion. A filthy and neglected habitation, destitute of all those conveniences and comforts which are wont to distinguish the abode of civilized man from the den of the beast, or the lair of the savage, has a fearful moral reaction which no man of ordinary sensibility or acuteness can fail to recognise. I will quote one or two passages in confirmation of this statement. The first is from the evidence of Mr. Hawksley before the Health of Towns' Commission:—

"My own observation and inquiry convince me, that the character and habits of a working family are more depressed and deteriorated by the defects of their habitations than by the greatest pecuniary privations to which they are subject. The most cleanly and orderly female will invariably despond and relax her exertions under the influence of filth, damp, and stench; and at length, ceasing to make further effort, probably sink into a dirty, noisy, discontented, and perhaps gin-drinking drab—the wife of a man who has no comfort in his house, the parent of children whose home is the street or the gaol."

A second passage from Dr. Southwood Smith's evidence, will show the work of degradation in actual and active progress:—

"A short time ago," he says, "I was standing in one of the streets branching off from Rosemary-lane, called Blue Anchor-yard, looking at a stream of abomination that was flowing down from a court into the open gutter in the centre of this Blue Anchor-yard—the open gutter being the common receptacle for the filth from the houses. This noisome stream was flowing close to a house, at the door of which there stood a woman with ruddy cheeks, neatly clothed. 'Five times this very day, Sir,' said she to me, 'have I swept this place as clean as I possibly could; but you see the state in which it is again. It is no use to try to keep it clean.' Her whole appearance indicated that she was a new-comer; in a few days, she would naturally give up her hopeless attempt to keep the place clean; and, if she remains there, she must necessarily sink into the state of squalor and filth so general among her neighbours."

I have just quoted an engineer and a physician; I will now add the testimony of a clergyman—of one who deserves to be placed in the very foremost rank among those who have laboured from the purest motives, and with no possible selfish end to serve, to improve the physical condition of the people, rightly judging, that without such improvement, there could not possibly be any moral or religious progress. The

gentleman to whom I allude, is the Rev. C. Girdlestone, who has published one of the very best treatises on the Sanitary question which has yet made its appearance. The little work from which I am about to quote, is on the "Cause and Cure of abject Poverty"—a subject worthy of a Christian minister. He expresses himself in the following beautiful and eloquent language:—

"First, I would ask you just to contemplate for a moment in your minds the outward universe—so orderly, so beautiful, so richly replenished and adorned; the fields decked with flowers, as well as laden with fruits, the heavens glittering with countless stars. Remember how these things are spoken of in Scripture. 'Consider the lilies of the field, how they grow;' and can you doubt, that much more would God have man, the noblest of his creatures here below, fed, clothed, and lodged in comfort, to his own satisfaction, and to the glory of his Maker? Next, reflect what serious obstacles are presented by such poverty as I speak of, to the growth of almost every Christian grace. Let us leave the fields and flowers, the fresh air and pleasant skies, and let us enter some close tenement, some narrow lodging, perhaps a single chamber for a whole family,—dark, dirty, noisome, pestilential, the occupiers in rags, and faint for want of food. I stay not to observe, that the bird fares better in its nest, the bee in its hive; instead of contrasting mankind with the brute creation, I ask you to contrast this picture with the portrait of a Christian, as set before you in God's Word. I ask you, whether the beauties of the Christian character are likely to flourish in such an atmosphere as this? Will a man take no thought for the morrow, who has no means of making provision for to-morrow's meal? Is cheerfulness or joyfulness easy of attainment under the pressure of cold and hunger? Can modesty bloom where common decency is impracticable? Under the boundless power of God's grace, exceptions may occur, and marvellous instances undoubtedly there are of a holy life and of a heavenly frame of mind maintained in circumstances the most adverse; but still such exceptions are extremely rare,—such circumstances are most adverse."

The subject of typhus fever has run on to such great length, and branched off into so many collateral and subordinate discussions, that I must endeavour, before bringing it to a close, to give you a condensed view of the facts and principles which I have established in reference to it. In doing so, I shall depart, in some degree, from the order which I have observed in the six lectures devoted to this subject.

In the first place, let me remind you of the calculations which I submitted to you in my last lecture. Those calculations rendered it in the highest degree probable, that taking one year with another (the epidemic with the non-epidemic years) the deaths from typhus fever in England and Wales alone do not fall short of 20,000, while the attacks of the disease amount at least to 200,000, entailing (if I am right in believing the disease to admit of prevention) an unnecessary outlay of, at the very least, half a million of money, imposing heavy burdens on the rate-payers, and making large demands on the funds subscribed for charitable purposes. Of these 20,000 deaths and 200,000 attacks of typhus fever, the large majority, as I have intimated, occur in the persons of young adult and middle-aged males and females, of whom a very considerable proportion, are heads of families, and have children dependent upon them for support. Great numbers of widows and orphans are, therefore, created every year by this pestilence, who must become, in very many instances, permanent burdens on public charity. Such is the extensive prevalence, and impoverishing effect of this loathsome and fatal malady. Of the amount of the burdens which fever imposes on the public, I gave you some idea, in my last lecture, when speaking of the expenses of certain of the London Unions in the epidemic year 1838.

The next point which I would insist upon in the history of typhus fever is its proved analogy, if not positive identity, with the gaol fever, which the sanitary reforms first suggested by Howard have banished from our prisons. That the gaol distemper was called into existence, and promoted by the self-same causes which now create and foster typhus fever, there is no room for doubt. The parallel, as I showed you in a former lecture, down to the mischievous agency of the Window-tax, (a) is complete in every point. The houses of

the poor are now indisputably what the gaols were in Howard's time; and it is clear that, so long as they continue as they are, typhus fever will make itself at home in them as gaol-fever formerly did in our prisons, to be banished from them only by the vigorous and persevering use of the same means which have proved effectual in driving out its predecessor.

Next, as to the causes of fever. In the vast majority of cases, there is no doubt that typhus fever spreads from person to person; that it is a contagious or infectious malady. But, occasionally it would seem to originate *de novo*, without the aid of infection, in extreme impurity of the air caused by overcrowding, by filth, or by a combination of the two. Still, as I have just stated, in the great majority of cases typhus fever is to be looked upon as a contagious malady, and overcrowding and filth as its chief promoters. But, for one or other of these, or both in combination, fever could never originate *de novo*; and but for the same causes promoting and sustaining it, contagion would soon lose its power, and fever would become a matter of history.

It is for us to hasten, to the utmost of our ability, the advent of this still remote period, when typhus fever shall no longer disable, impoverish, and destroy our people; when it shall be remembered only as the gaol-distemper now is, associated with the honoured names of those who following, though at a distance, the example of John Howard, shall share the honour so justly conferred on true philanthropists and patriots.

The means by which we may bring about the ultimate destruction of typhus fever are obvious. They suggest themselves as a natural inference from the two leading facts, that the disease spreads by contagion, and that it is promoted by overcrowding and filth.

The measures suggested by the contagious nature of the malady are very obvious. They consist in the prompt separation of the healthy from the sick, the dilution of the contagious matter (whatever that may be) by free ventilation, and the instant removal of all offensive discharges and soiled linen. Offensive odours may be destroyed or rendered more tolerable by moistened chloride of lime or burned brown paper.

The precautions to be observed by medical men and clergymen (in addition to the practice of free ventilation) consist in rendering their visits as short as is consistent with the proper performance of their respective duties, and the avoidance, as far as practicable, of extreme fatigue, prolonged abstinence from food, and all causes which impair the strength and vigour of the constitution. I need scarcely tell you, that Howard's bottle of vinegar, which he looked upon as an antidote to infection, and camphor, which others use with the same intent, have no virtue except in as far as they tend to inspire confidence. After an attack of fever the bedding should be freely exposed to the air, the clothes cleansed, and the walls of the apartment whitewashed.

Such precautions as these may be the means of preventing the spread of fever when once it has made its appearance; but very different measures are necessary if we would hope to root out the contagion of fever altogether. For this purpose wise measures of legislation, vigilant police inspection, and individual self-denial must go hand in hand. Let me first direct your attention to the means by which typhus fever may be prevented from being carried from place to place.

I have shown you that vagrants and tramps are largely employed in carrying fever about from place to place. We must, therefore, endeavour to diminish the number of these people by ceasing to give money or food in streets, highways, or doorways. We are bound to reflect that, however agreeable to ourselves may be that self-indulgence which consists in scattering money and provisions about at random, it is so eminently mischievous that it may some day become a serious question whether the law shall not take cognizance of the misdemeanour, as it already does of the lesser offence of begging. (a) That this abstinence on the part of the individual may be effectual to the destruction of the race of vagrants, the doors of the workhouses must be closed against the same class, or (what amounts to nearly the same thing,) the administration of casual relief

(a) It is worthy of remark, that the Bavarian Government has lately imposed a fine on people who thus encourage beggars. It was in the capital of Bavaria also, that the celebrated Count Rumford adopted the strong measure of arresting all the beggars in one day, and setting them to work in real workhouses, previously prepared for their reception.

(a) This tax has been happily repealed since this lecture was delivered.

must be transferred from the relieving officers to the police,—a measure of marvellous efficacy wherever it has been tried. Supposing the class of vagrants to be rooted out, the low lodging-houses would cease to be inconveniently crowded, as they would have to accommodate only the tramps in search of employment, whose habits of life are greatly superior to those of their fellow-wanderers. In this manner, and by the supervision of lodging-houses, of which I shall speak presently, the conveyance of fever from place to place might be put a stop to.

Next, as to the means of banishing fever from those spots where it permanently takes up its abode, and from which, as from so many centres, it is conveyed to distant places. The spots in question are to be met with in all our towns, and in those parts of them which suffer from the combined mischiefs of filth and overcrowding. The first of these—filth—requires, for its removal, the union of good sewerage with efficient cleansing and an abundant and cheap supply of water.

The second evil—overcrowding—can be done away with only by the union of several remedial measures. The laws of settlement and removal must be abolished,—the “poor-houses,” of which I have spoken, must be set in order,—and the owners of cottage property must be urged to set their faces against the system of sub-letting, and instantly to dismiss such tenants as may be guilty of it. In towns, the low lodging-houses must be put under the surveillance of the police, the number of persons to be accommodated in them being defined, and cleanliness being strictly enforced. In order to remedy the evils entailed by the present reckless mode of carrying on town-improvements, the standing orders of both Houses of Parliament should stipulate for the provision, within a defined distance of the improvements in question, of as many wholesome residences for the poor as the improvements are the means of destroying. In order further to promote the substitution of wholesome for unhealthy dwellings, the powers lately conferred on the parishes of erecting model lodging-houses should be enlarged, so that, on proof afforded that any house, or lane, or court, inhabited by the poorer classes, has, for a term of years, been the means of imposing heavy burdens on the rate-payers, in consequence of excessive sickness and a high mortality, the parish shall proceed summarily to purchase the property in question, to raze the houses to the ground, and to build new ones in their place.

In respect to houses and cottages not so dilapidated as to require to be destroyed and rebuilt, a clergyman may do much to prevent fever and sickness generally, by urging on their proprietors the duty of keeping them in repair, of relaying the floors when they are damp, of repairing the roof when it is not proof against the rain, of building chimneys for rooms which lack that necessary means of ventilation, of making windows to open above and below, and (now that there is no Window-tax, and glass is cheap) of making new windows where they are urgently required.

But even when the clergyman happens to be powerless with the owners of property, he may do much to promote personal cleanliness and systematic precaution against disease among the poor themselves. In towns where baths and washhouses exist, he may persuade the poor to avail themselves of the opportunities offered them, by the frequent use of the bath, by the habitual washing of their clothes away from their own crowded rooms, and, by the employment of whitewash, to sweeten and refresh their apartments; and, when places of decent deposit for the dead shall have been provided, he may combat the prejudices which would interfere with the prompt removal of the corpse.

These are the measures which occur to me as necessary to be taken, if we would hope to see the typhus fever banished from among us, as gaol fever was banished by analogous measures suggested by our great philanthropist, John Howard. Of every one of these measures it may be truly said, “that it is hard to determine whether its physical or moral consequences would be most important. There is not one of them which does not commend itself to the attention of the clergy,—not one of them that a clergyman might not find some means of advocating or promoting, without stepping beyond those limits of prudence and moderation which his calling prescribes to him.

From the subject of typhus fever, I shall pass in my next lecture to that of cholera, which will give me occasion to enforce by new illustrations some of the principles which I have been endeavouring to establish in this lecture.

ORIGINAL COMMUNICATIONS.

ON THE FALLACIES OF THE MODERN PRACTICE OF MEDICINE, MORE ESPECIALLY IN RELATION TO HOMŒOPATHY, AND IN ESTIMATING THE RESULTS OF PRACTICE BY IMPERFECT STATISTICAL INQUIRY.

By C. H. F. ROUTH, M.D.,

Physician to the St. Pancras Royal General Dispensary.

I have thought that a consideration of some of the leading fallacies in the modern practice of Medicine, and on the present mode of statistical inquiry, may not prove altogether uninteresting to the Profession. That not a few of these fallacies have crept in, to the injury of legitimate medicine, I imagine all will admit. That, however, which is most extended in its influence, and the leading delusion of the day, is homœopathy. It is, therefore, chiefly to this doctrine that I wish to direct attention; for, while I cannot dispute that most practitioners in medicine are more or less acquainted with the shallow foundations upon which this system especially rests, yet it has lately made, and continues to make, such progress in this country, and the metropolis in particular, and is daily extending its influence, even among the most learned, and those whose high position in society gives them no little moral power over the opinions of the multitude, that our Profession is, I think, bound to make it the subject of inquiry and investigation. But in doing so, we must consider it fairly. A college of physicians and surgeons may, and justly do, condemn it; but their influence is confined to the moral power of the executive over the body of its own members or fellows: the individual members of society at large have no part in this condemnation, and, however they may look up with respect to the declaration of learned persons, as embodying an opinion of some weight, in this inquiring age something more is needed than a mere declaration. On the other hand, the violent opposition of others to homœopathy can do no good. Abuse, intolerance, the infuriated excommunications of the champions of legitimate medicine, cannot be accepted by the world as a fair and philosophical inquiry. These can only call forth new defenders, and even those who perhaps may have hastily adopted its doctrines, and who, if logically and temperately admonished, might have been convinced of error, will not be compelled to recant. All doctrines are founded on truth, or what is supposed to be truth. The way to disprove a doctrine is, therefore, not by assailing it as ridiculous or absurd. A conviction of error can only follow when the foundations upon which it is based are shown to be untenable; and it is our own imprudent demeanour, I think, which has given homœopaths so much advantage over ourselves, and through which they have supplanted us in many high and lucrative positions.

Examples of such unphilosophical demeanour in refusing fair inquiry, or prosecuting an *ex parte* investigation, are not wanting; and, from the time of Galileo down to the present day, are triumphantly appealed to by those who seek to subvert legitimate medicine. Thus, the homœopath has reason on his side, when he appeals to the history of the French Academy, as exemplifying intolerance and unfairness in inquiry. He tells us, that, in 1642, this Assembly declared, that the blood did not circulate in the body; in 1672, that it was impossible. In 1774, after having opposed inoculation for fifty years, it admitted its advantages, the moment three Princes of the Royal blood had been inoculated contrary to their permission. In 1609, it expelled one of its members for making use of, and curing his patients of ague by quinine. Even among ourselves, the great Harvey was persecuted for his discovery. The time was, when the surgeon who had dared to bring together the edges of a cut surface to unite by the first intention, or who had ventured to dress wounds by water-dressings, in lieu of plugging by large pieces of lint and cerate, had met with the universal reprobation of the Profession, and was accused of the most murderous quackery. Even in later years, with what opprobrious names was the

discovery of the great Jenner assailed! Nay, but very recently, with what violence was the introduction of the stethoscope opposed! and, in the present year, how have not the speculum operators been insulted by the ascription of motives, not certainly the most honourable; and in our political relations, we have seen a Board of Health, directed by some of the ablest and most distinguished in our Profession and senate, brought in collision with the College of Physicians, and an opinion set forth, provoking the opposition of the most enlightened professors, here and abroad, that plague is not contagious.

This is certainly not the correct way in which to promulgate opinions. A fair, unbiassed, and philosophical inquiry should, in this as in all political matters, precede this promulgation; and then the conclusions arrived at might assume a more commendable form. I believe globulism to be false; but this opinion is the result of a fair inquiry. I shall, therefore, disdain abuse; and endeavour to show my opinion to be founded on logical ground.

Homœopathy may be considered best in three lights. 1st. In regard to the principle or law of nature, admitted among ourselves as occasionally in action, but by homœopaths stated to be of universal application,—“*Similia similibus curantur*,” both in large and infinitesimal doses. 2ndly. In regard to the dietetic regimen enforced, apart from the globules employed. 3rdly. In regard to the experience of homœopathic as compared with allopathic practice.

The first two of these only will be considered in the present inquiry.

On the law, “*similia similibus curantur*,” I do not wish to say much; yet it is essential I should not altogether omit its consideration. Hahnemann, the founder of this system, it is said, experimented upon himself and others with certain medicines; and having found that, after repeated trials, he succeeded, (or rather believed that he succeeded,) in about forty cases, to produce in the healthy body the symptoms of diseases which the same medicines were enabled to cure, he at once concluded, that all diseases were capable of being mimicked, as it were, in health, by particular medicines, which diseases, when otherwise occurring, were best opposed or cured by the same medicines.

I stop here to advert to two logical fallacies in this conclusion:—

1st. It does not follow, that because, out of some hundreds of experiments, (the results of which may have, in a great number, been simply negative,) although he succeeded in fifty or more cases in mimicking certain diseases, that there is for every disease a specific remedy. We might, from a few experiments, be led to suspect so, but no more. This source of fallacy, and through disregard of which a false system of medicine, purely empirical in kind, has been created, I am sorry to trace among all homœopathic writers. This tendency to *universalise*, or to deduce from a few facts a doctrine which it is then assumed universally applies, cannot be too strongly reprehended. *Idiosyncrasy* is seldom regarded. For example: it is notorious that, in some instances, particular individuals are peculiarly influenced by ipecacuanha, so that a grain, or much less, will, if sprinkled through the air, bring about the most violent symptoms of catarrh; and yet it is not logical to conclude that, in *all* cases, an infinitesimal dose of ipecacuanha will cure, or greatly meliorate the symptoms of, influenza.

2nd. These experiments of Hahnemann were made with *appreciable*, not *infinitesimal* doses. Nor is it logical to conclude, that, because a large (or even a small allopathic) dose has mimicked a disease in health, therefore, when that disease occurs, an infinitesimal dose will cure. Assuming the principle to be correct, we can understand that a *similar allopathic dose might* cure, but not an *infinitesimal* dose. Indeed, so convinced are many homœopaths of the illogical nature of this conclusion, that they have altogether discarded infinitesimal doses as forming any part of the system they practise.

Allopaths, admitting the occasional truth of this doctrine, “*Similia similibus curantur*,” have given the larger dose. The experiments of Majendie have shown, that tartar emetic, in doses of six to eight grains, will produce, amongst other lesions, pneumonia, if not rejected by vomiting. Every day's experience proves the efficacy of large doses of tartar emetic in curing pneumonia and other affections of the lungs. Arsenious acid, long continued, will produce a cutaneous eruption. The advantage of arsenic in scaly diseases is, on the other hand, well recognised. Here, then, are instances

of the occasional truth of the doctrine of homœopaths. But numerous instances could be mentioned of the contrary. Gallic acid and turpentine exert a specific influence in cases of hæmorrhage. Can these medicines produce hæmorrhage! Turpentine and the oil of male fern are specifics in many cases of tape-worm. Would a healthy person, taking turpentine continually, have tape-worm? The case of goitre is another familiar example. Iodine will cure this lesion, but will not produce it; and although, through excess of homœopathic zeal, some have maintained that the absorption of such a tumour, in a patient taking iodine, is always preceded by a slight feeling of erethism and swelling on the goitre, others have, again, denied it; and at most, even if correct, it would only prove, that this occurs in a diseased subject, and not in health.

But there are examples of a different kind, which, if correct, must compel the homœopath to have recourse only to infinitesimal doses, or renounce his system altogether. It is possible that a medicine which has been found to produce a certain set of symptoms in health, such as quinine, which (if we may believe homœopaths, will mimic in health all the symptoms of ague,) should cure the disease when it occurs. But then I am compelled to assume that it only does so by some specific effect of which the symptoms are by no means a criterion. In some cases of otitis, involving the dura mater, we have shivering followed by hot fits, exactly resembling the paroxysms of ague, of a quotidian, sometimes tertian, or other type; and what is still more singular is, that they seem to be checked for the time by the exhibition of bark. In these cases we have the exact application of the principle, “*similia similibus curantur*,” and yet death would inevitably follow the practice.

The experience of the homœopath would thus be opposed to his theory. The least contradiction necessarily involves the employment only of small doses, and thus infinitesimal doses come to be essential to homœopathy, just in the same degree that allopathic doses are part and parcel of legitimate medicine.

What, then, is an infinitesimal dose? And here we are quite at a loss. We hear of hundredths, ten thousandth, millionth, billionth, and so on, up to a decillionth; and it is asserted even this last dilution has produced marked and sensible effects on the animal economy, and cured disease. This piece of affectation, for I can call it nothing else, has been sufficiently exposed in Dr. Forbes' able article on Allopathy, Homœopathy, and young Physic; and by Dr. Alexander Wood. I may, however, be allowed to offer two other illustrations.

What is a decillionth of a grain? We really have no idea of the infinitesimal smallness of this quantity. If all the waters (a) of the sea were put together in one locality, the quantity of water necessary to dilute this mass so that each dose might contain the decillionth of a grain, would be expressed by 1,000,000,000,000,000,000,000,000,032,603; indeed it would require a much larger dilution to enable us to make the quantity to be introduced more intelligible. The waters of the whole world would require the addition only of 1.32603 grains to make the dilution such that each drop should contain but the quadrillionth of a grain; the addition of twenty-one gallons so that each drop should contain one trillionth of a grain. Again, if a decillion globules (b) were placed side by side, it would take 1285 sextillions of centuries before a ray of light, travelling at the rate of 200,000 miles a second, had reached the other end. In the case of a quadrillion it would occupy 1285 centuries only; a trillion about 36 days.

(a) Let v be the volume of water in the sea = 577,892,000 cubic miles.—5280 inches make a mile—12 inches 1 foot. \therefore there are $12^3 \cdot 5280^3 \times v$ cubic feet in the sea. 277 cubic inches = 1 gallon. \therefore there are $\frac{12^3 \times 5280^3 \times v}{277}$ gallons in the sea.—Reducing to drops we have

\therefore there are $\frac{12^3 \times 5280^3 \times v}{277} \times 4 \times 2 \times 16 \times 480$ drops in the sea
 $= 32603 \times 10^{29}$. This is to be divided by 10^{30} to give the number of drops to be put in the sea, so that each drop shall contain a decillionth of a grain = $\frac{32603}{10^{30}}$ = 32603 with 29 ciphers, and the decimal point before it. A quadrillionth would require 1.32603 drops; a trillionth, 21 gallons.

(b) Diameter of a globule $\frac{1}{10}$ th of an inch \therefore decillion of globules = 5×10^{29} inches. The velocity of light is 200,000 miles per second \therefore time in seconds $\frac{5 \times 10^{29}}{200,000 \times 5280 \times 12} = \frac{5 \times 10^{29}}{2 \cdot 10^6 \cdot 5280 \cdot 10 \cdot 12} \times \frac{60 \times 60 \times 24 \times 365 \times 100}{1}$
 $= 12854 \times 10^{28} = i. e. 1285$ sextillions of centimes. The numbers are calculated conceiving 1 decillion as expressed by 1 followed by 60 ciphers.

Who, with such calculations before him, can believe in the power of infinitesimal doses!

Proceeding further we are met by another difficulty. I have already alluded to the refusal of some homœopaths to give small doses, as useless. I have, however, also shown that this cannot be done without the renunciation of the law "*similia similibus curantur*" as universal, and the necessity of admitting exceptions to it. But even amongst homœopaths we find, that in Vienna, with Dr. Fleischmann at their head, a practice is in vogue which is anything but infinitesimal. They seldom adopt a higher dilution than the third or fourth, and Dr. Fleischmann in particular is in the habit of giving single drop doses of the mother tincture. Even the London practice is much more heroic than in Germany. Dr. Holland discards small doses as inert; and already, in the *Homœopathic Times*, we find a paper war has begun between some of the medical officers of the Hahnemann Hospital and the editors.^(a) I quote the very words. The Editor, in speaking of the large-sized globules used by some, remarks: "It cannot have escaped Dr. D —'s knowledge, that some practitioners who practise homœopathy so far as they can secretly, in cases where their patients like active treatment, make use of all shifts to conceal the fact that they are giving homœopathic remedies. . . . It is obvious that pills or pilules greatly facilitate this mode of doing business." The natural conclusion which must be made on becoming cognizant of such a mode of practice among homœopaths is simply this,—that if homœopaths are dishonest enough to give large doses of medicines, or homœopathic medicines in an allopathic form, they are equally capable of giving allopathic remedies in a homœopathic form, a circumstance of itself sufficient to make us distrust the pretended results of their experiments.

Now, a homœopathic pilule is in other words a very large globule, indeed, with no great difficulty, it may assume the size of a genuine allopathic pill. Even the ordinary English globule is a giant as compared with the German or Hahnemannian globules. "Hahnemann had said," I quote again from the *Homœopathic Times*, "that 200 globules of the size of poppy seeds were equal to one grain." We are, however, informed by Mr. Headland, the homœopathic chemist, that 75 globules such as are used in England are equal to one drop of the mother tincture. Supposing the average size of a man in Germany to be 5 feet seven inches, this difference would require, *cæteris paribus*, a man to be 14 feet 10 here, a difference of 265 per cent. in the size! One large pilule is equal to 1 grain, and when medicated contains about the fourth part of a drop of the tincture. When these circumstances are duly weighed, we can easily see how the facts brought forward by different homœopaths cannot be instanced as conclusive evidence of the same homœopathic treatment, in many cases of homœopathic treatment at all.

Again, we have another objection to offer, and it is in relation to the manufacture of these globules or pilules. The Editor of the *Homœopathic Times* informs us, that they are not made of sugar of milk exclusively, but that they may be made of sugar, sugar of milk, or starch, according to the taste of the chemist, and the preparation to be made. Indeed, according to the editor, it matters not what the vehicle is, provided it be pure and non-medicinal. Mr. Headland used, we are told, to make all his globules of sugar of milk, and incurred considerable expense in their preparation. Now that he finds that it is not necessary to do so, he is no longer so particular. The objection to sugar of milk, however, remarks the Editor, is, that in the process of its manufacture it is adulterated with divers medicinal substances, (*Ibid.*) Dr. Dudgeon, however, in the same journal, remarks, that globules of all kinds are not made of sugar of milk, but of sugar.

In either case, no dependence, by reason of the very impurities, can be placed in the results obtained. In the case of common sugar, we have the Editor's concurrence. But sugar of milk, or lactine, is obtained by evaporating the whey of milk to crystallization, purifying by animal charcoal, and recrystallization. Supposing, however, the whey pure in the first instance, who will pretend to say it does not contain an infinitesimal quantity of carbon; and it is clear this portion of attenuated carbon must modify the action of the future globule made out of it. And in the case of a *camphor globule*, carbon being the homœopathic antidote, the globule must needs be inert. The same objection applies to the

impurities of water. For it must follow, that if the infinitesimal quantities contained in globules are not detectable by the most delicate tests, and yet are powerful in their operation on the body, *à fortiori* the remark applies to the impurities of water. Add to these difficulties, it is admitted the globules may spoil by keeping, and that in other cases their influence may not be detected for thirty or forty days on the economy. The assertion made by Dr. Glover, in a late pamphlet on homœopathy, (if, even considering the distinguished position that physician holds in this country, his statement could be disputed,) carries upon its face the stamp of truth, namely, that a London homœopathic chemist was in the habit of supplying his customers with simple sugar of milk, but labelling them by the medical names usually adopted by homœopaths, and that the cures effected by these inert preparations were equally satisfactory with those prepared by the other and properly prepared homœopathic drugs.

With a doctrine based upon such difficulties, what dependence can be placed on the results? In allopathy we are able to trace the good or deleterious influence of drugs, which homœopaths assert to be inadequately prepared. Here we are acquainted with cognizable and sensible agents. The homœopaths, on the contrary, have no such index to guide them. Their remedies are too subtle for appreciation, even by the most erudite. They depend exclusively on the good faith of those who serve them; and all their experiments are open to fallacy, unless we feel disposed to grant them, what we cannot do, perfection.

The force of this objection has been felt, and attempts have been made to evade it. This very undiscoverable subtlety in their effects, after attenuation and infinitesimal division, so as to evade the most delicate tests, chemical, mechanical, or otherwise, has been explained by pretended analogous comparisons; for instance, malaria or other contagious miasmata, the influence of powerful odorific substances, vaccination and inoculation, the influence of mineral and other waters containing infinitesimal quantities of medicinal substances. I shall speak of these *seriatim*.

First, then, in regard to the influence of malaria, odoriferous substances, and miasmata, we have no right to argue *à priori*, that, because certain medicines taken by inhalation, and thereby at once absorbed in the blood, or acting on the mucous surface, produce certain effects, that, therefore, the same result will follow the employment of such substances taken as ingesta, or submitted to the influence of digestion. Odoriferous substances may produce headache, intoxication, and other unpleasant symptoms; but, dissolved in water, this effect would probably not result. Musk is a familiar instance. Some persons cannot bear the smell of it; and yet will take one, two, three, and even more grains, with advantage, and certainly impunity. Fifteen drops of the tincture of sesquichloride of iron will produce but little effect by the mouth. Inhaled, it will produce sickness, faintness, and great prostration. The inhalation of carbonic acid will kill. The ingestion of it will produce beneficial warmth in the stomach, and allay sickness. Two drachms, or even an ounce of ether, may be taken by the mouth, and an effect scarcely appreciable will result. Chloroform is in a similar predicament; *ziii.* have been taken by the mouth, with no appreciable effect; and yet, according to Dr. Snow, seven drops inhaled, if undiluted with atmospheric air, will kill. High game, or, in other words, putrid flesh, may be taken by the mouth, and yet not only do harm, but positively nourish. The inhalation, however, of putrid odours or miasmata, it is well known, will often produce most distressing symptoms of nausea, diarrhœa, or even in some rare cases death. The black vomit of patients affected with malignant fever in Africa has been swallowed with impunity; but the miasma from patients affected with this disorder is highly poisonous; and so on. The result obtained by some medicines, it is true, may probably be the same, whether taken by inhalation or ingestion; only in the former, we may, as a rule, expect it will be more marked; but commonly it not only differs in degree, but in kind; and sometimes ingestion of poisonous miasmata may be quite inert. There is no analogy, therefore, in the comparison made by homœopaths.

2nd. In reference to the examples of vaccination and inoculation.

It is commonly adduced in support of the action of homœopathic remedies, that these two operations are instances: 1st. When very small quantities of medicine may produce

(a) No. for February 22, 1851, p. 413.

very powerful effects. 2nd. That precisely as when inoculation or vaccination are performed, the patient is not only prevented by the artificial disease from having in most cases small-pox, but that, if in a case of small-pox we vaccinate, the artificial disease supersedes as it were the natural disorder, modifies its action, and makes it milder in character: so upon the same principle, medicines which in health will generate the disease, or one analogous to it, will, when taken internally by the mouth, cure the disease.

The first objection here, however, is, that the argument, if applicable at all, is true only for "isopathy," and not homœopathy—a most important difference; one, indeed, which would, if true, greatly facilitate the practice of our Profession. Discharges of cancerous and gangrenous sores, the injection of diseased portions or bodies, would at once be the most accessible and certain remedies. Unfortunately, however, the result clearly proves, that there is no truth in the theory: and even homœopaths reject isopathy. The inoculations of such poisons not only do not cure or prevent the occurrence of disease, but aggravate or generate it, where it remains permanently till overcome by other remedies.

But, 2ndly. It is not true, that medicines inoculated or injected in the blood always produce the same symptoms as when taken internally by the mouth. The injection of oils, or some other nourishing liquids, as milk, will often kill—the arrestation of the larger globules in the capillaries mechanically giving rise to asphyxia and death. Other agents, such as alcohol, acids, alkalies, will kill, in like manner, by their chemical influence, coagulating and disorganising the blood, even if taken in that degree of dilution which will give rise to little or no effect when taken by the mouth. The simple inoculation of many oils, milk, etc., will produce no effect. The inoculation of rust, soda, and many comparatively innocuous substances, if we look to the quantity, may give rise to a poisoned wound, and so on. The results of a dissection-wound are well known. Indeed, in regard to those more powerful poisons which, so inoculated, may act dynamically rather than chemically or mechanically, the rule is as follows: that medicines which, inoculated in the body, produce certain effects, will produce a like effect when given by the mouth only in those cases where the dose is considerably increased. The reverse, however, is the plan adopted by homœopaths; and, besides, we should bear in mind, that, occasionally, a totally opposite effect may result, as I have said. High game may nourish, taken as food; inoculation of putrid food will probably kill.

3rdly. The preventive effect of inoculation or vaccination is confined only to small-pox. Measles may be produced in like manner; but then the disease is not rendered milder. Erysipelas, porrigo, scabies, and many other diseases, may be produced by inoculation; the disease is neither prevented, arrested, or rendered milder, if present. In a case of secondary syphilis, the inoculation of syphilitic matter would not cure the disease, but make it more malignant, and so on. It is not fair, therefore, to generalise or deduce a universal conclusion from an exceptional fact.

Lastly. The alleged infinitesimal quantities of substances in mineral waters, and which even allopaths admit to possess medicinal qualities, is no argument in favour of homœopathy. This statement is, unfortunately, incorrect, and, indeed, is after all one of the strongest which could be adduced against homœopathy. Infinitesimal doses are precisely those which are not appreciable, or detectable even by the most minute chemical tests. The ingredients in mineral water are so easily the reverse, that the waters may, and have been frequently artificially prepared. Moreover, the waters are not taken in small quantities. The word, "infinitesimal," cannot thus fairly be applied, especially if we do not confine our attention to one ingredient only, but to all. The proportion of solid matter contained in mineral waters may vary from 1 gr. to several hundred in 16 drs. Taking, again, as an example of a particular ingredient, the carbonate of iron, the quantity varies from 5-100ths to 44-100ths; but even here we have a quantity fully and completely appreciable to the senses.

In like manner, the *régime* lately recommended as the preventive of goitre, cannot be fairly adduced as favourable to the infinitesimal doctrine. The French Commission have shown, that the cause of goitre is the undue proportion of magnesian salts in the food taken or water drunk. If iodine, however, be taken at the same time, it acts as a pre-

servative. The proportion of iodide of potassium recommended to be taken in the salt in daily use, is given as 1 to 5 per cent. The quantity, therefore, taken daily by each person is certainly small, and would average from $\frac{1}{2}$ to 1 grain; but then it is to be appreciated, and much too large to be called infinitesimal.

On the other hand, before dismissing this part of my subject, I feel bound to admit, that frequently small doses, and especially in large dilution, will oftentimes act very satisfactorily, and equally well with large doses. I have seen this repeatedly with quinine. The activity of some ingredients is also very great, even in large dilution. Elatin, in doses of 1-96th of a grain, is a powerful purgative. The same would be true of prussic acid and aconitine: small doses would act powerfully. The effect of dilution in increasing solubility, is universally admitted; indeed, medicines frequently act in proportion to their solubility, and so much so, that it is the common practice to select the most soluble preparations, and to add to a medicine those other ingredients the combination with which increases the solubility,—for instance, bichloride of mercury and the hydrochlorate of ammonia. But here, as in all other instances, we see the tendency of homœopaths to generalise from a few examples. This principle is not universal. There are proofs that some medicines act independently of absorption, and, as such, do not depend upon their solubility. The instantaneous action of some medicines, and the effect of mechanical injury or mental emotions, afford ample evidence of this. Calomel is an active but very insoluble agent. Carbon, in like manner. If one exception be shown, however, it is fatal to the infinitesimal doctrine as universal.

19, Dorset-square.

TWO CASES OF PARTIAL SEPARATION OF THE PLACENTA PRECEDING LABOUR.

BY THOMAS HAWKES TANNER, M.D.,

Licentiate of the Royal College of Physicians; Physician to the Hospital for Women, etc.

THERE are few cases, in the practice of midwifery, more appalling to the accoucheur, or attended with greater danger to the patient, than those accompanied with flooding; and of these, none are more deserving of attention than those instances of uterine hæmorrhage dependent on separation of the placenta.

Of the truth of this statement all practitioners are agreed, when the hæmorrhage is *unavoidable*,—that is to say, when it occurs in placenta prævia from the dilatation of the os uteri; but it hardly appears that an equal degree of attention has been paid to that form in which it is said to be *accidental*, arising from separation of the placenta at the body or fundus of the uterus. It is to these cases I would beg to direct attention by this report, first remarking, that the terms "unavoidable" and "accidental," as here used in conformity to custom, should be abolished, it being clear, that the hæmorrhage is as unavoidable in one case as in the other. It matters not to what part of the uterus the placenta be attached; if its connexion with this organ be partially destroyed, flooding will take place.

The cases of hæmorrhage dependent on partial separation of the placenta, when attached to the body or fundus uteri, are, perhaps, the more worthy of notice, since the symptoms denoting such an accident are often at first obscure, consisting only of rapidly increasing debility and faintness; so that, unless the physician is upon his guard, the most serious mischief may be going on without his being aware of it, and, as a consequence, the most valuable time for action pass away. This undecided nature of the symptoms is accounted for by the circumstance, that the blood discharged from the uterine vessels is retained in the uterus between its walls and the fetal membranes, and only escapes into the vagina on becoming excessive. Not, however, that this is always the case, as in one of the examples to be mentioned, where the diagnosis was clear from the time the patient was seen; but I wish to impress the fact, that the loss may go on to a sufficient extent to cause death, without any of the blood escaping externally, the vital fluid being retained, either in the way just mentioned, or by breaking down the bag of the membranes and mingling with the liquor amnii, the latter

escaping very slowly if the rupture of the membranes takes place at their upper part. It is on this account—for the reason that the hæmorrhage is more insidious, is less easily and certainly detected—that many of these cases are more to be feared, and are really attended with greater danger, than instances of placenta prævia.

The women in whom this separation of the placenta takes place, are mostly of a relaxed habit of body, and have usually had large families; in the cases to be mentioned, one was the mother of ten, the other of nine children. The first patient also was suffering from fatty degeneration of the kidney, while the health of the second was broken down from irregular living. In all or most of the instances there is some exciting cause, which may be easily traced, such as a fright, or fall, or, in short, any sudden excitement. It usually occurs when pregnancy has nearly advanced to the full term, as at some period between the eighth and ninth month.

The most important point in the treatment of these cases is to lose no time in effecting delivery, as I believe the woman is in a state of danger until this takes place. The first thing, therefore, to be done is to rupture the membranes, by which means the capacity of the uterus will of course be lessened, and the supply of blood to it diminished. In order, then, to hasten the progress of the labour, ergot of rye should be administered, and uterine contractions encouraged by the alternate application of heat and cold, by frictions over the abdomen, and by stretching the os uteri. If the loss of blood continues, the os uteri will in all probability be easily dilatable, and turning should be had recourse to, or, if the head is sufficiently advanced through the pelvis, the forceps should be applied. After the birth of the child, the placenta should be removed, the uterus grasped through the abdominal parietes to prevent its filling with blood, and a bandage tightly applied. In all cases it will be necessary to administer stimulants, sometimes very copiously; none are superior or equal to brandy. Too great caution, also, cannot be exercised in preventing the patient from changing her position for some hours after delivery; but dry sheets should be placed under her, and she should be made as warm and comfortable as circumstances will permit.

Having made these few observations, let me record the two following cases as examples.

January 5th, 1850.—Mrs. Q., of Cursitor-street, Chancery-lane, the mother of ten children, rather more than eight months advanced in pregnancy. Is in a very bad state of health, as she is suffering from fatty degeneration of the kidney, and for the last few days has been much harassed, and has suffered much anxiety owing to the illness of her youngest child, who is suffering from laryngismus stridulus. This morning, at seven o'clock, she was suddenly roused from sleep by the cries of her sick child, and, after getting out of bed, experienced a feeling of giddiness and faintness, so that she would have fallen had not assistance been near. Upon my arrival, about an hour afterwards, I found her pale and exhausted; countenance very anxious; extremities cold; pulse quick and feeble. On proceeding to make a vaginal examination, I found a large clot of blood in the bed, and blood still flowing from the vagina. The os uteri was soft and dilatable, about the size of a half-a-crown piece; no part of the placenta could be felt, the membranes were entire, and the head presented. Seeing that no time was to be lost, I ruptured the membranes, administered a dose of ergot, and some brandy, and dilated the os uteri. The hæmorrhage at once ceased, the patient rallied, and strong pains coming on, a male child was born, apparently dead, in a couple of hours, quickly followed by the placenta. By the assiduous employment of artificial respiration, with the alternate application of the warm and cold bath, the infant was restored to life; he only lived, however, a few hours. The mother remained much exhausted for some hours after the labour; but, under the use of stimulants, good nourishment, etc., soon regained her former condition.

May 29, 1851.—Mrs. P., aged 32. Ninth pregnancy; about eight months and a half advanced. This afternoon, while quarrelling with her husband, was forcibly thrown down by him, and shortly afterwards was seized with a violent attack of sickness, vomiting a quantity of dark-coloured matter resembling coffee-grounds. At the same time she complained of great pain about the umbilical region, became very faint, and stated she was dying. On my arrival shortly afterwards I found her much exhausted, still suffering from sickness, cold, and with a very feeble pulse. Some

brandy and water was administered, and I proceeded to make a vaginal examination, though not without some difficulty, as she protested that it was unnecessary, as her labour was not coming on. I found the os uteri about the size of a shilling, dilatable; no part of the placenta could be felt. There were no labour pains, but while making the examination, slight uterine contraction came on, and forced down what I at first imagined to be the placenta, but which I soon found was a clot of blood. This was an important guide as to the treatment. By irritating the os uteri I again produced a pain, slight but sufficient to render the membranes tense, and allow of my rupturing them with my finger nail, when a large quantity of liquor amnii came away, of a deep red colour. Some brandy was again administered, followed by ergot of rye. At the same time I endeavoured to excite uterine action by the alternate application of heat and cold to the abdominal parietes, and with the desired effect.

The patient rallied, and in rather more than three hours labour had so far advanced that the os uteri was fully dilated, and the head low down in the pelvis, when the pains suddenly ceased, and flooding again set in, which became alarming, not so much from the quantity of blood discharged from the uterus, as from the already depressed condition of the patient. I had, fortunately, previously sent for my instruments, and at once completed the labour with the short forceps, bringing into the world a still-born infant, with the umbilical cord twisted round the neck. Immediately after the birth of the child a large clot was expelled from the uterus. The placenta was easily removed, and the uterus grasped externally, when it was felt to contract. The patient was prostrated to such an alarming degree that she was insensible, and no pulse could be felt at the wrist. Brandy was at first cautiously administered and afterwards freely, and a binder applied tightly over the uterus, which was also firmly pressed upon by a large pincushion applied under the bandage. All hæmorrhage ceased, but I did not feel justified in leaving the patient during the night, the state of exhaustion being so severe, that, in spite of large quantities of brandy, I feared she would have expired. Transfusion, of course, suggested itself to me; but I thought it better to trust to the stimulants alone, more especially as I felt that the least movement of the patient might be fatal to her.

Attempts at resuscitating the child by the warm bath and other means were useless. This could only be expected, however, as I was unable to resort to these measures properly for some time after its birth, being unable to leave the mother. In the mean time, however, the nurse used the warm bath and other means.

This patient slowly rallied, and was better on the following day; but in the evening complained of severe pain over the uterus, which was relieved by a full dose of the pulv. ipecac. co. Under the use of a nourishing diet and tonics she soon began to mend; but it was not until the end of June that she was enabled to go to the sea-side and regain her former strength.

I trust that the report of these two cases will not be thought altogether useless. They both caused me some anxiety, for which I was amply repaid by their recovery; and, in since thinking over them, I can but conclude that, should similar instances occur to me, I could not do otherwise than pursue a similar line of practice.

10, Charlotte-street, Bedford-square.

STUDENT LIFE IN GERMANY.

By H. J. WHITLING, Esq.

INTERESTING remains of the Middle Ages greet the eye of the traveller all over Germany; but, among the most striking vestiges of those picturesque times, stands prominently forth the German student. Throughout the whole of Europe, no other example can be found, in which not only the costume, and much of the manner, but also the bold and vigorous spirit of that period, are so well preserved as among this class, who live, during three or four years, a distinct and separate life amid the millions of other human beings by which they are surrounded. All who would witness with their own eyes this living episode, will, however, find it desirable to do so without delay, since the newly awakened spirit of the German world, which will scarcely further toler-

ate aught like an exclusive position, is already beginning to produce its effects even in the German Universities; and it is probable that in a few years the German student will no more be so remarkably distinguished from other young men of education, either by his exterior appearance, mode of life, or general bearing.

The sons of the better classes in this country, who for the most part receive their education at a *Gymnasium* (public grammar-school), appear to entertain, in regard to their next step in life, but one of two alternatives; that is, either to become officers, in which case they generally enter a cadet corps; or to graduate at one of the Universities. As to the nature of the studies they are to pursue, in order to qualify them for their future career, whether they are destined for clergymen, physicians, or jurists, it never enters their heads to concern themselves. Their only aim and object is to get to the University, and for four of the freest and happiest years of their lives to play the student. For, whatever may be the faculty, the life and manners are the same. The theologian has his moustaches as well as the jurist, owns as large a dog, lingers as long over the beer can, trolls as good a song, is as fond of a broil, and handles his weapons with equal readiness and dexterity. A boy who is confined to the severe study of the *gymnasium* from the 8th till the 18th year, during which time he dares not be seen smoking a cigar, nor visit, without the master's permission, any public place of amusement, has both opportunity and reason enough to admire and long for the happy time when he can also enter upon the free and easy life of the student, whom, between terms, he sees returning home as a sort of knight-errant. How he admires the distinguishing dress that he wears, the ornamented coloured cap, the rakish-looking coat, the amply-flowing trousers, the gold embroidered ribbon, with the insignia of the *kneip* or order to which he belongs, and the lengthy spurs which go clanking at his heels as he walks along; though, peradventure, the wearer, throughout the whole course of his mortal life, never crossed a horse! Thus clad and adorned, the student lounges through the streets, and wherever he cometh people appear to show a certain degree of respect, or, at all events, generally avoid too close a proximity; for many of these youths possess rather strange notions of honour and its attributes, are often gratuitously impertinent, vastly enjoy picking a quarrel, and, even though totally against their nature, must show themselves to the last degree daring, rash, and intemperate, since temerity and recklessness are esteemed by them among the highest University honours; and a student who displays a want of either could no longer exist among his fellows.

Amidst the chivalric and attractive halo they cast around the student, it is not to be wondered at if a great impression be made upon the mind of every *gymnasium* boy. He now looks forward with the most restless impatience to the time of his second birth, when, having passed his examination, and obtained the *absolutorium*, (an awful document in the eyes of a German scholar, since upon it depends much of his future career,) he shall emerge from his present drudgery, into that higher class of beings, who, from their imaginary Olympus, look down in pity or contempt upon the common children of the earth.

At length the happy day arrives. With more money in his pocket than he ever had before, accompanied by the wishes of his parents for his good conduct, diligence, and health, the young man proceeds, oftentimes on foot, to the University, preparing, by the way, his thoughts and feelings for his new position. He is now a self-subsisting, independent man; upon his own hands, committed to his own care, and no longer subject to control beyond what his own principles impose. He is, moreover, going among those whose social intercourse, amusements, ceremonies, and rules of life are totally distinct from any with which he is yet acquainted, but to which he must strictly conform if he would not incur the daily risk of a duel. For this reason, he must begin by avoiding many words which he was accustomed to use among his school companions; for those which were heretofore innocent, and if uttered implied nothing, are now to be construed into offensive expressions. This is particularly the case with the word "*dumm*," (stupid), a term common enough at school, but now not only unusual, but dangerous. As soon as this is applied to a student he answers no more; all entertainment, and all further immediate quarrel at once cease. He goes silently away, and speedily deposes a friend to wait upon the

offender, to name the hour when he must stand before his sword. Then again, the word "*honour*," (*ehre*); this, in the feeling of the German student, appears to be too holy an expression to be employed in the more trivial matters of every-day life. As such, its use must be avoided on all but the most serious and important occasions. An assurance once given "*upon his honour*," is believed and held sacred by him, and, although he should have given it in haste and anger, without consideration as without reason, still, to such an extent is the feeling carried, that whatever he has thus promised or threatened he is bound to execute, even though it should cost him his life! If he use such an assertion faithlessly, or neglect to fulfil so solemn a vow, he cannot escape the consequences. Go wherever he may, his punishment follows him. He is scorned and despised in every German University. He is proscribed as infamous. No other student will either speak, walk, or even eat with him, lest he should come under the same condemnation. Indeed, the effects pursue him in after life, for no one who has himself formerly been a student, and is aware of his delinquency, would hold communion with one so outlawed; and the only course for him is, to go into another country where he is comparatively unknown.

It may easily be imagined, that a protestation of the kind alluded to sometimes escapes in moments of excitement or thoughtlessness, which cool reflection would gladly disclaim or renounce. It is in vain; and instances are numerous wherein this blind and perverted feeling has led to results of the most fatal and terrible description. It is not our object to distress the reader by narrating them. Enough that they have been. We will, however, give one anecdote, in which there was no loss of human life, though the difficulty and danger of fulfilling the solemn declaration, that had been somewhat hastily and indiscreetly made, will suffice to show the moral influence of this doctrine upon the mind and conduct of a student.

A friend of ours, then at the University, was sitting in a *kneip* (club) together with many other students, at one of their usual evening entertainments—of which more hereafter. Presently, one of them remarked, that his cloak had fallen from the rail upon which he had hung it, and that a large dog, known to be a very morose and savage animal, had presumed to make himself therewith a very comfortable bed. He went towards it, and tried to drag away his cloak; but the dog resenting any such interference with his enjoyment, sprang up, flew at him in the most ferocious manner, and tore his hand dreadfully. "*Damned beast*," cried the student, "*by my honour you shall not live to see to-morrow's sun*." The proprietor, who was very much attached to the animal, which, besides being faithful to him, was the most celebrated warrior of all the dogs in the town, understood too well the import of the threat, not to be in some anxiety for the life of his favourite; and therefore, while the other was having his wound washed and dressed, he quietly betook himself home, and calling the dog into his sleeping room, secured the door, and went to bed. His companion returning to the *kneip*, and missing both dog and master, silently took the door-key of the house where the former lived from the cloak pocket of another student, a fellow-lodger, and possessing himself likewise of a sharp-pointed knife, which lay on the table, he disappeared. It was now past ten o'clock, and within two hours his honour must be clear, and the dog must die. He quietly unlocked the house door, and proceeded cautiously up stairs to the sleeping apartment of the student. He tried the door. It was fastened. By a sudden and powerful effort, he burst it open. The dog instantly again attacked him with the utmost fury, but was now stabbed through and through by some half dozen well-directed thrusts, and speedily despatched; almost, indeed, before the proprietor could spring out of bed to see what was the matter. The whole house was in an uproar. The landlord and his family came flying up stairs, terrified at the unwonted tumult. The other lodgers also rushing in, the small room was soon filled, and the scene they discovered was much as follows:—There was the one student, as he had thrown himself out of bed, half naked and furious, the other, perfectly satisfied with the success of his enterprize, confronting him calmly; the knife in his hand, the dog weltering in blood at his feet, and his honour safe.

Nothing more could be done that night, since the use of nature's own weapons, the fists, is denied to students, or only employed by those who have declared each other unworthy

of satisfaction by pistol or sword. All honourable quarrels must be settled, by the usual law of arms, in a regular duel. This was one. Therefore the murderer of the dog received, the following day, a challenge from its owner for twelve rounds with the crooked sabre—a somewhat fearful weapon. The challenger, however, got the worst of it, and came off with a terrible scar across his face, which he still carries as a life-long remembrance of his favourite dog.

The same student—the dog-slayer—was afterwards attached to the medical staff of the Bavarian army, then in Greece. While there, a ship arrived from Tunis, petitioning the Government for the services of a physician, as the plague was raging on board, and they were without medical aid. He instantly declared himself ready to attend them; and, accordingly, went in the vessel to Tunis. Arriving there, and the quarantine passed, he was conducted into the presence of the Dey, who received him most graciously, complimented him on his courage, and acknowledged his kindness; offering him, moreover, if he would remain, the appointment of private physician. The young man, pondering a little, began to think it might be no bad career; but happening to look through an open window, near to which he was at the time standing, he observed in the court-yard the executioner beheading, for some trifling offence, one of the Dey's officers. "No," thought he again; "heads don't seem to be very secure in this country;" and, wishing to carry his own back with him, he thanked His Deyship for the proffered honour, and politely declined it. He soon after departed, carrying with him some weighty tokens of the African's regard. Instead of returning immediately to Greece, he went to the South of France, where he relieved himself of the greater part of the burden which the Dey's generosity and gratitude imposed upon him; and at length came back to his regiment, about as wealthy as he set out, surprised at the extreme ease and rapidity with which African gold disappeared in France.

In giving a clear and concise account of student-life, three prominent and striking divisions must be noticed, viz., the studies, the societies, and the duelling. As, however, our object is not to swell a volume, as the manner of some is, we shall be as brief as possible on these points, and close the present section with a few authentic and original anecdotes by way of illustration.

As regards the course of study, there is not much to be said likely to interest the general reader. According to the Government regulations a student is obliged to spend at least four years at a university. In the first year he attends lectures on metaphysics, logic, history, mathematics, Natural philosophy, etc. The other three years are devoted to his professional study, theology, jurisprudence, or medicine, as the case may be. Every professor generally finishes his course in one term. The honorar is fixed by himself, and varies from ten shillings to two pounds. He is bound, however, to give lectures gratis, or nearly so, (these are public and are always the worst,) to poor students, who are admitted thereto on the production of the necessary testimonials before the Commission appointed to investigate them. Besides this very questionable advantage, the needy student frequently obtains a stipend to assist him in his education. This is derived either from the Government or from ancient foundations in his native town. There is also a free table provided for such in some of the universities. When the courses are ended (of the lectures, that is, not the dinner) the student is examined, and obtains a testimonial from each professor, all of which must be produced at the Government examination previous to his obtaining any appointment. Never was a better scheme devised by the rulers of this great country to hold their subjects in the most abject moral and political thralldom, than that of arrogating to themselves the sole power of appointing, either directly or indirectly, to every employment, from the Chancellor to the chimney-sweeper. The discontented cannot effect much in this country, said one of the well-fed appointees to us one day, "for the King holds the keys of the bread cupboard." True, that is the great and dread secret. Chancellor and chimney-sweeper are alike dependent for their bread upon the King,—their aristocracy is destroyed, and they have no middle-class, as in England, able to stand up alone, and demand their rights. But, to return to our student. He can study at any German University, but he is required to pass one year of the four at a University in his own country, that is, a Bavarian in Bavaria, a Prussian in Prus-

sia, and so on. Few students trouble themselves much about work during the first twelve months of College life; but as the time draws on, and the Government examination, which, with many candidates and comparatively few appointments, must be made as difficult as possible, approaches, he begins to "ochsen," as they call it, or work like an ox, which, in this country, God knows, is hard enough. Early in the morning away he goes, his little portfolio under his arm, and his inkstand in his pocket, to the first lecture. That ended, he attends another; and thus the whole morning is occupied till dinner-time—twelve o'clock. After dinner, he plays at billiards, or takes a fencing-lesson; and at two o'clock is again in the colleges till about five o'clock. The professor never inquires who are present, neither takes he heed of the absent ones,—never directs a question to anybody, but delivers his lecture, and goes away without any further notice of his auditory. Hence the necessity—well preserved—of private lectures, from which the professors derive the greatest part of their incomes. The consequences are obvious: all the interest, and most of the improvement, belong to the private lectures, which are mostly given at the professor's residence.

At the commencement of a course, or semester, as it is called, the student affixes his name to a given place in the auditorium, which he retains throughout. On returning to his lodgings, the student, if one of the workers, prepares for the next day: goes through his notes, amends what he has written, and extracts and studies the chief portions of the lecture. At eight o'clock, he goes to his commerce-house, or kneip, where his own company assembles. There he takes his frugal supper, and drinks his beer. His mode of living is simple and inexpensive. Even in the dearest places, a student with 80*l.* or 90*l.* per annum may cover every charge and live very comfortably; but, in small towns, about 50*l.* to 60*l.* is enough. There, his lodging, furnished, costs about 7*l.* per annum; his breakfast, 9 to 12 krs. (4*d.*); his dinner, 18 to 24 krs. (say 7*d.*); his supper, 12 krs. (4*d.*); beer per mass, about a quart, not quite 2*d.*

Pass we now on to take a brief view of student society. The young man on first coming up, is regarded by his elders as a squire (*knappe*), while the others are as knights. He must, therefore, perform many little services which, as a matter of course, attach to his year. He must carry the weapons to the place of combat. He must stand sentry before the house during the duel to prevent a surprisal by the police. He must fetch beer when there is no keller present, and take care to supply a due quantum of tobacco. The first year he is called a fox (*fuchs*); (a) the second year, a young student (*jung-bursche*); the third, an old student (*alt-bursche*); and in the fourth he is a mossy head (*be-moostes haupt*). He claims during this year the highest respect of the juniors, particularly of the foxes, whom he rides and drives pretty considerably; has the greatest experience in fighting, and gives his counsel like a patriarch in the graver matters of student life. But he now, like an old grandfather, passes his time more quietly, is more punctual at lectures, is frequently found in his study, and in ordinary or dangerous affairs seldom takes the lead. These objects of ambition are left to the youngsters. Foxes particularly enjoy this distinction, and are expected to stand foremost in every risk wherein much experience is not required. Should it, however, be a case of duelling, and a dangerous and well-skilled antagonist present himself, the affair is taken up by the *jung* or *alt burschen*, who usually fight the battle. These also represent the society or club in other things, where diplomatic ability is called into action; and likewise before the police, whose inquiries have either to be prevented or repelled, and where some adroitness is requisite, in order to elude or to perplex investigation and discovery.

In every German University, young men of the same country generally associate together in the same kneip, according to ancient custom. Thus, you find in each University-town, the Prussian, Bavarian, Franconian, Suabian Kneip, &c. Not that it is absolutely necessary they should form these separate societies; but it seems to be the result of a conventional form among themselves, and followed by tacit consent. The student finds, in the club he thus joins,

(a) *Fuchs*.—The derivation of this word, as regards its use in student life, does not seem to be known. It signifies, not only a fox, but also a horse of peculiar colour. Part of the ceremony of initiation consists in "riding the fox." Hence probably its application.

the colours of his native home. These are displayed, either on the cap, in a ribbon worn across the breast, or braided on the trowsers. There are also his own duelling weapons, his former school companions also, and friends from his native town, who, with other fellow-countrymen, meet together in the same commerce-house, as it is called, to pursue their evening's amusement and celebrate those ceremonial orgies which for the time mark them as belonging to a class of beings distinct from all others. One kneip is often at feud with another; whether of the same University or not is of no consequence, for they will sometimes travel from one to another in order to win honour for their respective clubs. Directors are, therefore, appointed, the first of whom is called senior, the second consenior, and these must fight the battles of the Society whensoever it has been collectively offended. Men renowned for strength, bravery, and skill,—of the most determined character and imposing appearance, are always selected to fill these posts. It is an object of the highest importance to represent the kneip, or Society, in a manner worthy of every member, the first point of which seems to be that of not yielding in anything to the members of another. It naturally follows that, among so many different societies, whose members must frequently meet together in the colleges, in the streets, and in places of public resort, and of whom each is at all times ready to exhibit himself as the *representative* of his own kneip against those of any other, many disputes arise which can only be settled by a duel, for the more duels the more honour.

From the period of the war against Napoleon, a new element appeared in the *morale* of the Universities. The whole German people at that time arose as one man; and professors and students fought together side by side in the armies of their country against the common enemy. Then was heard the first low but earnest aspirations for German unity. The feeling soon took deep root and extended itself in the minds of all. Then came the momentous question, why Germany could not become a nation? And men met quietly and discussed it. *Divide et impera!* was Bonaparte's motto. They felt its effect in their political degradation. They referred it to its proper cause. They declared that the calamities which had ravaged and broken down their country, and caused its subjugation by the French, was its separation into so many States, and they mourned over the fallen destiny of their Fatherland. And how came this to pass?

The rulers of Germany, who, in the beginning, were little better than officers of the Emperor, had by degrees become more and more independent. As they waxed stronger, they contrived from time to time to weaken, and at length to destroy the Imperial prerogative; and the first act of the new German drama finished by the erection of their own harlequin, striped, and many-coloured dynasties on the ruins of the Imperial power. Then came the man of iron, Napoleon; the compendious sweep of whose sabre mowed these puppets down one after another. Yet, though he trampled them under foot, they were satisfied, nay, honoured, for he afterwards graciously gave them fresh titles; and of some he made *Grand Dukes*, and of others *Kings*; and they ruled and reigned at his bidding. That which should have been their shame became now their glory. They consented to accept from him the gift of chartered sovereignty, and to wield sceptres which they derived at the hand of the *stranger*, to the enslavement and oppression of the people who had fought for *them*, and who had so nobly stood at their side in the day of their calamity. Thus were separate interests shamefully created, and as shamefully supported; and thus, *divided against itself*, the German Empire, for many centuries one of the most powerful in Christendom, became the football of Europe, the prey of the conqueror, the battle-field of all. The world, however, and all that belongs to it, is changeable; and things in this noble country cannot remain as they are *for ever*. She is gradually awakening from her deep moral and physical lethargy, and as soon as her kindling eyes are enabled to sustain the full lustre of the midday-beam, she will again stand forth to claim and occupy once more her fitting position among the nations of Europe. But much has yet to be done; the day of reckoning must first arrive. The Germans are the most patient and long-suffering people upon the face of God's fair creation; but the course of true liberty, like the course of true love, seldom or never runs smoothly. The dust of revolution is not to be laid with rose-water; and the German people begin to discover, that the way to the liberty they seek—like that of the

Israelites of old upon a similar errand—lies through the Red Sea; but it is a sea of blood! They will, however, it is sincerely hoped, pass safely over, though their oppressors will probably then find, both for themselves and their petty dynasties, a grave!

With a view to German Unity, both Professors and students, at the time of the General Peace, combined together, and founded the Society of *Burschenschaft*, which was naturally in antagonism with all others, representing only detached parts or conventional divisions of the country. This demanded, on one hand, the re-organisation of student-life; a greater application to study, less drinking, and a higher degree of moral deportment. On the other, its one only fixed and solemn purpose was, to effect the freedom and unity of Germany. Every young man who attached himself thereto wore a black, red, and gold band, as a memento and pledge that he was sacredly sworn to uphold and follow that purpose throughout his whole life. The Government soon took the alarm; but, instead of taking one meliorating step in the right direction, put on the political screw, suppressed the Society, seized the papers, expelled the students, and drove away the professors. The persecution of that time is yet bitterly remembered. Many were imprisoned, many fled into other countries. You find them in England, France, America, Egypt, and even in Algiers, and may listen to many a sad tale of families ruined, hopes destroyed, and prospects lost by the un pitying, unrelenting pursuit of Government vengeance. Suppressed but not extirpated, the principles of the Society appear to have thriven the better, nay, to have actually derived increased vigour from the very attempts made to crush them. But they grew on in darkness and secrecy. The Society extended itself in numberless ramifications, and amongst its members were subsequently found many who filled high and important offices (even that of Minister) in the various German States! What wonder, then, that the first opportunity should have been embraced to realise their object, and that the black, red, and gold, are now the adopted and recognised colours of Germany, denoting the political freedom, and the progress being made towards the unity they have so long sought. The origin of these colours, which has caused some little controversy, appears to date as far back as the Hohenstaufen dynasty, and the *Burschenschaft* chose them in honourable remembrance of that flourishing era. The escutcheon of the Hohenstaufens bore three red lions in a golden field; but the bloody fate at Naples, of Conradin, the last scion of that celebrated house, caused the alteration of the colour from red to black, with a bloody paw, the same as seen to this day on the Wurtemberg bearings; for the Hohenstauffens were dukes of Suabia, whose ancestral castle stands about twenty miles from Stuttgart. From that blood-stained *lion noir* in his golden field, the present German colours, black, red, gold, are derived.

[To be continued.]

ON POSTURE, AS A THERAPEUTIC AGENT.

BY W. PRICE EVANS, Esq., M.R.C.S.

THE importance of posture as a therapeutic agent in the treatment of disease, is not (in as far as I know) recognised by our Profession, to the extent to which it appears to me to be deserving. I will, therefore, briefly relate what led to my conviction of its paramount importance in at least one form of disease. In the early part of the cholera campaign of 1849, I was fortunate enough to attend patients who successfully passed through the stage of collapse; but, in spite of all treatment, and the most unremitting attention, I lost every one of them. At this juncture, upon witnessing a poor fellow lying upon his back *in articulo*, it occurred to me, that the immediate cause of death was, that the law of gravitation overcame the *vis vitæ*; that the blood determined to the most depending part, very frequently the back, head, and chest, and that the inevitable result, passive congestion of, and fatal effusion upon the brain, ensued. Acting upon this notion, I henceforth, immediately upon the access of the consecutive stage, kept my patient, as nearly as possible, in the sitting posture; and I do not find, that after pursuing this plan, I lost one patient from consecutive fever, although the seizure appeared to be quite as severe and collapse as complete as in the previous cases. In order that you may partly judge whether these gratifying results

were consequent to or merely coincident with the treatment by posture, I append in the tabular form the number of cases, etc., that occurred in my own practice, during the period alluded to.

Number of Cases of Diarrhoea reported from 24th July to 24th Sept., 1849.	Number of Cases of Cholera reported from 24th July to 24th Sept., 1849.	Number of Cases of Death reported from 24th July to 24th September, 1849.		Number of Cases of Recovery from Cholera reported from 24th July to 24th Sept., 1849.	Number of Cases of Recovery from Diarrhoea reported from 24th July to 24th Sept., 1849.
		In Collapse.	From Consecutive Fever.		
780	188	27	12	149	780

In all chest affections, the advantages of position are fully recognised by patients. In brain affections, this instinct of self-preservation is partially or wholly abolished; therefore is it the especial province of the medical attendant to supply its place.

Analogy also indicates that attention to the posture of the patient should be deemed an important element in the treatment of typhoid, epileptoid, etc., forms of disease, and experience has confirmed the truth of the supposition.
Swansea.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

By HOLMES COOTE, Esq., F.R.C.S.,
Demonstrator of Anatomy in the Medical School.

EXTROVERSIO VESICÆ.

THE case of extroversio vesicæ, treated by Mr. Lloyd, the particulars of which were given in the preceding number of this Journal (Oct. 11), has terminated unfavourably, the patient dying upon the fifth day from the operation. It will be remembered that Mr. Lloyd passed an instrument armed with a seton from the rectum into the bladder behind the prostate gland, in the hope of establishing a recto-vesical fistula, through which the urine would pass, instead of flowing over the front of the abdomen and the thighs. Severe pain, with swelling and tension of the abdomen, ensued on the second day, and the patient died labouring under the usual symptoms of peritonitis.

Examination of the body detected a considerable quantity of sero-purulent fluid in the lower part of the peritoneal cavity, with flakes of soft yellow lymph upon the coats of the small intestines, the convolutions of which were matted together. The rectum was situated much more to the left than natural; the recto-vesical pouch descended deeply down to the neck of the bladder, so as to be in contact with the imperfectly developed prostate gland. Through the lower part of this pouch the instrument had passed, leaving an opening both in the serous covering of the rectum, and in that of the bladder. There was no space uncovered by peritoneum into which any operation could have been safely carried. The pubic bones were separated, as is usual in these cases.

[We are given to understand, that an operation has been successfully performed upon a case similar to that above related, by Mr. Simon, in St. Thomas's Hospital; the difference in the manner of proceeding consisting in the mode in which the communication was established with the rectum. Mr. Lloyd passed a sharp instrument in the usual way, from the intestine, behind the prostate, into the bladder. Mr. Simon introduced canulæ, armed with threads from the ureters, seen in the posterior wall of the bladder, into the rectum. The patient a young subject, has weathered some unfavourable symptoms, and is now doing well; but it remains, however, to be seen, how far his condition will be

benefited by the altered course taken by the urine; and whether the openings, thus artificially established, will remain permanent. We beg to call attention to an observation made by Mr. Coote upon this malformation, in our last Number. "Whenever a case of arrest of development comes under notice, it should be remembered, that it is an indication of imperfect formation, which may extend beyond that deformity which comes immediately before the eyes. The same law which, when broken, fails to close either the bony arches of the vertebral column or the integuments of the abdomen, fails generally to perfect the set of viscera connected with that segment of the body. When the front of the abdomen is unclosed, the anterior wall of the bladder is generally deficient; when the penis is imperfect, the prostate is small, and the power of emitting healthy semen is, as a rule, lost." In dealing with these cases, particular attention should be paid to the fact, that there may exist some remains of the foetal arrangement and connexion of the viscera.

We observe, that the fourth edition of Mr. Coulson's work on Diseases of the Bladder is advertised as in the press. We hope to see the subject there fully investigated.
—Ed. *Medical Times*.]

ST. GEORGE'S HOSPITAL.

By DR. BARCLAY,
Medical Registrar.

KOUSSO UNSUCCESSFUL(?) IN THE TREATMENT OF TAPE-WORM.

It seems right that the public experience of a hospital should be made available to the Profession at large, by acquainting them with the failure as well as the success of treatment, especially in those cases in which, under whatever guise, a remedy is vaunted as a specific for the cure of a certain disease. Of the existence of tape-worm in a patient who is at the time of observation passing joints of the animal, there can be no question; there is no room for nice diagnosis; there is little exercise of judgment in the selection of the remedy for the particular case; and when a new substance is brought forward which is believed to be more efficacious than those we have been in the habit of employing, when it is asserted to be innocuous, and has the advantage of not being nauseous to the patient, it is the duty of physicians to give it a fair trial, and it is for the interest of the Profession that its results should be made public.

Since the introduction of koussou there has been a comparative dearth of cases of tape-worm at St. George's Hospital, the first for this year only occurring on the 18th of June. In consequence, it has been administered only a few times, and always hitherto with the effect of bringing away a very large portion of the animal; but I am not aware that in any instance the head has been seen.

On Wednesday, 10th September, however, Dr. Wilson admitted three patients into this hospital with tape-worm, each of which proved to be examples of the *tænia solium*. One man, John G., aged 31, was immediately recognised as the first patient who had ever taken koussou in this hospital, and that so recently as the month of June last. He then stated, that he had suffered from dyspepsia and sinking sensations at the epigastrium for four years, and that he had begun to pass portions of tape-worm about eighteen months before; that various remedies had been employed, and that he had been admitted into King's College Hospital in February, when koussou was administered with the effect of bringing away a very long worm, (he said thirty-seven feet.) He had been already passing joints of the worm, two months before he was admitted in the middle of June. A dose of the patent koussou was now administered, and a very long portion of the worm was again discharged, an exact measurement of which was not made. He began again to pass joints of the worm, two days before his admission. Savory and Moore's preparation was tried on the present occasion, with the effect of discharging a worm thirteen

feet long; but the head still remains behind, or at least was not observed among the evacuations.

John A., aged 21, was admitted the same day; he stated that he had first passed tape-worm a year and a half ago, that eleven weeks since he had taken kousso, with the effect of passing seventeen or eighteen feet of worm; and had felt comfortable and began to pick up flesh immediately after, and had continued to improve till three weeks ago, when his dyspeptic symptoms returned on him, and he was now again passing joints of the worm. A dose of the same preparation of kousso was administered, followed by a black draught, as there was no action of the bowels during several hours after, when only a few detached fragments were passed. Some days having then elapsed, in which the bowels were freely acted upon without any more portions of the worm passing by stool, a second dose of the same preparation was given on the morning of the 18th, which was followed by the evacuation of between two and three yards of tape-worm, chiefly in broken fragments, of which some portions presented very fine joints; but the head was not found. It seems useless to prosecute the attempt further, to bring away any further portion of the animal; and now, in order to restore the tone of the system generally, steel has been ordered.

The third case is that of a girl, Harriet W., aged 17, who has been suffering from feelings of sinking, and general weakness since April, and in May had passed about three yards of tape-worm, after a dose of turpentine and castor-oil, which was prescribed in consequence of detached joints having been observed in the stools. She had felt rather better, and seen no more of the parasite until last month, during which her dyspeptic symptoms had been aggravated, and she had observed portions of various sizes in the evacuations. After a dose of the same preparation of kousso, she passed several broken fragments of tape-worm, altogether not measuring much more than a yard, among which no portions were found that approached to the head of the animal.

She seemed a person of nervous temperament, and the menstrual periods were irregular; but she began almost immediately after to complain of headache. The face was flushed, the tongue whitish, and the pulse quick; her head was much relieved by assuming the recumbent position. A saline draught having been prescribed, her general health was much improved, and it was thought better to defer any further attempt to expel the tape-worm for the present.

There can scarcely remain a doubt in the mind of any candid inquirer that kousso is equally liable to failure with other anthelmintics in expelling the *tænia solium*. Neither can it be alleged that the patent preparation is more efficacious than that supplied by Savory and Moore, because, not only are we certain that the first patient took the former in June, but, from the date, it is almost certain that he took it also in February, and on the third occasion the joints were so fine that it required care to ascertain positively that the head was not attached. This was, by careful examination, placed beyond a doubt, and, unless perchance it may have been passed in a separate and detached portion which had been lost, it is extremely probable that this creature, with its extraordinary rapidity of growth, will have reached the length of some yards again in a few months.

Another advantage was said to be obtained by the use of the kousso, that it acted as a direct poison to the animal, and there was consequently the more certainty of its being expelled after its death than when the expulsion was merely due to a purgative action on the bowels; but this is also disproved, both by the circumstance that a portion has been twice left behind, which has grown again, and also by the circumstance observed in more than one of the above instances, that the detached joints continued to move for some time after their expulsion, following on a dose of the kousso.

SANITARY CONDITION OF OXFORD.—At a recent meeting of the Street Commissioners of Oxford, a complaint was made of the foul state of a privy in Tredwell's-yard, opposite the Three Goats, in Corn-market-street, which was reported to be in so bad a state, that fever had broken out in consequence, and one death had already occurred. In the course of the inquiry it was averred, that it was *not worse than others in that city*. A report was accordingly ordered to be made as to their condition, with a view, we trust, to put down altogether these hotbeds of disease.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Oct. 18.—MEDICAL SOCIETY OF LONDON. *Subject*:—Mr. Dendy, "On the Affinity and Prophylaxis of Small Pox." Eight o'Clock.

Tuesday, October 21.—PATHOLOGICAL SOCIETY OF LONDON. Eight o'Clock.

Saturday, October 25.—MEDICAL SOCIETY OF LONDON. *Subject*:—Mr. T. Hunt, "On the Skin as Diagnostic of the General Health." Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, OCTOBER 18.

MEDICAL SOCIETY OF LONDON.

THE Medical Society of London has resumed its meetings. It has done so by endeavouring, as far as in it lay, to put down irregular practice, especially the leading delusion of the day, Homœopathy. We are glad to see this. It is a step in the right direction, and we hope the Society will obtain that support from the Profession it at present so much requires. We regret to find that there is already a strong hostile feeling against the Society, which should not be encouraged. It is said, that the present and the late Council have been most extravagant in their expenditure, since an additional subscription of a guinea is solicited from each Fellow for payment of debts amounting to 200*l.*, for which the Society is liable. This demand was made when other means had failed, and it was not until every councillor had first disbursed a like sum for current expenses, that the expedient was adopted. But now the act is no longer one of the Council, but of the Society; since at the general meeting of the Fellows, called by the Council in June, and held on the 5th of July, the Fellows then assembled passed this recommendation into law, with only two dissentients. Legally, therefore, every Fellow is liable. It should be remembered, that no private individual could possibly have removed so large a library and fitted up his new domicile for a smaller amount. It has been objected that it was a kind of breach of faith to the Fellows of the Westminster Medical Society, who were given to understand that the expenses of removal might be raised on the property of Bolt-court. Unfortunately this was an error, the property being then in Chancery, and reverting, in the event of the dissolution of the Society, to the late Dr. Lettsom's heir-at-law. Since the amalgamation, a new title-deed has been procured, new trustees appointed in Chancery, and the present Mr. Lettsom has abandoned all claim to the property in Bolt-court, and made it over to the Society for ever, and all this with the stipulated arrangement that it should in no way be mortgaged, or money raised upon it by loan. These impending negotiations, so happily concluded, have hitherto prevented this property from being let; while it has necessarily entailed law expenses, the maintenance of the premises at some cost, and the loss of the rental expected from the house,—circumstances not likely to recur. We understand that about 100*l.* has been collected, and we do hope that so old and useful an Institution will not be allowed to sink under its present emergency. The *esprit de corps* in the Profession can only be maintained by frequent meetings and reunions of its members. This Society has this advantage; and when seconded by a determination on the part of the Council to allow none but the best papers to be read, with a large library enriched by most of the periodical Medical Journals, all to be enjoyed for so small a

contribution as 1*l.* 1*s.* per annum, it is not too much to hope it will be well supported. From the abstract submitted and circulated among the Fellows in July, the income of the Society will more than cover its expenses, especially as the cost of refreshment, which amounted to more than one-sixth of the total expenditure, will now be provided by a separate fund, and the entrance-fee has been doubled.

It was stated by one of the officers of the Society, that the funds of the Society would not allow the publication of its anti-homœopathic resolutions. Several members expressed their readiness to come forward with their subscriptions to promote this end. Let the guinea contribution only be forthcoming from all Fellows, and there will be no necessity for further demands.

THE AWARD OF THE JURIES IN THE GREAT EXHIBITION.

MANY exhibitors who have taken considerable trouble and have gone to considerable expense in preparing or manufacturing articles for the Great Exhibition, have no doubt waited with considerable anxiety the publication of the awards of the juries of the respective departments; and, as the office of judge is by no means in all cases one of the most agreeable in which men can be placed, we anticipate that more or less injustice and dissatisfaction consequent thereon will be manifested. The department of the Exhibition in which the members of the Medical Profession are especially interested is of very limited extent, embracing only the second and the tenth class. Of the awards in the former no complaint has reached us up to the present time; but in Class X., which includes our surgical and medical instruments and appliances, a sad omission, resulting in a piece of manifest injustice to the exhibitor, has occurred, although it may not be yet too late to remedy the error.

It will be in the remembrance of our readers, that in one of the articles on the Exhibition, we had occasion to make some lengthened observations on a series of experiments, demonstrating most fully to our mind the identity of variola and vaccine. It is a curious fact, that the same idea should have occurred to the minds of two gentlemen, a very talented provincial surgeon, Mr. Ceely, of Aylesbury, and a clever pharmacien, Mr. Badcock, of Brighton; and that both were working on the same subject at the same time, independently of each other. Mr. Ceely was the first to bring the question to a successful issue; but, Mr. Badcock, without being aware of what had been done by Mr. Ceely, also obtained vaccine lymph, by inoculating the cow with the virus of variola. Mr. Ceely, so far as we are aware, remained satisfied with a single experiment; but, Mr. Badcock, with a praiseworthy perseverance, has repeated the experiment a great number of times with the same undeviating result. Hence, say we, the question of the essential identity of the two diseases is determined.

As Mr. Badcock had spent much time, and gone to considerable expense in conducting this most important and valuable series of experiments, he was induced, as he himself says in a letter to us, to offer himself as a candidate for some token of merit at the Exhibition; and as he could neither exhibit vaccine lymph, nor a living child, nor cows with the vaccine vesicle, he hit on the happy expedient of having a series of daguerreotypes taken of the progress of the vesicle in the different stages of its course, which was placed with an explanatory notice among the surgical instruments. As he had received no application for further information up to the time that it was announced in the papers that the juries had completed the survey of their

respective departments, and had awarded the prizes and other honorary distinctions, he wrote to Mr. Green, the chairman of the jury, on the subject, and was not a little astonished at receiving the following reply to his note:—

“Sept. 6, 1851.

“Dear Sir,—I feel much obliged to you for directing my attention to your interesting experiments. I regret, however, that the jurors in Class X. have been wholly unaware of the objects you have exhibited, and that no means now offer themselves of bringing the jury again together.

“I am, dear Sir, yours very faithfully,

“JOSEPH HENRY GREEN.”

We really hope that, for the credit, not only of the awards made by the juries, but also for the individual reputation of the jurymen, that few such cases as the present have occurred. One would imagine, that it was the duty of each member of each jury to make himself thoroughly acquainted with the contents of his own particular class of objects throughout the entire collection; and if upon any particular object sufficient information was not afforded by the exhibitor, to call for further explanation. But if we may credit the statement we have heard concerning some members of the jury, especially those belonging to a neighbouring nation, the duties were performed in the most hurried and slovenly manner; a circumstance which will readily account for such an oversight as that which we are now denouncing. But we assert, that it is not even now too late to rectify an error or to examine the merits of this series of experimental researches, and to determine their true value; for if they possess any value at all, they possess a very high one. In the name of common fairness and justice, we call upon the Jury of Class X. to examine this subject, to rectify this oversight, and to re-consider their awards.

TINCTURA WARBURGII.

AMONG our remarks on the letter of Dr. Babington in the *Medical Times* of July 5th, are the following:—

“We aver, then, that Dr. Warburg's object is to make money.”

“This nostrum mania must be cured.”

The dose of “our remedy” then administered, we rejoice to say, effected a cure. Dr. Warburg and his remedy vanished incontinently from our hospitals—he and his physic were thrown to the dogs; and of Tinctura Warburgii, medical students may chaunt:—

“Oh! no, we never mention it,
Its name is never heard;
Our lips are now forbid to speak,
The once familiar word.”

It is, however, from no desire to boast of the power of “our remedy,” that we exhume the offensive subject; but, because, through the praiseworthy exertions of two of the most distinguished men in the Profession, Dr. J. Davy and Dr. Blair, we are now enabled to prove indisputably, that Dr. Warburg did “puff his remedy by advertisement;” that he did “sell it;” that he did, in every way, “endeavour to make it a source of pecuniary profit;” and that he would not “have made known its composition and mode of preparation” “as soon as the virtues which he asserted to belong to this medicine should be fully proved in this country.” (a)

The Letters to be found in another column tell their own tale. How Sir Andrew Halliday could have justified the part he played in the transaction, we are at a loss to conceive. Mr. Parker is a tradesman, and, as such, strove to fulfil the function of a tradesman, i.e., to make money, and, with that object in view, he embarked in what he hoped would prove

(a) See Dr. Babington's letter above referred to.

a profitable "speculation." "In short," writes Mr. Willson, "I think and hope there will be a *very good business done in it*." And again: "It is really not from any failure of the business, as a speculation, that Mr. Parker wishes to withdraw." In order to push the trade, we learn from the same party, the medicine was "advertised," until "he (Mr. Parker) had advanced nearly 3000*l*." So much for the advertising and money-seeking part of the business.

Now, would Warburg, if there had been "a good business done in it," if the advertising, etc., of "his remedy" had proved a profitable speculation, as soon as the thing was paying, have made known "its composition and mode of preparation?" No! if such had been his intentions, he would not have entered into partnership with a tradesman who had, and professed only to have, a business interest in the "remedy," nor would he have bargained for the secrecy of the spot even where the thirty-two puncheons of extract—the effective ingredients of three millions of bottles—were to be kept. Let the reader remember, that the nett profit of the sale of these three millions of bottles would have been, deducting 150,000*l*. for expenses, about 600,000*l*., and then say whether Mr. Parker, a tradesman, who had ventured his capital in the speculation, would have consented to forego another harvest, or that Warburg would have regarded even three hundred thousand pounds to be a fair compensation for his outlay(?) and labour(?) *Credat Judæus!*

Oh, John Bull! verily thy simplicity is great, thy swallow is large, thy maw capacious! Puff them well, advertise them widely, and you take, at the same time, and with equally implicit confidence in their virtues, thirty-two puncheons of "effective ingredients"—three million of bottles of "the remedy," and globules of charcoal diluted to the decillionth degree,—Warburg's pyramid of physic, and Hahnemann's invisible drug! In your eyes, Warburg and Hahnemann are both equally virtuous, especially Master Hahnemann. Fortunately, however, for the simple-minded John,—who ought to down on his knees and thank his stars for it,—"Parker withdrew his confidence from Warburg;" and so he escaped the swallowing the thirty hundred thousand bottles of that compound which Dr. Blair says acted so violently on some of his patients as to lead to the idea, in the minds of many, that it contained arsenic.

We have omitted from the letters placed at our disposal the details of some matters which seemed to us somewhat irrelevant.

To Mr. Parker we will only say, "Ne sutor ultra crepidam."

YELLOW FEVER.—QUARANTINE.

ALMOST contemporaneously with the sitting of the Quarantine Congress at Paris, yellow Fever prevailed at Oporto. If this be so, then the Portuguese representatives can render no more important service to the great inquiry in which they and the other Delegates from the various states of Europe are engaged, than in laying before the Conference a full, clear, and impartial statement of all the facts connected with this outbreak of so fatal a disease.

We understand, that a vessel called the "Tentadora," arrived at Oporto, from Brazil, sometime about the beginning of September, several of her crew having died on the passage from yellow fever. It is said, that one of the crew was missed on the voyage, and that, on the cargo being discharged, his body was found in a state of decomposition amongst the ballast in the hold. We also learn, that three persons from Oporto who boarded the vessel soon after her arrival, were attacked with the fever, and all died. The

fourth case of death on shore was of a store-keeper, who had not been on board the "Tentadora," but who had received at his store casks from the infected vessel. We are at present unable to supply the other links in the chain of propagation; but, up to the 26th September, at which time no new case had occurred for twenty-four hours, it is alleged that nearly fifty deaths from fever had taken place.

The Portuguese Government ordered that the facts should be investigated by a medical Commission, which is said to have reported, that the disease on shore was identical with that which prevailed on board the "Tentadora," or yellow fever in a modified form.

In the face of these facts, it is said to be asserted by the Government, that the fever is not contagious. Then why, in the name of all that is reasonable, impose quarantine upon vessels touching at Oporto?

If there is nothing to be feared from vessels arriving from Brazil, why impose most harassing and annoying restrictions upon them?

On the other hand, if the disease now or recently raging at Oporto, be true yellow fever, and contagious, let us know the truth. There is no use in rushing head-foremost into the hedge, because we dare not look upon the danger which threatens us.

The case of the "Tentadora," admits of full and open exposition, if it be not surrounded by political or other adventitious difficulties. Let us hope, that an inquiry will be at once instituted, and that every fact will be fairly, honestly, and rigorously sifted. The cause of science requires such an investigation,—the cause of humanity commands it.

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF
MEDICINE AND SURGERY.

[NINETEENTH NOTICE.]

IN surgical instruments, the French makers rival the English, if not in quantity, in quality. The high polish and finish of their productions is, indeed, in some instances, superior to that of any in our own collections. The exhibitors of instruments are only three or four in number, of whom M. Charrière takes the lead, and far distances all his competitors. M. Charrière, indeed, exhibits all, and more than all the instruments required in the practice of surgery. In so extensive a collection it would be impracticable to notice even a tythe. We shall, therefore, confine our remarks to such as are either novel, or that differ in construction from those in use in England, premising that equal care has been expended in the workmanship of all.

It is well known to surgeons with what difficulty substances are extracted from the auditory passage, especially if the substance be of a globular form and have a smooth surface. In a case in which a piece of copper had found its way into the ear of a child, M. Sanson applied to M. Charrière for a new instrument, as all others had failed. M. Charrière constructed forceps, the blades of which could be introduced separately and afterwards locked.

An instrument for staphyloraphy attracted our attention, as being extremely ingenious. It consisted of a tubular fork with two prongs, with notches in the prongs, through which a forked stilet passes, and, after the punctures are made, the thread is caught by two crochets, which are placed opposite to the notches in the tube which encloses them. It is exceedingly difficult, if not impossible, to convey an intelligible description in words of this instrument.

An equally ingenious and useful speculum oris is exhibited, which consists of three valves, fixed, when open, by a spring rack, and having a plate to depress the tongue. The opening when the instrument is expanded is sufficiently large to permit any manipulation within the cavity of the mouth. The speculum oris of M. Sanson is a two-bladed instrument, with a hinge and handles so arranged that when the latter are pressed together the valves expand.

An instrument for the removal of flexible bougies or frag-

ments of calculus, etc., from the urethra or bladder, invented by M. Segalas, consists of a canula including a pair of spring forceps, which can be projected from the distal extremity of the canula, when they open by their own elasticity, and are closed and grasp the foreign body when retracted into the canula.

An instrument for tying polypi of the uterus very much resembles a lithotrite in appearance; it is formed on the same principle, with tubes for carrying the ligature.

An instrument for crushing calculi too large to be extracted through the usual incisions in lithotomy, consists of three branches, which are made to grasp the stone, with a large and powerful drill for excavating it. A very ingenious instrument for measuring with exactitude the morbid prominences on tumours, especially in the præcordial region or thorax, invented by Dr. F. Audry, consists of a thin band of steel, in the middle of which a graduated stem is attached, at right angles to the steel band, and near each extremity two narrow metallic plates which cross each other opposite to the graduated stem. It is evident that when the steel band is curved by applying it closely to the tumour or other unnatural prominence, the narrow plates will alter their position and cross at a point on the stem corresponding to the curve of the steel band. By this means a comparative admeasurement and record of the increase or decrease of the tumefaction can be procured.

M. Charrière has an instrument, or, rather, apparatus, for compressing the carotids, of a very ingenious character. A circular metallic band surrounds the head, and from this steel plates project downwards, with screw pads for direct compression.

Another contrivance exhibited for compression of arteries, for the cure of aneurism without operation, consists of two strong broad steel springs, each having a fixed pad, which are connected by straps, the springs producing the pressure. He states, that this is a much more convenient and efficient tourniquet for continued compression of arteries than any other now in use.

We must not omit to notice an extremely useful instrument, which will supersede the common exploring needle. In noticing Mr. Weiss's collection of instruments, we had occasion to speak in terms of praise of an extremely fine exploring trocar; but here we have a still more useful instrument. The difficulty of distinguishing the nature of tumours, in many cases, by external manipulation, and the use of the microscope in distinguishing malignant from non-malignant growths, is well known to our readers. This trocar, invented by M. Charrière, fulfils all the purposes of an exploring needle, and, at the same time, enables the operator to remove a portion of the tumour, if solid, of sufficient bulk to determine the nature of the morbid growth by microscopic examination. The instrument consists of an extremely fine steel trocar, with a corresponding canula, which is introduced in the ordinary manner into the tumour; the trocar is then withdrawn, and the contents of the swelling, if fluid, escape by the canula. If the tumour be solid, another trocar is introduced into the canula, terminated by a very fine corkscrew, which, when completely introduced, projects somewhat beyond the canula. A small portion of the tumour is then entangled by turning the handle several times, and by first withdrawing the corkscrew into the canula, and then withdrawing the whole instrument; a sufficient portion of the tumour is, as we have said, brought away for microscopic examination.

Apropos of the microscope, we were shown an exquisite little case of instruments for minute dissections, containing Charrière's modification of Valentine's double knife for cutting thin sections of animal tissues for microscopical examination, Straus-Durckheim's microtome, extremely fine scissors of several descriptions, handles for needles, hooks of extreme delicacy, and a supply of needles and electro-gilt pins.

We must not omit to notice a pocket case of instruments, rather more bulky, it is true, than those ordinarily in use, but containing a larger number of instruments than we have ever before seen packed in so small a space. We find here several very ingenious little instruments, among which are a caustic holder of sufficient length to apply nitrate of silver to the os uteri, which consists of a series of tubes with screws fitting each other, by which it can be separated into several pieces. One of these contains the caustic holder, and each of the others some small instrument, such as an exploring needle, etc. An extremely convenient

form of probang is contained in this case,—convenient because, unlike our English probangs, it can be folded up and placed in the pocket or pocket-case. The stem of this probang is formed of three pieces of whalebone connected by hinge-joints, over each of which, when extended, a short tube slides, so as to convert the pieces of whalebone into a straight stem.

In England, we have been accustomed to employ the ordinary carpenter's saw in the section of the large bones in amputation of the limbs. M. Charrière has introduced the bow-saw, which we consider to be a great improvement, as it permits the introduction of several blades into the amputating case,—a matter of some importance to military and naval surgeons, who may have much employment for the saw, and no surgical instrument maker at hand to set it when required. A circular saw is also exhibited by this gentleman, but we did not like it so well as the circular saw exhibited by Mr. Weiss.

The eye instruments in M. Charrière's collection are fully equal to those exhibited by any of our own surgical instrument makers; and we saw among them some very ingenious modifications. Lithotrites and lithotriptic instruments differing somewhat in construction from those in use in England, are, we should judge, equally efficient with our own. In one of them a longitudinal opening is left in the extremity of the outer blade, to permit the escape of detritus and prevent clogging of the instrument.

The examination of the spinal cord after death has been much neglected in this country, on account of the difficulty of opening the vertebral canal, and the time occupied in so doing by the ordinary instruments. M. Charrière supplies a double saw, called "rachitome," for this purpose, which is, in our judgment, a very efficient instrument. Other instruments for the same purpose are exhibited. The apparatus manufactured by M. Charrière for anatomical injections is very complete; but with regard to the syringes, there are equally good ones of London make, and even less expensive; indeed, it would be impossible to excel the small silver tubes we possess of English manufacture. M. Charrière has certainly introduced great improvements in the tubes for mercurial injections, the one shown to us consisting of a flexible tube, with a funnel of horn at its upper end to receive the mercury, and a steel tube below, furnished with an extremely convenient spring stop-cock, which is opened by simple pressure, and closes of its own accord when the pressure is removed. In addition to these, we have the apparatus employed by Straus-Durckheim for the injection of the mollusca,—a fine elastic tube with a globular enlargement near its upper end, and the fine canula for introduction into the vessels at the other. Robin's apparatus for injections with mercury or coloured oil of turpentine are very ingenious.

The midwifery instruments employed by French accoucheurs differ in many particulars from those used in England; and God forbid that some of them should ever find their way across the Channel! Among them, we observed an enormous instrument termed a cephalotribe, which we at first imagined was some veterinary instrument; but we shuddered when we ascertained that it was intended to crush the head in cases of contracted pelvis. We do not find fault with M. Charrière, but with the inventors of this horrible instrument. We give a translation of his description, which will show that M. Charrière has meliorated it. "A cephalotribe which obtained a prize at the Academy of Sciences. The lightness, compared with its original weight, arises from the temper, which I proposed when M. Baudelocque desired a change in a part of this instrument. The first I made weighed *four pounds five ounces*; it was tried at the Hôpital des Enfants Trouvés, in the presence of Drs. Gordon and Le François. We compared it with an instrument that M. Baudelocque had caused to be made, which was of double the weight. The latter gave way an inch when applied to the head of a child which had lived eleven days; while mine did not yield three lines when applied to the head of another child that had lived twenty-one days, which elicited praises from M. Baudelocque, by which I felt much flattered." Imagine an instrument, nearly two feet in length, consisting of two blades of very great thickness, each terminated by a knob, and fastened together by a screw-joint, with thick handles connected and brought forcibly together by a strong screw. The blades are introduced separately, then locked, the lock being secured by a screw, and the handles and blades approximated by the screw at the end of

the former. It is a curious fact, that English obstetricians have been enabled to deliver in all cases in which there is space for such clumsy instruments as this by much milder and more gentle means. The forceps employed in France are equally formidable; a pair, represented as the form in general use in Paris and the departments, being nearly two feet in length, much curved and broader between the blades than those used on this side the Channel, the handles terminating in hooks, to give a firmer purchase. Indeed, it would seem from the form of the instrument, that direct traction is the dominant idea in France, instead of the lateral movement combined with moderate traction employed in England. One pair of forceps, accompanied by a chain saw, which passes through a groove in the blades, and appears to be intended to saw the head or other part embraced by the blades of the forceps, is among the midwifery instruments in the south gallery. Even supposing that the forceps could be applied and the saw worked, we do not perceive the slightest utility in this extraordinary instrument. We have examined the instruments exhibited by M. Charriere with great care and attention, and have been much gratified with the ingenuity displayed in many of the modifications. The only instruments we have felt ourselves called upon to condemn, are those employed in obstetric practice; and here the French accoucheurs and not the manufacturers of the instruments are at fault.

REVIEWS.

1. *The Spine; its Curvatures and other Diseases; their Symptoms, Treatment, and Cure. To which are added some Remarks on Paralysis.* By CHARLES VERRAL, M.R.C.S., Surgeon to the Hospital for the Cure of Distortions, Portland-road, Regents-park, and the Sea-bathing Infirmary, at Eastbourne, etc., etc., etc.

2. *On the Prevention and Cure of Spinal Curvatures.* By Mrs. GODFREY, of Renshaw-street, Liverpool. London. 1851.

1. There is no need to ask, Who is Mr. Charles Verral? Since 1848, when he obtained his diploma at the College of Surgeons, his public appointments have fallen in quickly; but, without the advantage of railways, we fear he could hardly perform with satisfaction surgical duties in public establishments so far apart as the hospital in the Portland-road, and the Sea-bathing Infirmary at Eastbourne.

The paper of this work is of the best quality, and the printing clear and good. We greatly admire the engraving of the medal given to Mr. Charles Verral's father by the Society for the promotion of arts and commerce, for the invention of a bed, often of considerable use, which supports a patient in the prone position. There is also a very pretty sketch at p. 71, of young women frantically engaged in calisthenics.

We are told, for the benefit of non-professional persons, that the back-bone is composed of certain separate pieces named vertebræ; that throughout the column there exists certain holes, named foramina, which serve for the transmission of nerves; that these vertebræ are connected by "muscles and ligaments." We recommend this chapter to the consideration and attentive perusal of Professor Owen, who may find, what has escaped us,—the object with which it was written.

There is very much to be done by the Profession in the investigation of the causes and treatment of lateral curvature, but the work now before us advances the subject but a very few steps. We agree with the author, "who has been brought to believe that most curvatures do originate in the lower or lumbar portion of the column," the dorsal curvature being only secondary. "Debility of the muscular system may either be the primary cause of spinal distortion, or, less frequently, it may supervene upon a curvature that has been produced by some other agency, where it will exert its influence in a secondary degree."—P. 9. And yet debility of the muscles alone will not produce lateral curvature. How many weakly, half-starved children grow up as straight as an arrow? We have looked in vain throughout the volume for a good account of the various morbid conditions of the inferior extremities and of the pelvis, so often associated with this deformity.

The treatment proposed consists in the recumbent position, with adjunct mechanical extension, muscular exercise,

mechanical support, and superadded remedies. Care must be taken not to let the patient sit or stand at rest. When upright, she should be moving about, and taking exercise. At night time, she should be freed from all bandages and restraint. These directions are good. Some useful instruments are depicted in the course of the work; such as supporters for the back, with pads to press up or down the shoulder or the scapula.

The chapter on Angular Curvature contains some correct observations, but nothing that is new, except allusions to the bed for keeping patients prone. As a general rule, this position is certainly not needed, while its inconvenience to the patient must be great.

The newest parts of the work are the chapters on Incurvation and Excurvation of the vertebral column, with an account of the treatment applicable in either case.

This subject is yet in its infancy. Ere many years have passed, it will be considered one of the highest branches of surgery. The names of Stromeyer and of Jörg, of Delpech and Guérin, and of Pott, will be remembered as standing high among the list of those who first unravelled the difficulties which threw a shield over the barbarous and irregular proceedings of quack practitioners, and who taught the Profession the principles upon which these deformities might be successfully treated. We have hopes that Mr. Verral may yet do good service in this branch of his Profession; but he must work hard, write more concisely, not speak of his patients' "mammas," omit pictures of medals and young women, and we have strong anticipations that he will live to arrive at some mode of practice, and publish some work which will gain for him the unqualified approbation of his professional brethren.

2. Mrs. Godfrey is evidently a lady of humble mind. She trusts, in her Preface, that her work, which is a downright honest advertisement, "will be the means, under Divine Providence, of preventing a large amount of bodily suffering and mental anguish," and of course of bringing grist to her mill. We admire this lady's honesty, and prefer it to the covert advertisement of many pseudo-scientific productions of some aspirants to practice.

If any one afflicted with lateral curvature wishes to derive advantage from Mrs. Godfrey's experience, he or she must go to Liverpool, call in Renshaw-street, and submit to a process of kneading and friction, successful only under the fair hands of the authoress.

The object of the work is frankly expressed, and we have no doubt but that it will answer its purpose.

Suggestions for the Extension and Perfection of Vaccination, simultaneously with the Systematic Study of Epidemic and Endemic Disease in India. By J. R. BEDFORD, Civil Assistant-Surgeon, Rampore Banleau, Calcutta. 1851. Pp. 14.

This pamphlet has grown out of that Report of the Small-pox Commissioners which has been largely commented on in the pages of this Journal. The author's objects are stated in the title-page. He wishes to unite in one body at Calcutta the duties and functions appertaining, in this country, to the Registrar-General, the Board of Health, the National Vaccine Board, and the Epidemiological Society. The bulk of the pamphlet is devoted to details, topographical and financial, which are of no interest here. We shall confine our consideration, therefore, to the hints, scattered and brief though they be, which Mr. Bedford's work affords of the state of Hindostan with reference to small-pox and vaccination since the publication of the Commissioners' Report. It does not appear that the grand measure recommended by them has been adopted by the Indian Government. The profession of the ticcadar, or native inoculator, has not been put down by the iron arm of the law. Mr. Bedford advises, that the present inefficient staff of native vaccinators (112 in number) be abolished, and their places supplied by nine travelling native sub-assistant-surgeons, *élèves* of the Medical College, Calcutta, with a much higher rate of pay. We doubt not, that, so far as it extends, this plan would be an improvement upon the existing system; but it contemplates only a house-to-house visitation once in two years; and we fear, that the sudden appearance of a strange doctor from Calcutta, even though speaking their own language, would not be necessarily succeeded by that unhesitating confid-

ence which ought to subsist between the parent and the vaccinator.

Mr. Bedford suggests, that, in order to preserve the crusts for subsequent inspection some small pecuniary reward be given to the parents, or a tin medal, stamped with the Company's arms, or "indeed, anything to gratify them!"

Mr. Bedford entertains some curious doctrines regarding vaccination, which we never remember to have heard broached before. "It cannot be doubted," says he, (p. 4,) "that in the natives of this country the resulting pustule lacks vitality; and it may be, that, to transmit the disease from such a subject to the European, is equivalent to bestowing a less protective influence." If this doctrine be correct, the practical result would be, "the necessity of vaccinating European children direct from English lymph." We have heard it hinted, but it may be a libel, that the great inducement held out to the native population of Calcutta to have their children vaccinated, were the rupees given by the European mothers on the transference of the lymph from the native to the Anglo-Indian arm.

Mr. Bedford very judiciously inculcates plain dealing with the natives. He advises, (p. 11,) that the new vaccinators should afford to the parents "an honest exposition of the results of vaccination, skilfully performed, with the best lymph;" but we do not see how he can do this without stating, on the other hand, what are the results of vaccination unskilfully performed with lymph of inferior quality; and we fear that, in the end, the parent would quietly wait for the next circuit of the Calcutta ticcadar.

We see nothing in this pamphlet calculated to shake the opinion already expressed in this Journal,—that the native population of Hindostan are not in a state to profit by a national system of vaccination.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

CHLOROFORM IN PNEUMONIA.

In the last number of Henle's *Zeitschrift für Rationelle Medicin*, (Neue Folge, Bd. 1, Heft. I,) is a very important paper, by Varrentrapp, of Frankfort, "On the Employment of Chloroform in Pneumonia by Inhalation." Already, Wacherer and Baumgärtner have used chloroform in this way, and with great success, and, including Varrentrapp's cases, more than 200 cases of acute pneumonia have now been treated after this method.

Varrentrapp's own cases amount to 23, the first case being treated by V. S. and antimony, the rest only with chloroform, except one case which was bled, and two others, in whom there was pleurisy, treated with calomel and blisters. Of these cases, 21 were men and 2 women; the mean age of the former 31 years; the youngest 19, the eldest 62; the women were aged 20 and 29. The mean period of disease at the entrance into hospital was the fourth day; the chloroform treatment was commenced usually on the following morning. The average number of inhalations was 74 in 10½ days, the smallest number being 27 in 5 days, and the greatest 162 in 15 days. The chloroform was not given to stupefaction, but about 60 drops were placed on a compressed piece of cotton, and the vapour was allowed to enter the lungs for 10 or 15 minutes. If cough was excited, or unconsciousness seemed about to be produced, the cotton was removed for a few moments. Every two, three, or four hours, the inhalation was repeated. If the first three or four inhalations produced any effect on the head or irritation of the lungs, this soon passed off. In the majority of cases, perspiration was produced, the pain in the chest was diminished, the cough was less frequent, and there was a general feeling of improvement after even the first inhalation. Varrentrapp enters into a long analysis of the effect on each individual symptom, from which we extract the following:—

The Sweat.—If sweating had not previously occurred, it came on after the first inhalation; in no case later than the fourth or fifth. When the disease began to yield, it diminished and disappeared, on the average, on the twelfth or the thirteenth day.

Pain in the Side.—Often relief to this symptom followed the first inhalation, but after an hour or two it began to return again; the next inhalation again diminished it, and if

it returned again, it was very much less intense, and gradually disappeared. The average date of its complete disappearance was from the third to the fourth day after the use of chloroform.

Tightness across the Chest.—After the first inhalation the patient could often at once draw a deep breath; but, on the average, this symptom disappeared, at the same time as the pain in the side.

Frequency of Respiration.—The average number being 37·8 per minute on the day of admission; the number decreased daily till the 9th day after admission, when the average was 20 per minute.

Cough.—In all cases, without an exception, the cough was lessened by the inhalation—gradually the intervals between the cough became shorter, while the cough itself became much less violent, and with looser expectoration. The heavy attacks of cough disappeared on an average at the end of the second, or at the commencement of the third day, after the employment of chloroform. In one case, however, they continued to the fifth.

Expectoration.—The changes in the expectoration were dissimilar from those observed after the ordinary treatment. The "sputa cocta," or "critica," were never seen; but either the sputa gradually lost the blood, and slowly diminished in quantity, retaining their viscosity to the last, or more frequently became surrounded by a thin, watery fluid, which presented adhesion to the glass; then the blood disappeared, the sputa lost their glassy character, and became white; and then the viscid portion altogether disappeared. In one case this change occurred on the first day; but the average was from the second to the fourth day.

Fever.—The fever diminished gradually; in one case suddenly disappeared; the pulse very rapidly fell in frequency; it was at 80 or under, on the 5th day, after admission, taking the average of all cases.

Thirst.—This symptom disappeared with the fever.

Sleep.—On an average, good and comfortable sleep ensued on the third or fourth day after the commencement of the inhalation. In several cases, however, even on the second day there was many hours' sleep. This symptom seemed to be independent of all others, that is to say, it did not appear to have any determined relation to any other special symptom.

Urine.—The condition of the urine was the same as under the ordinary treatment.

Physical Signs.—These did not show any deviation from those observed under ordinary treatment. They improved in proportion to the other symptoms. The average period of commencement of signs of retrogression was 3½ days after the commencement of treatment.

Mortality.—One case died, making a mortality of 4½ per cent. In 193 cases treated in the same way, and collected by Wacherer, Baumgärtner, Helbing, and Schmidt, the mortality was 9 or 4½ per cent. Of 266 cases treated between 1844 and 1849, by Varrentrapp in the ordinary way, 49 died, or 15 per cent. This would make the mortality under chloroform treatment very favourable; but Varrentrapp remarks, that it is not so favourable as it appears; since, in taking indifferently all the patients which come into hospital, many cases are included which are beyond treatment; whereas, in using chloroform, hopeless cases have been excluded. Thus, during the time that chloroform was used, three fatal cases were admitted which, from their severity and complications, were not treated with chloroform, and would probably have equally died had they been treated with it. But, if these 3 cases are added to the 1 fatal case of the 23, the mortality becomes 11½ per cent. In estimating the mortality, also, it is necessary to pay especial attention to age; and the ages of Varrentrapp's cases not treated with chloroform are not given. The mean age of his chloroform cases was 30 years, the mortality in all cases being, according to Dr. Walshe, 6 per cent. between 15 and 30 years, and no less than 14 per cent. between 30 and 40 years. ("On Diseases of the Lungs and Heart," p. 332.) The 23 cases are detailed at length at the end of the paper. On going over these cases, it is evident, that Varrentrapp's favourable account is borne out by the facts. The improvement produced by chloroform is not sudden and magical; and those who use it with the idea, that their pneumonic cases are straightway to get cured, will be disappointed. It is evident, however, that it is a valuable remedy, and probably will be still more useful when

employed as an auxiliary, than when used (as by Varrentrapp in most of his cases) entirely alone.

ENORMOUS HYPERTROPHY OF THE MAMMÆ.— EXTIRPATION.

The following case is worthy of record, in a surgical as well as pathological point of view:—

S. R., a young woman, menstruated, for the first time, at the age of 18 years. Four months afterwards, the discharge ceased without any apparent cause, and the mammæ soon became painful, increasing gradually in size. At the expiration of a year the left mamma presented a circumference of 80 centimetres, (43 inches,) and was 20 inches in length; the right mamma had attained nearly the same magnitude.

In June, 1844, three years after the commencement of the disease, the mammæ hung down below the knees, and were estimated to weigh 30lbs. each. The patient had been confined to her bed for two years, being unable to move from the mere weight, although her general health was good. As it was evident that nothing could relieve such a state of things except removal of the hypertrophied glands, the operation was performed, on the 24th of June, by M. Bouyer. The left mamma was first removed. Every precaution was taken to prevent excessive loss of blood; but in the centre of the tumour were two arteries as large as goose-quills, and about two pounds of blood were lost before these could be tied. Twenty-six days afterwards, the right mamma was removed. It had very considerably diminished in size, and no hæmorrhage of any consequence ensued. The left breast weighed 30½ lbs., the right one 20½ lbs.; the patient herself weighed only 101 lbs. after the operation, and had consequently lost one-third of her whole body in weight by the removal of the mammæ. The disease was simple hypertrophy of the glands, for the tissue was fatty throughout, containing a number of glandular nuclei in a normal state.—*Bul. de l'Acad. de Méd.*

UTERINE HÆMORRHAGE AND COMPRESSION OF THE AORTA.

Several recent facts have been communicated to the Institut and Academy of Medicine, which tend to confirm the utility of compressing the aorta as a means of arresting hæmorrhage in severe cases of flooding.

M. Duhamel has had occasion to employ this practice in three cases, where transfusion of blood would have been otherwise indispensable. The first case related to a female, 30 years of age, who was attacked immediately after delivery by such profuse hæmorrhage that her life was soon in imminent danger. M. Duhamel compressed the aorta and at once arrested the loss of blood. In a second case it became necessary to keep up pressure for four or five hours. The third case was a very serious one. The patient had lost a great deal of blood before delivery, as the placenta was implanted on the neck of the uterus. After delivery the flooding returned with violence, and the woman appeared to be lifeless in a few minutes. The aorta was now compressed and the flooding arrested. The pressure was kept up for nine hours, but thirty hours elapsed before any pulsation could be felt in the radial arteries. M. Duhamel and many other practitioners exercise the pressure on the walls of the abdomen. M. Chailly-Honoré introduces his hand into the vagina and applies the pressure almost directly on the aorta, which is easily felt pulsating, and may be seized between the middle and index fingers. He related seventeen cases in which this method had been practised with the best effect. In one case only was the termination fatal. Here, as in M. Duhamel's case, the patient had been reduced to an extreme state of anæmia from partial flooding, through irregular insertion of the placenta.—*Bul. de l'Acad.*

CHLOROFORM AND PAINTER'S COLIC.

M. Aran is an indefatigable advocate of local anæsthesia. His last experiments refer to painter's colic, for the cure, or rather, alleviation of which he recommends from four to eight scruples of chloroform applied by means of compresses to the abdomen. This mode of treatment was employed in eight cases, and its results are certainly remarkable. Six out of the eight patients were cured in intervals varying from two to six days. In most cases the severe pain disappeared quickly, and never returned (five in eight cases.) In the remainder it was necessary to repeat the local application once or twice. The patients took, likewise, a mixture containing 40 drops of chloroform in 100 scruples of water

during the day, and had a lavement containing twenty drops of the remedy. Sulphureous or alkaline baths were administered daily to free the skin from any particles of lead, which might remain attached to it.—*Bul. de Therapeutique.*

DR. LINOLI ON PSOITIS FROM RUPTURE OF THE PSOAS MUSCLE.

In a paper on cœcal abscess, Dr. Linoli relates some interesting cases of Psaitis, which he has met with in his practice. The first occurred in a man of athletic structure, aged 38, who tripped while descending a hill with a heavy burden on his head, and, in order to avoid falling over a precipice, stretched the trunk upon the pelvis violently backward, at the same time feeling something give way in the belly. He was unable to rise, and his left lower extremity became immoveably flexed. As there was no injury about the hip, the limb being moveable by others though not by the patient, and much tenderness existing in the iliac region, the psoas was supposed to be injured. In spite of bleeding, leeching, etc., peritonitis, with intense fever, was set up, the limb always continuing semi-flexed and immoveable. At the *post-mortem*, abundant signs of peritonitis were found; and the muscular belly of the psoas was found ruptured and disintegrated, and surrounded by an abscess. In the second case, a youth, while wrestling, was thrown backwards, and, having lost his balance, notwithstanding great efforts to save himself, he fell, hearing something break in his belly. He found the right lower extremity maintained in an immoveably semi-flexed position. Fever and great lumbar pain occurred, and he was freely bled and leeches. He lingered on for a month, and at the autopsy a collection of about 4lbs. of fetid pus, and a rupture of the psoas were discovered. The third case occurred in a lad, who, while leaping, fell backwards, and found himself unable to rise, his thigh being semi-flexed and immoveable. He was treated under the supposition of their being a lesion of the spinal marrow, and a fluctuating tumour presented itself in the inguinal region. At the *post-mortem*, an immense collection of pus was found, and, on removing this, the psoas was seen to be completely torn through. In the fourth case, the subject of it, after firing a mine retreated backwards, and, notwithstanding his efforts to save himself, fell down. Like the other cases, he found his thigh in an immoveably semi-flexed position, so that it could not be brought near the belly without great pain. He was freely bled and leeches, and in about two months he recovered, the trunk being, however, somewhat curved upon the limbs.—*Omedei Annali Universali.*

GENERAL CORRESPONDENCE.

WARBURG'S DROPS.

[To the Editor of the Medical Times.]

SIR,—You have exerted yourself in a very meritorious manner to bring secret remedies into the discredit they deserve,—actuated no doubt, by regard for the interests of a liberal Profession, and the welfare of society, which cannot be separated with impunity.

The enclosed I have received from a respected friend in British Guiana, the author of the account of the last epidemic yellow fever of that colony, with permission to make any use of it I may think proper.

Accordingly, I beg to transfer it to you, with leave to insert it either in part or whole in your journal, if of opinion that it is adapted to expose charlatanry and imposition, which, in various forms, are now so prevalent, rendering it even questionable, whether, as regards the public mind, the present is truly an age of progress and improvement. I am, &c. J. DAVY.

Lesketh How, Ambleside.

Georgetown.

My Dear Sir,—Since I wrote to you hurriedly (not to miss the mail) on Sunday last, I have seen the *Medical Times*, containing Dr. Warburg's paper. I am much gratified by the very proper way in which it is handled by the Editor. I mentioned in my last, that, in my opinion and that of several others, Dr. Warburg's "drops" are quinine disguised. The disguise is supposed to be tincture of aloes, sulphuric ether, and camphor. This opinion, as to the basis of the drug being quinine, is not founded on any che-

mical analysis of it, but chiefly from the fact, that at the time he was publishing the rare merits of his drug over any other febrifuge, he was purchasing from the druggists here large quantities of quinine. In one case, which I will presently relate, under the most suspicious circumstances, a little girl came to the drug-shop of the late Mr. Cross, and asked to buy eight ounces of quinine, for which she had the money. Mr. Cross was surprised at the magnitude of the quantity asked for, and inquired from whom she came. The girl said, she was not allowed to tell; but, Mr. Cross's curiosity being excited, he sent a servant after her, who traced the girl to the residence of Dr. Warburg. I believe I have never met Dr. Warburg, nor had any direct communication with him; but I am told, he is a person of excellent address, and of convivial talents, and an admirable player on the guitar; and that, in consequence, he became intimate with the officers then quartered here, particularly Captain Halliday, and, through him, Dr. Gibson and Sir A. Halliday. I was then residing on the west coast of Demerara on a plantation, when Dr. Warburg was in Georgetown, with little practice, endeavouring to make known and sell his nostrum. Mr. M'Calmont, (since drowned,) of the late firm of Johnston and M'Calmont, sent me some bottles of the "drops" for trial, and with a request for a report. I reported unfavourably; as I found, with many others, that it (the drops) acted violently as a local stimulant on the œsophagus and stomach, inducing symptoms of gastritis so markedly, that many suspected the "drops" to contain a large dose of arsenic.

It would be very difficult, indeed, for any person in this climate and country, to collect any great quantity of plants without an assistant labourer and without the fact being known. It would be next to impossible for this to be done, and their juices to be elaborated in quantity, and that secrecy be preserved of the entire transaction. But Dr. Warburg was not known here as a botanist, or herbalist, or working chemist; but he was known to be buying up suspicious quantities of quinine, at the moment he was proclaiming the new substitute for it. In 1849, Dr. Warburg published a pamphlet, entitled "Hospital Reports, and other Official Documents," purporting to be of Austrian origin. A copy of it, which opens with a letter beginning "My dear Parker," is now before me. The *Pharmaceutical Journal* of July 1st, 1850, notices it, under the head "Quackery." I have also now before me six letters from H. Willson, in London, to J. S. Stutchbery, of this city, from whom I have obtained permission to copy the extracts which follow. These will show you, that the appellation "*humbug*," which I applied to Dr. Warburg and his drops, in my last letter, was not uncalled for or over severe. I may mention here, that the discoverer of beberine, Dr. Rodie, is an honest and honourable man.

"London, 4th Nov., 1839.

"Your letter to Messrs. Parker and Co. came to hand last week; and I suppose you are already aware that Cross has been applied to to become agent for the 'fever drops.' Mr. Parker, however, is not a bookseller, in the commercial acceptance of the term, but a publisher, never selling any books but his own; and Messrs. Parker and Co., proprietors of Dr. Warburg's fever drops, are totally unconnected with John W. Parker's publishing concern in the Strand, or his printing offices, either in St. Martin's-lane or at the University of Cambridge. Having, I trust, sufficiently impressed this important distinction on your mind, I shall proceed to make a few remarks on the fever drops. This invaluable medicine —, but I need not take the trouble of writing out the whole account, as I believe you have some of the bills, where you can read all its virtues. Seriously, however, though at Demerara I was very sceptical about them, I do now believe that Warburg's drops are the most efficacious febrifuge existing. Of course I do not believe with their inventor, that they are all-sufficient in every possible case of fever; but that they will generally cure all simple cases of fever, and that in the most complicated they would be a very valuable remedy in the hands of a physician. Mr. Parker wishes to conduct the concern on the most respectable footing possible. In fact, his name stands so high, that the drops are in a very different position from common nostrums. I had hoped that you might, by being the exclusive agent at Demerara, put 100% a-year in your pocket without any risk or outlay of money; but you, of course, are the best judge how it would affect your business,—though I think you have too mean an opinion of the medicine, and that the advertisement would not have compromised the respectability of your name to the extent you think it would. The agency has been sought by many respectable houses abroad, and one gentleman has gone to Egypt and Syria on his own expense, with no other hope of profit than the same percentage which was offered to you. The medicine has been tried with great success at the public hospitals at Cologne; and in France the Minister of Commerce has ordered an analysis

of the medicine by the College of Pharmacy. In short, I think and hope there will be a very good business done in it."

When the foregoing was written, Dr. Warburg, having met with no success in Demerara, went to London, and entered into partnership with Mr. Parker in the manner afterwards narrated by the writer. It is but right to Mr. Stutchbery also to mention that, when he declined the 100% a-year to be the agent for a quack medicine, he did not possess the wealth which he has so meritoriously earned since.

"27, King William-street, Charing Cross,
1st June, 1840.

"Warburg has not yet gone to Germany. He talks of having some invention which Government is to purchase, and by which he expects to make a good deal of money, and which he says detains him here at present. The invention is not his own, but only entrusted to him by some person on the continent. We have letters stating, that the fever drops have been very successful at Jamaica, Bahamas, La Guayra, Malta, Constantinople, Alexandria, and Bombay. In fact, there are no complaints of their failure. But the receipts of the concern are not yet such as to warrant our considering the business as fully established. As, however, I am enabled to live on the salary I at present receive, and although unable to put any thing by, am not incurring any debts, I am induced to continue in hope of something better. Warburg has tried to serve me by getting a wine-merchant of Dijon to give over to me some wines which he had in the docks, for sale on commission; and although I have not yet been able to make anything by them, I feel obliged to him for his intention, which was good."

"London, 2nd November, 1840.

"Warburg was introduced to Mr. Parker by his particular friend, Sir Andrew Halliday, as a gentleman of property and a scientific physician, who had discovered a remedy which would be of the greatest benefit to humanity; but that, although he was not willing to divulge it, such was his antipathy to quackery, that there was danger of its being lost to the public. Sir Andrew of course believed what he said, and Mr. Parker, finding that Warburg was living in a style that indicated his being a man of some money, entered into partnership with him, and undertook to bring the medicine before the public, and to conduct all the mercantile part of the business, finding whatever capital might be required. Warburg bound Parker not to endeavour to discover his secret, and to allow the former to store thirty-two puncheons of extracts, which were said to contain the effective ingredients of three millions of bottles, where he, Warburg, chose, and in a place which was to be kept secret from Parker. The duties and expenses of these said extracts were stated to be about 600%, which sum was duly paid to Warburg. As Warburg said it was his intention to proceed to Germany to live, Mr. Parker thought it would be a pity he should have to furnish a house for the short time he remained in London, and, as he would require a confidential person to reside on the premises, he thought there would be no harm in furnishing the house at the expense of the partnership, which he did at the cost of 360%. He was, however, somewhat surprised when the medicine came to be prepared, that he had to pay Warburg about 10d. per bottle for other ingredients which were necessary for the preparation of it. Parker then fitted up a laboratory and warehouse for selling the medicine, without any limitation on the score of expense; introduced Warburg to his friends as a gentleman of science and property; and advertised the medicine until he had advanced nearly 3000% on the whole. * * * * *

I must omit some episodes of other discoveries with which Warburg was entrusted from the continent, and was willing to share with Parker, but which the latter did not wish to join in, though willing to use his influence towards their success. Parker continues to take measures to bring the medicine before the public in the most respectable manner possible; and as neither of the partners is in any way dependent on it for an income, is in no hurry to sacrifice its future standing to present notoriety. The reports of its success are highly satisfactory; but a variety of little circumstances occur to throw suspicion on the truth of Warburg's high pretensions, till Parker is at last convinced * * * * *

Such is a meagre sketch of a romance of real life, which, in the hands of a novelist of genius, might be made very interesting. The *dénouement* is, however, yet within the unread events of time, and we can only hope that poetical justice may still be duly awarded. I have proposed to Mr. Parker to make an offer to continue to conduct the business, dissolving the partnership, and acting only as an agent; but he says, that although he has no doubt of the success of the business as a mere mercantile speculation, he will not continue connected in any way with one who has been guilty of such gross misrepresentations, even if the sacrifice should be the sum he has already advanced. In the meantime, orders from the East Indies to a large

amount remain unexecuted. Warburg could now easily get another partner to continue the concern, but he wants 4000*l.* premium in the first instance, which of course is some obstacle. Parker says he would not stand in the way of any new arrangement,—that he does not want to press for what he has advanced, but that he will not allow his capital to remain in the business unless he is satisfied that the 32 puncheons of extracts which were shipped from Demerara by Johnston and M'Calmont are really in existence; and he therefore demands security upon them. This Warburg's lawyers promise, but he still evades giving any proof of their being by producing them."

"23, Portland-place, New North-road, Islington.
1st January, 1841.

Warburg, in fact, had no idea of such an uncompromising character as Mr. Parker, who will not make the slightest sacrifice of what is right to what is expedient. Mr. Parker is most anxious to close the concern, but is willing to give Warburg an opportunity of getting some one to advance the money and so to get out of the scrape.

"23, Portland-place, Islington,
1st June, 1841.

"Your brother is, at present, out of town. He has gone to the west of England. I understand from him that Warburg has given, in security to Winstanley, a shipment of eau-de-Cologne, which, if it do not quite cover his debt to you, will very nearly do so."

I believe you and I concur in opinion as to the ingredients of the "drops;" the only thing in which we differ is as to the value of the medicine,—and really, from the letters we receive, together with the remittances and orders, I am convinced that it is a good form of administering a *certain well-known drug*. It is really not from any failure of the business, as a speculation, that Mr. Parker wishes to withdraw; but from a determination to break a connexion with

He believes the concern would yield a very good income, but he says he is prepared to face the loss of all he has embarked in it rather than compromise his character by assenting to be joined in partnership with the lawyers are negotiating, etc., etc.

"P.S. I believe the humbug you wot of has even imposed on Dr. J. L. Smith, jun. The latter was for some time his oracle, but, I believe, will not now speak to him."

"441, Strand, London, 20th August, 1841.

"After long and frequent delay we have, at length, made a preliminary arrangement with Warburg. He has signed an agreement to supply Mr. Parker with 15,000 bottles of the drops in the beginning of October next; has given bills, bearing interest, for the balance; and, in fulfilling the agreement, he is to have possession of the business, and the partnership is to be dissolved. If Warburg supplies the medicine, Mr. Parker will be in a much better position than we hoped for some time ago. As to the bills, he is bound to furnish medicine to the amount, if they be not taken up when due. We do not expect to get them paid, but they can always be held over Warburg,

I hope this long letter of extracts will not bore you. It will give you an idea of the "drops" and their inventor, such as his advertisements will not communicate; and besides, it is so rarely that a person can get behind the counter of a quack, I thought the exhibition would amuse you. You may use the information in any way you please.

tain resolutions respecting homœopathy, and it was for them to decide as to the propriety of their adoption and promulgation as the act of the Society.

The Secretary, Dr. Routh, then read the resolutions, which are as follow:—

"1. That in the opinion of this Society, the practice of homœopathy, or the prescribing medicines in what are called infinitesimal doses, under a pretence that they are useful in the cure of disease, is founded in palpable error, is a delusion on the part of the practitioner, a deception on the public, and manifestly dangerous to its welfare.

"2. That the Fellows of the Medical Society of London cannot honourably hold any professional communion with homœopaths.

"3. That, consequently, any Fellow of this Society who shall hereafter practise homœopathy, or who shall knowingly meet in consultation any professed homœopathist, will thereby render himself unworthy the fellowship of this Society."

The President then put the first resolution.

Dr. Barnes desired to propose a short amendment, which would not infringe on the spirit of the resolution, with which he thought every medical practitioner would agree. He would recommend the insertion of a few words after "the cure of disease;" for he did not think it right, that they should broadly assert, that "it is founded in error," but rather that, "in the opinion of the Society it is founded in error."

Mr. Chippendale seconded the amendment, which was carried unanimously.

The second resolution was also carried, every hand being held up in its favour.

The third resolution was then put.

Mr. Chippendale said he fully agreed with the spirit of the resolutions proposed to the Society, but he thought the step that had been taken was ill advised, and was attaching too much importance to these persons, whose quackery, like all other dishonourable proceedings, must ultimately fail. He thought the Council had placed them in a false position by calling them together on such a pretext, but as he was there he should vote for the resolution, as otherwise he should stultify himself.

Mr. Clarke had been of opinion that all interference with the homœopaths up to a certain time was wrong; but, after seeing their tactics, and finding them parading their titles and diplomas obtained from colleges and universities where legitimate medicine is taught, he thought it was essentially necessary that such Societies as the Medical Society of London should take a very decided step with regard to that quackery, and should utterly repudiate them, and cast them out from among them. If they came before the public as the Morisons, and Holloways, and such like did, then he would not advise interference with them, but as they put themselves forward as being legally qualified as regular members of the Profession, something should be done to show that the Medical Societies are not a party to it. So far from it not being right now to interfere, he thought they had been too tardy. They should utterly repudiate the quackery in every way, and thus they might stir up the colleges and universities to proceed against them.

Mr. Clifton perfectly concurred with Mr. Clarke, and said that the Medical Societies should show, by their condemnation of this practice, that it is not a mere rivalry, as the public too often suppose it to be. They were bound to do all they could to protect the public from imposition, for these persons paraded medical honours, which, in some instances at least, had been illegitimately obtained. He, as a member of the Council, fully concurred in all they had done in this respect.

Dr. Camps should vote for the resolutions, but was sorry they had been brought forward. He said homœopaths professed to cure without physic, while on the other hand some practitioners deluged their patients with drugs. He thought homœopathy had arisen in consequence of the system of over-drugging. He did not wish to offend, and, if any one felt annoyed at his remarks, he trusted he would believe they were offered in good part. Dr. Camps then proceeded to narrate what he called an instance of over-drugging, where a general practitioner sent in medicine for an infant, his bill for which, he said, amounted to 48*l.*, although only three or four visits had been paid. Dr. Camps was proceeding in this strain, but the unequivocal feeling of the Fellows present, and a call to order from the president, stopped him, and he sat down.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

SPECIAL MEETING.

RESOLUTIONS AGAINST HOMŒOPATHY.

DR. MURPHY, President, in the Chair.

On Friday, the 10th inst., a special meeting of the Fellows of this Society, summoned by circular, was held, to consider the propriety of adopting certain resolutions against homœopathy, recommended by the Council. The attendance of the Fellows was very good, but the rooms were not crowded—owing, we presume, to the absence of visitors. At eight p.m., the President took the chair, and briefly informed the Fellows, that they were met to take into their consideration a very important question, which had been maturely examined by the Council. They were prepared to lay before them, as the result of several of their meetings, cer-

Dr. James Bird, Mr. Harrison, and Mr. Hunt, strongly supported the resolution. Dr. Webster and Dr. Crisp thought it did not go far enough. Dr. Crisp referred to the practice of over-drugging complained of by Dr. Camps, and said it was purely a question of honour among practitioners. The physician and surgeon might pay too many visits, just as the general practitioner might send in too large a quantity of drugs. The matter depended entirely on the honour and honesty of the medical attendant, and he (Dr. Crisp) condemned the practice of introducing irrelevant matter, and of causing ill-will and unpleasant feelings by recriminations.

The resolution was carried.

Mr. Clifton suggested, in order that the resolutions might not be altogether a dead letter, that they be published in the Medical Journals, and in some of the newspapers; so that the public, as well as the Profession, might be fully instructed as to the character of these delusions. If they stopped at merely passing the resolutions, and did not publish them, they would not give that information to the public which it had a right to expect from them, and for which the respectability and standing of that Society would be a guarantee.

Mr. Norton proposed, and Mr. Chippendale seconded, that these Resolutions be published in the Medical Journals, and also in certain daily newspapers, which were specified. The Secretary alluded to the pecuniary condition of the Society, as offering an impediment to the carrying out of this resolution; nevertheless it was carried, and it was suggested, that the Fellows would willingly subscribe to meet the expense.

Mr. Palmer recommended, that the portrait of a former President, now hanging in the meeting-room, should be removed, he having practised homœopathically.

The President said, the meeting was not competent for that purpose, as it was held for a special purpose, and they could not entertain other proposals.

Mr. Palmer then gave notice of this proposition for another meeting, and the Society adjourned.

On the 11th inst., the first ordinary meeting for the present Session was held.

DR. MURPHY, President, in the Chair.

DISEASED JOINTS.

Mr. Gay said, in the course of three or four weeks he should have the honour of laying before the Society some remarks in connexion with a new plan of treatment which he proposed for some forms of diseased joints. He thought when suggestions for any new method of treatment were brought before this Society, that it would be more satisfactory to the Fellows if illustrations of the result of such treatment in the human subject could also be placed before them at the same time, and the practice of this Society had, and, as he felt, most properly, sanctioned such usage. Mr. Gay would have preferred showing the case in question at the time of reading his paper, but the man was dismissed the hospital, and might not be forthcoming at that time, whilst the case presented very valuable evidence of the correctness of his views. Mr. Gay would only then say that the man had had disease of the elbow-joint for five years; that the end of the ulna had become extensively carious; that the cartilages had been removed; that the integuments of the joint were fairly riddled with sinuses; and that in this condition the joint had been deemed, at one of the largest hospitals, unfit for resection and only fit for amputation. Mr. Gay made deep incisions into the joint on each side, and in twelve weeks, although a severe relapse had taken place during the recovery, ankylosis was completely established, and the arm in all respects well.

Mr. Nunn admired the bold treatment pursued by Mr. Gay, with respect to disease in the larger joints. He had employed a similar plan by free incisions in the same state of the joints of the fingers, and with success, the patient recovering considerable use of the parts, but he had not as yet applied the plan to the larger joints, such as the elbow.

In reply to a question from Mr. Cooke, Mr. Gay said, that it was not only in deference to the patient's wish that he had produced ankylosis with a straightened condition of the limb, but that he was inclined to think that in those forms of labour to which the patient was likely to apply himself, such as wheeling a barrow, digging, sweeping, etc., the straight arm was better than the bent.

AMPUTATION OF THE OS CALCIS.

Mr. Gay showed another patient, from whose foot he had, about six months since, taken the os calcis. For extensive and irreparable disease of this bone, the foot would in former years have been amputated. The case presented shows that the functions of the foot were very slightly interfered with by the loss of so large and important a bone; for, as would be seen, the man could walk, and he can climb a ladder as well as ever he could, and his gait was hardly affected by it.

ANEURISM OF THE AORTA.

Mr. Weedon Cooke narrated the following case, which occurred in the practice of Mr. T. Wakley at the Royal Free Hospital:—

An American, 39 years of age, a tailor by trade, was admitted on the 26th September, 1851. For some time past he had complained of a rheumatic pain in the left shoulder, and of general ill health, attributed by Dr. Mott, of New York, to secondary syphilis, for which he was ordered to travel. He accordingly came to England. When admitted, the countenance was expressive of pain and anxious; respiration hurried, with a frequent, short, hacking cough. He complained of great pain in the left shoulder, extending down the arm as far as the elbow. Pulse 92, rather quick; skin cool; tongue moist and nearly clean; bowels open and appetite bad, and sleep prevented by the severity of the pain. On examining the chest a great hollowness was noticed above the clavicles, less marked on the left side, and a comparative fulness on the left side of the sternum, below the clavicle in the first intercostal space, and opposite the second rib. On pressing on this swelling a pulsation was felt much stronger than that at the precordia. By auscultation the sounds of the heart were found to be dull and prolonged, and a bruit was heard on applying the stethoscope over the tumour, but not when over the heart. The respiratory murmur was perfectly natural, but obscured by the sounds of the heart and the bruit. The pulse of the left radial was scarcely perceptible; no difference in the carotids. Some blood had been coughed up, and the sputa was streaked with it. For a few days after admission the hæmoptysis had ceased, but returned in a little while. He died on the 7th of October, after bringing up about a pint of blood. The *post-mortem* examination, made 28 hours after death, showed the following appearances. *Chest*.—Old adhesions of right pleura. Adhesions at the apex of the left lung, surrounding a tumour in that part. Lungs and pericardium healthy. Heart—Left ventricle greatly hypertrophied; all the valves sound. The heart was removed, with the thoracic aorta, œsophagus, lungs, and trachea. In dissecting the parts, the tumour gave way, and a large organised coagulum escaped. No opening could be found into the trachea, bronchi, or their primary or secondary divisions. A small one was found into the œsophagus, at the point where it was divided in removing the parts. A quantity of cellular tissue intervened between the aneurism and the œsophagus, in which was deposited a quantity of coagulated blood. Just beyond the origin of the left carotid, on the convex part of the aorta, began an aneurism of large size, occupying the last part of the arch and the commencement of the thoracic portion of the aorta. The left subclavian arose from the aneurism, and its canal was nearly closed. The anterior and posterior walls of the aneurism were destroyed by ulceration, and the blood prevented escaping only by the adhesions in front to the pleura lining the apex of the lung behind and above, to the pleura forming the upper boundary of the cavity of the chest. It was by an extension of the ulceration at the latter point, that the small communication had been formed with the œsophagus. The inner lining of the aneurism was ulcerated, and, when placed in spirit, a quantity of earthy matter was deposited. The rest of the aorta was healthy. In the preparation which was exhibited to the Fellows, the cavity of the aneurism is kept open by pieces of bougie. One is passed along the left subclavian, and another through a small rounded ulcerated opening in the anterior wall, below the chief ulcerated opening.

PROSPECTS OF THE SOCIETY.

The President, Dr. Murphy, before proceeding to read a paper on the duration of pregnancy, congratulated the Society on the fact that the difficulties in which they were involved were likely to be removed, the appeal which had been made to the members for pecuniary assistance having been warmly responded to. There were only eighteen dissentients in the whole list of the Society. The property in Bolt-court was also let to an eligible tenant; so that their prosperity might be considered to be assured.

HOMŒOPATHY.

He (Dr. Murphy) next referred to the question of homœo-

pathy, which, he said, had been considered with great anxiety by the Council, the result being, the submitting the resolutions respecting it, which were adopted by the Fellows on the preceding night, one of which had reference to the course to be pursued by them when, in ordinary professional intercourse, they are brought into contact with the professors of this new mode of practice. On this and on the other points, he said, under any other circumstances, it would be a work of supererogation for him to assure them, that he fully agreed with them; and that while he occupied that chair, he should endeavour to render these resolutions as efficient as possible. (Cheers.) Dr. Murphy then referred to the accusations that had been made against him; and desired the Fellows to pardon a slight digression, while he sought to correct the misrepresentations, and replied to charges, of which, were he guilty, he should resign that (the President's) chair. (Much applause.) To the first accusation, that he had met a homœopath in consultation, his answer, in the terms of the resolution, was, that he had never *knowingly* done so, and, more than that, that he never would. He had invariably refused when asked so to do. This reply he had already placed on record; but to another and equally serious charge, that in a certain certificate he had assigned as a cause of disease that which could not be true, that if true, its only effect would be to injure the reputation of a most respectable practitioner, and that, therefore, he was bound to retract his words, he had not yet given any public reply. He now stated, that his opinion had been most completely misunderstood and misrepresented. In giving it, he had no intention that it should injure the gentleman alluded to, which it could only do by straining it from its proper meaning. He would willingly have given that gentleman any explanation of that certificate necessary to exonerate him, but his correspondence showed that he did not desire it. It could only be by the most gross misrepresentation that that opinion could be made to indicate any want of skill, attention, or judgment, on the part of that practitioner, for it presumed that the placenta was morbid, that it was of necessity adherent, so that it could not be completely removed, and further, that the disease which rendered it so was the same that afterwards appeared. In this opinion he (Dr. Murphy) may have erred, from not having been acquainted with all the facts of the case; but he trusted that, while admitting this, the Society would discriminate between such an acknowledgment and an admission that his opinion was absolutely erroneous,—that it could not possibly be true. In his correspondence on this subject, he had explained this his view of his opinion, and he still held that it was within the limits of truth. It was formed on the facts that had been placed before him, and if there were other facts subsequent to his visit which might change that opinion altogether, he knew nothing of them. Whether his opinion were right or wrong, he did not think it conveyed any injurious imputation on any one's professional reputation. There was not, therefore, the slightest foundation for either of the charges against him. (Cheers.)

Dr. Murphy then expressed his opinion respecting homœopathy, and classed the professed homœopaths, mesmerists, and hydropathists, with the professed charlatan, who sells his cures under a thousand different disguises. With such men homœopathy becomes a form of quackery, the more dangerous because it assumes the garb of a science. The secret remedy vendor is far more harmless; the public, if they trust in him, do it with their eyes open; but the charlatan who entangles them in the intricacies of a pseudo-science, who bewilders them in the subtleties of the absurd dogma, "*similia similibus curantur*," and presents to them his infinitesimal dose as the ultimate result of his scientific inquiries, is calculated to do a much greater evil, just in proportion as the scientific garb he assumes is calculated to deceive even the judicious and the reflecting. (Applause.) Still he (Dr. Murphy) felt that such a stigma should not be affixed to a Professional brother without just cause, as it would lead to an abuse as great as homœopathy itself. There may be some honest men in the Profession anxious to obtain some valuable grains of wheat from the mass of chaff, and who therefore may order smaller doses than hitherto, and consequently may look like homœopaths. Great caution should be used in classing these with the others, as, so far from aiding in the suppression of homœopathy, he feared it would give it unexpected support, by the dogged resistance to an act of injustice, and its effects on the human mind. He

would say for such men, who have been educated as ourselves, and who, through life have observed the same honourable course, that it is neither just nor prudent to hold them up to public reprobation merely because they happen to order an unusually small dose of medicine. Stronger and more decided evidence of homœopathic dementia should be first obtained, such as an open acknowledgment of the principles of homœopathy as the foundation of their practice, and an admission, that they are converts to these novel doctrines. Then is the time to act with decision and effect. In saying this, he did not wish to shelter the secret homœopathist, or to say that he should not be called upon to declare his faith, to make his election, but to caution the Society against the abuse that may be made of its honest intentions. Professional character is the only property a professional man has; deprive him of that, and you deprive him of everything. This being the case, the evidence against any of our professional brethren should be of the clearest nature before he is singled out as an object for attack or accusation.

DURATION OF PREGNANCY.

The preceding remarks having occupied much time, Dr. Murphy did not propose to dwell long on the "duration of pregnancy," especially as he intended to bring the subject before the Society at a much later occasion, when the facts in his possession could be more fully and more perfectly arranged. He therefore on this occasion limited himself to a mere outline of the method he had pursued, and its results, in the attempt to resolve this difficult problem. He added, that other practitioners, by adopting a similar plan, might aid him in its solution.

The two questions he proposed for consideration are,—Is the duration of pregnancy a fixed or a variable period? and, if it be decided that it is variable, What are the limits of its variation? The usual mode of calculating the term of pregnancy is by dating from the last period of the menses to the time of delivery, the gross results being corrected by deducting as many days as is supposed necessary to avoid error. Some, believing that conception may take place at any time, deduct one-half the menstrual interval; while those who consider that conception can only take place at a menstrual period, date either from the last catamenia, or from that which should have happened, but for conception. This estimate being compared with the period of quickening, a result is obtained sufficiently accurate for ordinary practical purposes; but not precise enough for legal evidence. Other indications have, therefore, been sought for. Peculiar sensations are experienced by some women at the time of conception; some cases of this kind, described by Dr. Montgomery, would tend to fix the duration of pregnancy at 280 days. In other cases it has been ascertained by the date of a solitary intercourse, which, of course, fixes the date of conception; the same period of 280 days is, from such cases, given by Sir C. Clarke and others, and from these facts many are inclined to regard that period as the correct duration of pregnancy. To this opinion, however, Dr. Murphy does not subscribe, as these cases are comparatively few in number, and, if the rule were different, might easily form an exception to it without invalidating it. He would, therefore, call in the aid of statistics for the solution of the problem; this he commenced some years since, at the University College Hospital, when forming a register of obstetric cases. The following method was adopted:—When a letter for attendance was applied for, an inquiry was made as to the catamenia, the age of the applicant at its commencement, its period, and its last appearance. With regard to the last question, some could only give the month, others were precise as to the date, and some were too irregular to date from. The last were excluded from the inquiry, as, for instance, some who were nursing either had no change or a very irregular one; others had been always irregular before pregnancy, and therefore could not be depended on; and again, with others, the catamenia had evidently continued after conception; all these were excluded as the others were noted, and when delivery occurred, that also was noted, the interval between the two giving the gross duration of pregnancy, which was afterwards corrected, so as to make as near an approach to accuracy as possible. Of these cases, some time back, a table of 186 was formed. The corrections were made as follows:—If the period exceeded 280 days, and the woman had given the exact date when she was last unwell, the whole menstrual interval was deducted; so, if the whole period were 328 days, and 28 days were the menstrual interval, 300 days would be regarded as the true duration. It was considered that the woman might be in error, and it was thought safer to suppose that conception occurred just before the catamenia which had been arrested. Subsequently 280 days were regarded as the true period, and in any

cases that exceed, the menstrual period is deducted, the result being presumed to be accurate. From his records of 965 cases, Dr. Murphy has formed four tables: 1st, those in which the duration of pregnancy exceeded 280 days, including 303 cases; 2nd, those that are exactly that period, including 378 cases; 3rd, those between 260 and 280 days, including 201 cases; and 4th, those below 260, including 83 cases. The 4th, or last table, he (Dr. Murphy) looks upon as instances of premature labour. From these tables he gathers that the duration of pregnancy is not a fixed but a variable period, as in the lower animals, varying, however, only within certain limits. Those limits are not yet ascertained. He regards 260 days, or 37 weeks, as the shortest period; he has attended mature infants born at that date. The longest period is yet *sub judice*, the cases in the first table being yet under examination, and requiring correction.

The paper concluded with the details of a case of protracted pregnancy, parturition being delayed till six months and a half after quickening, *i.e.*, two months longer than usual.

Mr. Streeter would make a few remarks on the very interesting subject, so ably sketched by their President. He would ask him, whether, in noting the cases, he had distinguished between the earlier and later pregnancies. (Dr. Murphy answered "Yes.") He (Mr. Streeter) was anxious on the subject, because he thought he had noticed that in the later pregnancies, such as the ninth, tenth, or eleventh, the child was frequently carried much longer, than in those of an earlier period, as if there were a tolerance of the womb to retain the child, after repeated pregnancies. If this were so, it would prove an important element in any statistical inquiry on the subject. In first pregnancies, the child is often born before the time supposed has elapsed, and, in the latter ones, the mother is often out in her calculations as to the time of carrying it. He believed that it is now admitted, that the date is not a fixed one of 280 days, and he (Mr. Streeter) thought there might even be a difference in this respect as regarded races. It was a point, at all events, worthy of further inquiry. He believed that delivery may be retarded by disease; it certainly may be accelerated by a certain condition of the nervous system of the uterus, and it may probably be retarded by disease. He would wish to ask Dr. Murphy his opinion as to delivery being a multiple of the catamenial period. It had been asserted by some writers, but the correctness of the opinion had been disputed. He thought it a question that would be settled by the results of extensive inquiries. There was a difference in the time of menstruation in some women; in some it occurred every three weeks. Was it possible, that in a woman in whom menstruation commenced appearing every three weeks, it could subsequently change its period, and become monthly? He had no facts on the matter, and merely threw out the question, thinking it of importance.

Mr. Chippendale agreed with Dr. Murphy in the opinion he had expressed, that the duration of pregnancy was a variable, and not a fixed period, although his own teacher in midwifery, Dr. D. Davis, believed that it could not exceed 280 days. It was a question of physiology, and required a very large number of cases to decide it. Many exceed, and some fall short of the period named. Similar variations may be met with regarding all questions in physiology. No one doubted the viability of infants born before the time; but the great question was, whether pregnancy can exceed the fixed term. Mr. Chippendale then referred to the well-known Gardner peerage case, where several medical men expressed essentially contrary opinions on this question, leading the then Chancellor to the belief that they knew nothing about it. Several of them swore that pregnancy could not continue beyond the 280th day; but the Profession is now better informed. Nature does not do her duty by clockwork. He had no absolute data to go upon, but he thought that pregnancy might be prolongable or curtailable within certain limits. The average may be taken, but it should be struck from very large numbers. Vital staticians say 10,000 cases are required to make a rule.

Dr. Chowne remarked, that the mode for obtaining information on this point adopted by Dr. Murphy was the only one by which real knowledge could be obtained. It was impossible, from the usages of society, to know the precise moment when utero-gestation commences. That must always be a secret. He had made some investigations on the subject, and he thought that his own results would bear out those already obtained by Dr. Murphy. The Profession were prepared to believe, that utero-gestation had not a

fixed date, but was variable within certain limits; the extent of those limits had not yet been ascertained. In the lower classes of animals, pregnancy often exceeded the alleged date; in some instances, as much as one-fifth of the whole period. Dr. Denman had said, he did not see why the duration should not be fixed in the human being, as in the lower animals. He (Dr. Chowne) would take the converse of this, and say, he did not see why it should not be variable in human beings as it is in animals. He looked forward with great interest to the paper Dr. Murphy had promised them, as offering more facts to enable them to come to a conclusion, which, however, must be approximative only. One of the witnesses in the Gardner peerage cause had spoken of a pregnancy continuing ten months. The Lord Chancellor, commenting on this, had said, he would rather believe the patient had wandered from virtue, than that nature had wandered from her course.

Mr. Dendy thought the question was regarded too much in a physiological point of view; it was often strictly pathological. The allusions to the lower animals were irrelevant, as man *drudges* all the year round, and animals only once a year. He referred abortion often to repeated acts of intercourse. Fox-hunters are much more careful with their brood-mares than they are with their own wives. When the mare is in foal, no access to the horse is allowed, and other precautions are taken; but he has no idea of acting thus with regard to his wife. (Laughter.) Few pregnant women in this metropolis act like Christian women. They will dance the polka even within a week of their confinement. Indeed, he was sorry to say, he had himself seduced a patient so as to lead her to do that. (Great laughter.)

Dr. Murphy, in reply, wished it to be fully understood, that the paper this evening was a mere outline, to point out to the Profession a mode in which they could aid in resolving this great question. No other question has thrown greater obloquy on the Profession than this.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following Report of the Receipts and Expenditure of the College in the year, from Midsummer-day, 1850, to Midsummer-day, 1851, has just been published by order of the Council:—

The RECEIPTS amounted to £9623 8s. 10d., from the following sources of Income, *viz.* :—

	£	s.	d.	£	s.	d.	£	s.	d.
Court of Examiners	8220	17	0						
Fees on Admission to the Fellowship	126	0	0						
Certificate of having received the Diploma	5	5	0						
Fees on Admission to Council and Court of Examiners	63	0	0						
Sale of List of Members, Catalogues, &c.	186	15	0						
				8601	17	0			
Dividends on Investments in Government Securities				1021	11	10			
							9623	8	10

The DISBURSEMENTS amounted to £9215 18s. 10d., divided under the following heads, *viz.* :—

	£	s.	d.	£	s.	d.	£	s.	d.
I. College Department,—including Council, Court of Examiners, Auditors, Fellowship, Diploma Stamps, List of Members, Law Expenses, Salaries, Wages, Coals, &c.	5720	15	7						
II. Museum Department,—including Catalogues, Specimens, Spirit, Bottles, Studentships, Salaries, Wages, &c.	2277	16	11						
III. Library Department,—including purchase and binding of Books, Salaries, &c.	459	19	1						
IV. Miscellaneous,—including Taxes, Insurance, Furniture, &c.	562	18	7						
V. Repairs and Painting	22	8	4						
VI. Under Deeds of Trust,—including Oration, Lectures, Prizes, &c.	172	0	4						
				9215	18	10			
Balance at the Bankers, Midsummer-day, 1850	1031	19	1						
Balance at the Bankers, Midsummer-day, 1851	624	9	1						
				407	10	0			
							£9623	8	10

SUMMARY.

	£	s.	d.	£	s.	d.
Incidental Income	8601	17	0			
Permanent Income	1027	11	10			
				£9623	8	10
Incidental Expenditure	5146	9	0			
Permanent Expenditure	4269	9	10			
				£9215	18	0

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 10th inst. :—

ATKIN, GEORGE, Sheffield.
 BUTCHER, JOHN BREAY, Devonport.
 COCKERTON, RICHARD, Trinidad, West Indies.
 EVANS, OWEN SPENCE, Wilton-crescent, Belgrave-square.
 FARNCOMBE, THOMAS BEARD, Bishopstone, Sussex.
 GRAVES, RICHARD CROKER, Chester.
 LARMUTH, MARK OLIVER, Salford, Lancashire.
 NAYLOR, GEORGE ROBINSON, Calcutta.
 PEARL, EDWARD, Hoxne, Suffolk.
 SCOTT, GEORGE, Denmark-hill, Camberwell.
 WILLIS, THOMAS, Upper Ormond-quay, Dublin.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, October 9 :—

DOUBLEDAY, JAMES, Blackfriars-road.
 PARTRIDGE, SAMUEL BOWEN, Newport, Monmouthshire.

MILITARY APPOINTMENTS.—6th Dragoon Guards: Assistant-surgeon George Fenton Cameron, M.D., from the 3rd Foot, to be assistant-surgeon, vice Carline, deceased. 9th Light Dragoons: Assistant-surgeon Edward Bailey Tuson, from the 53rd Foot, to be assistant-surgeon, vice Macpherson, promoted in the 59th Foot. 11th Light Dragoons: Surgeon John Mure, M.D., from the 72nd Foot, to be surgeon, vice Patrick O'Callaghan, M.D., who retires upon half pay. 3rd Foot: Assistant-surgeon Dowell O'Reilly Clayton, M.D., from the Staff, to be assistant-surgeon, vice Cameron, appointed to the 6th Dragoon Guards. 11th Foot: Assistant-surgeon Edward William Young, from the Staff, to be assistant-surgeon, vice Guy, appointed to the Staff. 18th Foot: Assistant-surgeon David Ogilvie Hoile, M.D., to be assistant-surgeon, vice Batt, appointed to the Staff. 41st Foot: Assistant-surgeon Richard Woodley, M.B., from the Staff, to be assistant-surgeon, vice Swettenham, promoted on the Staff. 47th Foot: Assistant-surgeon Lawrence Mackenzie, M.D., from the Staff, to be assistant-surgeon, vice Richardson, deceased. 53rd Foot: Assistant-surgeon Alexander Macrae, M.D., from the 93rd Foot, to be assistant-surgeon, vice Tuson, appointed to the 9th Light Dragoons. 59th Foot: Assistant-surgeon Ewas Macintosh Macpherson, from the 9th Light Dragoons, to be surgeon, vice Powell, appointed to the Staff. 72nd Foot: Staff-surgeon of the 2nd class Wm. Campbell Seaman, M.D., to be surgeon, vice Mure, appointed to the 11th Light Dragoons. 93rd Foot: Wm. Stewart James Horne Munro, M.D., to be assistant surgeon, vice Macrae, appointed to the 53rd Foot. Ceylon Rifle Regiment: Acting assistant-surgeon Robert Orr Crichton, M.D., to be assistant-surgeon, vice Tweddell, appointed to the Staff. Hospital Staff: Staff-surgeon 2nd class, Robert Winchester Frazer, from half-pay, to be staff-surgeon of the 2nd class, vice John Hartley Sinclair, M.D., who retires upon half pay. Surgeon George William Powell, M.D., from the 59th Foot, to be staff-surgeon of the 2nd class, vice O'Flaherty, deceased. Assistant-surgeon W. Kilner Swettenham, M.D., from the 41st Foot, to be staff-surgeon of the 2nd class, vice Seaman, appointed to the 72nd Foot. Assistant-surgeon Thomas Guy, M.D., from the 11th Foot, to be assistant-surgeon to the Forces, vice Robertson, who resigns. Assistant-surgeon Edgar Dumaresq Balf, from the 18th Foot, to be assistant-surgeon to the Forces, vice Young, appointed to the 11th Foot. Assistant-surgeon Fenwick Martin Tweddell, from the Ceylon Rifle Regiment, to be assistant-surgeon to the Forces, vice Macintyre, deceased. Acting assistant-surgeon, W. Arthur Thomson, M.D., to be assistant-surgeon to the Forces, vice Clayton, appointed to the 3rd Foot. Robert Thomas Buckle, M.D., to be assistant-surgeon to the Forces, vice Mackenzie, appointed to the 47th Foot.

NAVAL APPOINTMENTS.—Acting Assistant-Surgeons Henry Harkan, to the Victory, flag-ship at Portsmouth, and Francis Hardinge to the Impregnable, flag-ship at Devonport.

UNIVERSITY OF CAMBRIDGE.—Examinations for the license *ad practicandum in medicina* will commence on Monday, Nov. 3, at 10 a.m., at the Arts' School, and continue the three following days. Candidates for the degree of Bachelor of Physic will be examined at the same time by the Regius Professor of Physic, the Professor of Anatomy, and the Downing Professor of Medicine.

QUEEN'S COLLEGE, BIRMINGHAM.—The presentation by the Queen, of Her Majesty's portrait to this Institution, and the distribution of the annual prizes to the students, formed the occasion of a large meeting at the Town Hall, Birmingham, on the 6th

instant. In the absence of Lord Lyttelton, the Principal of the College, the Rev. Chancellor Law, Vice-Principal, presided, supported by the Archdeacon of Coventry, the Professors of the College, and a number of the clergy of the town and neighbourhood. From the Report read we make some extracts. The Council referred, with sentiments of the deepest gratitude, to the condescending kindness of Her Majesty the Queen, in presenting to the College Her Majesty's portrait, as a distinguished mark of royal favour. The decease of Dr. Johnstone had deprived the College of one of its earliest and most constant friends and supporters. He was among the first to assist and further the efforts of Mr. Sands Cox in the establishment of the School of Medicine in this town; and on the granting of the Royal Charter, he became the first Principal of the College. The Council had again to record, with sincere gratitude, the continued munificence of their great benefactor, Dr. Warneford, who had granted during the past year 500*l.* towards the further endowment of the wardenship, and 1400*l.* towards the further endowment of the professorship of pastoral theology. The anatomical museum had been re-arranged under the direction of Mr. Sands Cox, who, as Dean of the Faculty, had kindly undertaken the charge of its general management. Among the most remarkable specimens contributed to the Natural History Museum, were—a specimen of monstrosity presented by Mr. Guest, of Hall Green; a rare species of crocodile from Theophilus Richards, Esq.; and specimens of seals and fishes buried in guano 300 feet below the surface, presented by Mr. A. Preston.

"Medical Department.—The Council have had the satisfaction of confirming, by election, the recommendation of the Professor, and appointing Dr. James Johnson joint Professor of the Practice of Physic, and Dr. Samuel Wright joint Professor of Materia Medica and Therapeutics. Mr. Jordan, of King's College, has been elected on high testimonials to the office of medical tutor. The medical department has been attended by seventy-three students during the year. Thirteen students during the year have passed their examination at the Royal College of Surgeons, without any residence elsewhere, viz. Messrs. Roland, Freer, Spark, Darwin, Stead, T. Lowe, Wall, Ellis, Russell, Dunn, Warrilow, Blake, and Bull. Considerable improvements are now completed in the arrangements for accommodation of the resident medical students—the non-resident students have been placed under the surveillance of the senior tutor, and subject in some degree to college discipline. Under this improved regulation, one of the gold medals given by the Governors for regularity of conduct and attendance at chapel for three years, has been awarded to Mr. Russell, an out-student. The following prizes, among others, were awarded :—Medal, Anatomy, Russell, Netherton; certificate, Anatomy, Coleman, Wolverhampton; certificate, Practice of Physic, Banks, Birmingham, and J. Smith, Birmingham, equal; medal, Forensic Medicine, Franks, Whittlesea; medal, Midwifery, Webb, Barton; medal, Midwifery, Perry, Aylton; certificate, Midwifery, Stillman, Birmingham; medal, Surgery, Webb, Barton; certificate, Surgery, Russell, Netherton; medal, Materia Medica, Harris, Wardington; certificate, Materia Medica, Franks, Whittlesea; medal, Botany, Harris, Wardington; certificate, Schofield, Hall-green; medal, Chemistry, Franks, Whittlesea, and Wilkinson, Northleach, equal; certificate, Cantwell; books, Anatomical Demonstrations, Franks, Whittlesea; books, Medical Tutor's prizes, Arden, Weymouth, and Bond, Weymouth, equal. *Matriculation Certificates of the London University.*—Examination for honours: Second place in chemistry, Bond; sixth place in chemistry, Wolston; first place in zoology, Bond; second place in ditto, Wolston. First class, Baxter, Bond, Smith, Wolston, Froyssell. Second class, Trevor, Coleman, Turner, Stedman, T. Davis, John Davis, Down.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—A half-yearly general court of the members of this Society was held on Wednesday evening, the 8th instant, in the Library, at No. 53, Berners-street, by permission of the Council of the Royal Medical and Chirurgical Society; Sir Charles Mansfield Clarke, Bart., the President, in the chair. From the minutes read it appeared, that a Committee had been appointed to consider the present position of the Society in connexion with the Commissioners for the Reduction of the National Debt, and the future investment of the funds, as affected by the new Act regulating Friendly Societies, 13 and 14 Vic., c. cxv. The Report of the Committee was read, containing the questions submitted to counsel on the subject, drawn up by Mr. Upton, Solicitor to the Society of Apothecaries, with the answers thereto, and recommending, that the Society should not restrict the amount of its annual grants made to widows, either of old or of new members, within the sum of 30*l.* allowed for Friendly Societies investing with the National Debt Commissioners under the new Act; but that all new investments should be made in the New 3½ per Cent. Annuities; that 2000*l.* be withdrawn

from the sum now deposited with the Commissioners, and invested in the names of new trustees, to form a fund for the future grants to widows of new members; and that such fund should be increased, and the old fund diminished, as the relative demands upon each may, in course of time, be found to require. These recommendations the Court of Directors had adopted. On the recommendation of the Court of Directors, the sum of 20*l.* was voted as a donation to a widow who was not eligible to receive the usual relief, her husband not having been two years a member at the time of his death. A Committee has been appointed, to revise the laws of the Society; it will be assisted by Mr. Upton; and members are to be invited by circular to communicate, under cover to the Secretary, Mr. C. R. Walsh, any alterations which they may have to suggest. A ballot took place for the election of officers, the six senior Directors, viz., Drs. Burrows and Ferguson, Messrs. Wormald and Lucas, Law and Sterry, having retired in rotation. Drs. Little and Hamilton Roe, Messrs. Walne and H. Fisher, Wm. Self and Hanks, were elected Directors. Thanks were very cordially voted to the President, Sir Charles Clarke.

M. DE SAVIGNY, member of the Academy of Sciences, and known by his works on zoology, recently expired in Versailles at an advanced age.

PROGRESS OF EPIDEMICS.—At the latest date, the cholera had not entirely ceased either in Quebec or Montreal, in Canada. In the former city, several soldiers, and at least one officer, have fallen victims to the disease. The sudden recent cold weather, although very severe, has not in any way checked the progress of the epidemic. It is raging with great fatality at Cynthiana, Kentucky. One or two cases of the fever have occurred in Oporto since the last report. From a report read before the *Instituto d'Incoraggiamento*, at Naples, it appears, that the fungus which has attacked the grape, is a cryptogamous plant, of the family of the *Torulaceæ*, and genus *Mucidina*. The microscope shows, that it consists of articulated filaments branching out in every direction, spreading upon the epidermis of the fruit, without penetrating it, and representing the root, otherwise called *micelium* in plants of this kind. Other filaments, also articulated, but simple, shoot out vertically from the former, and end in a whitish *spora*, or germ, by which the species is generated. This plant acts injuriously on the vine by intercepting air and light; this, after a time, causes a disease of the epidermis and parenchyma, which manifests itself by black spots on the surface. In its earlier stage of existence, the grape drops from the vine; if attacked at a more advanced period, its growth is stopped, and putrefaction commences. All kinds of vines are liable to disease, but more especially those which have white grapes. The vitus *lustrusæ*, which is much used in Italy to colour wines, also suffers from the disease. Professor Carster says, one part of lime to twenty of water acts as preventive, but not as curative of this blight.

SMALL-POX.—STRANGE PROCEEDINGS.—On the 10th inst. a cab-driver applied to the sitting magistrate at Southwark, for advice under the following circumstances:—It appeared that an inmate of Guy's Hospital had been seized with small-pox, and while labouring under that exanthem had been placed in the applicant's cab, he being ordered to take the sufferer to the small-pox Hospital. There he was refused admission, and, consequently, he was taken back again to Guy's, where the authorities would not take him in; after some time, the poor miserable wretch, thus driven about from charity (?) to charity, (?) was, finally, brought to the Police Court. The poor man seemed to be very ill, and appeared as if he ought to be in bed, instead of riding about the town from hospital to hospital. The magistrate, Mr. Arnold, expressed his surprise "at the incautious (?) act of the Guy's authorities in sending a small-pox patient to the hospital in a public cab, and that, too, at a time when those vehicles are in such demand, and said that great blame was attachable somewhere. There was the fact, that a man with small-pox had been put into a cab to be driven to an institution, which, after all, it was alleged, had refused him admission. There must have been an utter carelessness as to what was to become of the poor patient, then shivering in the vehicle at the door of the court, instead of being properly attended to at one of those institutions which abound in the Metropolis." The poor wretch was sent to the workhouse, and the cabman ordered to fumigate his cab before he used it again. [Should this poor fellow, thus cruelly sent about from pillar to post, die, and should it be proved that death was caused or hastened by the extreme brutality and reckless carelessness to which he was subjected, against whom would a verdict of manslaughter lie? Such a verdict would be a most just one; and if such an occurrence were to happen, we trust it would be accorded. The newspapers, in recording this shameful act, should also have given a description of the cab, and its number, so as to guard the public against the danger of infection.]

FOUL AIR IN WELLS.—A correspondent of the *Builder* says, with reference to the best mode of using lime for the purification of wells, "put some unslaked lime into a large bucket, (not so much as to cause it to fall over when it becomes slaked,) and before lowering the bucket into the well, pour a sufficient quantity of water on the lime to slake it; immediately that the water has been put to the lime, let the bucket and its contents be lowered to the water in the well, but not so as to go into it. In a few minutes the well will be cleared of the foul air, the slaking lime either taking up the noxious air or forcing it out of the well." So many lives have been lost in consequence of foul air in wells, that these directions cannot be too widely made known.

THE MASTODON.—The bones of an extinct species of the mastodon have been dug up from a bog near a small stream in the town of Green, Sussex county, New Jersey, U.S. A tusk was obtained, 10 feet in length, weighing 165 lbs.; some teeth, 10 inches long, and 28 in circumference, weighing 7lbs. each; and a fore-leg or shin bone, measuring 3 feet 6 inches from the fetlock to the knee. Remains of these monsters have frequently been found in the valley of the Delaware and its tributaries; and the Indian traditions would tend to show, that at an early period they were well known there, and that they migrated thence to the westward, probably to the valley of the Ohio, where their bones are often found. Those discovered in Green Town are said to be in good preservation, and will probably be collected, and the skeleton re-constructed.

A duty of 1*s.* per ton is, it is said, to be levied on all shipping entering the Gambia, on the coast of Africa, for the next three years, in order to establish funds for the maintenance of a civil hospital on that coast, where epidemic disease is very prevalent.

A FEMALE SOMNAMEULIST, named Saucerotte, pretending to cure disease, has been condemned in Paris to eighteen months imprisonment, and 315 francs fine. She pretended she could induce a trance at any time by smelling a bag, which, on examination, was found to contain only bits of a common plant. She charged 15 francs for the first consultation, and 10 for every succeeding one. She prescribed certain waters, for which she charged 5 francs a bottle, and sundry secret preparations, called the pommade de Mela, the topique Indien, and the baume de Haarlem. Her connexion, especially in the country, was very extensive. Some of her dupes were produced in court. One, a baker, swore she was better than all the physicians in the world, for she had several times cured his headaches, by prescribing a cup of tea with a little rum mixed with it, charging only 5 francs for so prescribing, instead of 10. Another, a wood dealer, said she had removed the sorcery affecting his house. In two years he had paid her 1500 francs (60*l.*) for her remedies, and his mother-in-law had paid 5000 francs (200*l.*); but she had the advantage of a remedy prepared by two friends of the prisoner, one the hermit of Passy, and the other the Archbishop of Constantinople. The last-named personage, or rather the man who pretended to be the archbishop, a person named Martini, was sentenced to six months' imprisonment, for participating in the fraud; and a druggist, called Busquet, was fined 200 francs (8*l.*), for having prepared some of her prescriptions, and sold certain secret remedies to her order.

THE SALE OF ARSENIC ACT.—Another conviction has taken place under this Act, which will eventually do much good, and be the means of saving life and preventing the commission of crime. The *Blackburn Standard* states, that on Wednesday se'nnight, Abraham Sefton, of Church, near Accrington, druggist, was charged at petty sessions, by the superintendent of police, with having unlawfully sold to Mary Lowe two ounces of arsenic, she not being of full age, and the poison not being mixed with soot or indigo, as required by the Act. The sale was proved, and the excuse alleged by Sefton was, that he did not know the Act was in force, and thought that the purchaser was 21 years of age. He was fined 5*l.*, and costs, the presiding magistrate, Mr. Eccles, expressing a hope, that it would act as a caution to other druggists. We trust that the provisions of the Act will be speedily extended to the sale of all other poisons, so that the suicide and the murderer may be baulked in their desire for crime.

ERRORS to a considerable amount have been discovered in the accounts of the Bengal Medical Fund with Government. This fund is raised by sums compulsorily appropriated annually, under the name of subscriptions, from the pay of the medical officers; and we trust that those who have declared, or may hereafter do so, upon it, will not suffer in their interests by them. If the defalcations and losses have arisen from the misconduct of the Company's employes, John Coompanie should make them good. It is said, that in this and in other instances they are owing to the dishonesty of the native subordinates.

THE *New York Herald* says, that "a man in Monson, Massachusetts, upwards of seventy-five years of age, has a third set of front teeth growing." Such cases have occurred before, and even later in life.

POISONING BY MUSHROOMS.—Two officers of the Belgian cuirassiers, died lately at Bruges, poisoned through partaking of a dish of mushrooms. Their sufferings were very great, and it is reported, but we doubt the truth of the report, that one of them broke his back during the convulsions. The more fearful circumstance connected with the case is, the declaration of several medical men and chemists, that the mushroom poison is really contained in the true *agaricus campestris*, or common mushroom, after a certain stage of growth, an opinion that is in some degree supported by Orfila.

THE poor woman upon whom the operation of the Cæsarian section was performed at Guy's Hospital, about three months since, died lately, from the progress of the carcinomatous disease, which rendered hysterotomy necessary.

QUEEN'S UNIVERSITY, IRELAND.—At a meeting of the Senate of this University, the following candidates obtained the degree of M.D., after seven days' examination:—Robert J. Black, James Dickson, Charles G. Lester, John Moore, Washington Murphy, Thomas Plaine, and Thomas Wheeler. Mr. Dickson obtained the first exhibition, and Mr. Moore the second. The day for conferring the degrees is not yet fixed.

REGISTRATION NOTABILIA.—Nine hundred and fifty-three deaths were registered in London in the week ending last Saturday. The average, corrected for increase of population, may be stated as 1014, on which the deaths of last week show a decrease of 61.

Zymotics.—The zymotic, or epidemic class of diseases, produced 242 deaths, or more than a fourth of the total amount; while the corrected average is 278.

Prejudice against Vaccination.—The number of fatal cases ascribed to small-pox is 18, all of which occurred to children, and in none is it stated that the patients had been previously vaccinated. The neglect of vaccination is repeatedly noticed by the Registrars, and their observations on this subject deserve attention. In North St. Giles, at 21, Lumber-court, the daughter of a butcher, aged 3 years, died of small-pox after nine days' illness. Mr. Simpson, remarks, that "this is the second death within a week from small-pox in this family; a brother, aged 6 years, having died of the disease. In neither case had vaccination been performed, the general adoption of which is loudly called for in poor and overcrowded districts, where so many fatal cases occur, owing to the epidemic diffusion of the disease, as well as a greater degree of susceptibility." In Haggerstone-west, at 75, York-street, the son of a bricklayer, aged 2 years, died of "confluent small-pox (10 days)." This (Mr. Bowring adds) furnishes another example of prejudice. Four months ago I requested the parents to vaccinate their children, as small-pox was in the neighbourhood; but they did not consent. The following is from a letter of the medical attendant of the above case:—On the 20th of last month I attended a girl, aged 8 years, for an attack of small-pox, and was informed by her mother that there were two of her children who had not been vaccinated. I requested her to allow me to vaccinate them, but could not prevail, although I warned her of the consequence. The result is the death of one, and the other is now suffering from the premonitory symptoms of the disease, which I have no doubt will terminate fatally. Since my appointment to this district, I have frequently experienced great opposition from parents to have their children vaccinated, and without the enactment of some stringent measure to compel parents and others to submit, there is no chance of getting rid of this loathsome disease." In South St. Giles, at 9, Great Earl-street, the daughter of a lawyer's clerk deceased, aged 4 years, died of small-pox, without medical attendant. Mr. Faulkner mentions that "this child has never been vaccinated. The mother had applied to a medical man, who refused to attend, as he said 'small-pox was contagious, and he might take it.'" [Can this be true?—*Ed. Med. Times.*]

Scarlatina.—Among epidemics it is evident that scarlatina is making progress. In the last week of August it was fatal in only 20 cases; since that period the weekly numbers have run thus: 29, 27, 41, 41, 48, and in last week, 55. In All Souls, Mary-lebone, at 14, Castle-street-east, on 4th October, the son of a carman, aged 2 years, died of scarlatina maligna. Mr. Wallington observes: "This house is very defective in ventilation and drainage, and is reported to be in a dirty condition. It is let out in single rooms, and from the testimony of

the medical men attending patients there, it appears to be particularly unhealthy. Since 13th May last I have registered the deaths of three children from scarlatina maligna (ages from 2 to 4 years,) and of two from convulsions and whooping-cough, &c., (ages 1 month and 10 months), all of which deaths occurred in this house." In the south sub-district of West London, at 1, Dean-street, St. Andrew's, the son and daughter of a compositor, aged respectively 18 months and 3 years, died of scarlatina. Mr. Nason states, that "in the family were six children, all of whom were laid up with scarlatina, but the four who remain are now convalescent; the house is clean, well ventilated, and has a good supply of water."

Diarrhœa and Dysentery continue to decrease; the number from these diseases which in the first week of September rose to 200, has now, with the decline of temperature, fallen to 54. Four deaths from cholera were registered during the week.

Typhus has lately shown a disposition to increase, and in last week carried off 60 persons, of whom one half were of middle age. On the 4th inst. the daughter of a labourer, aged 18 months, died, at 16, Orchard-grove, Balls-pond, of fever, (followed by diarrhœa,) which in the medical certificate is attributed to "the want of proper drainage." Mr. Butterfield describes, also, the Lower-road, Islington, which crosses the top of the place above-mentioned, as very defective in drainage.

Miscellaneous.—Among other classes of diseases, besides the epidemic, the most important are the tubercular, (including phthisis,) which numbers 173 deaths in the present return; that of affections of the respiratory organs, which numbers 111; diseases of the brain and nervous system, which number 97; and diseases of the digestive organs, which number 72.

Cases of a Special Character.—At 96, Leman-street, White-chapel, a cigar-maker, aged 28 years, died of "sunstroke, (9 months previously,) effusion on the brain." A rope-spinner, aged 68 years, died in the workhouse, Borough-road sub-district, of "inflammation in the arm from venomous bites," which, according to the Registrar, were inflicted by a wasp. In St. George-in-the-East, at 18, Raymond-place, the wife of a chimney-sweeper, aged 29, died of "cancer of the uterus; she had undergone the Cæsarian section 3 months and 9 days before death." It is stated by the Registrar that the child is alive, and doing well. The widow of a labourer died at 1, Dudley-court, St. Giles-in-the-fields, of dropsy, at the advanced age of 100 years. She was a native of Ireland. Her hearing, sight, and other faculties were good to the time of her decease. During the last 20 years she worked as a porter in Covent Garden market. The deaths of a man and a woman are directly ascribed to intemperance, while another female is stated to have committed suicide in an unsound state of mind produced by drinking.—*Registrar General.*

DEATHS in the Metropolis for the week ending Saturday, October 11, 1851.

CAUSES OF DEATH.	Oct. 11.				Sum of Ten Weeks.
	0	15	00	All Ages.	
ALL CAUSES.	433	342	174	953	9220
SPECIFIED CAUSES	432	340	174	946	9174
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	184	46	12	242	2529
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	2	18	25	45	506
3. Tubercular Diseases.	46	120	7	173	1639
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses, ...	41	27	34	97	1017
5. Diseases of the Heart and Blood-vessels	4	29	11	44	288
6. Diseases of the Lungs, and of the other Organs of Respiration ...	48	35	28	111	1098
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	22	22	11	72	595
8. Diseases of the Kidneys, &c. ...	...	11	5	16	101
9. Childbirth, Diseases of the Uterus ...	1	9	...	10	108
10. Rheumatism, Diseases of the Bones, Joints, &c.	2	3	1	6	57
11. Diseases of the Skin, Cellular Tissue, &c.	1	...	...	1	9
12. Malformations	3	...	...	3	32
13. Premature Birth and Debility ...	31	4	...	35	233
14. Atrophy	20	...	...	20	152
15. Age ... ..	...	...	33	33	468
16. Sudden	2	1	4	7	87
17. Violence, Privation, Cold, and Intemperance	14	14	3	31	215
Causes not Specified	1	2	...	7	46

TO CORRESPONDENTS.

[To the Editor of the Medical Times.]

SIR,—The other day, the Right Hon. Sir F. Pollock, Lord Chief Baron of the Court of Exchequer, took occasion to remark, at St. George's Hospital, after the prizes had been delivered, that "the honour which the Crown had in its power to dispense, hereditary or otherwise, were open to him" (i.e., the medical man.)

It is difficult to say, what term ought to be applied to such a statement. The only hereditary honour open to a medical man is a baronetcy, which is constantly conferred in other ranks, on men scarcely capable of understanding exactly what a baronetcy means.

Is the Lord Chief Baron not aware, that the Crown has deliberately ignored the claims of those who daily save the lives of thousands, and that the merits of a man like Hunter or Jenner weigh as nothing in comparison with the accumulation of two millions in the funds, or a series of unmeaning capers at a civic ball?

I am, &c.,

J. B.

[To the Editor of the Medical Times.]

SIR,—Perhaps Mr. Syme will have the goodness to make the medical world acquainted with his excellent plan of treatment in gonorrhoea. Strange as it may seem to him, there are many surgeons in London who would actually like to put in force a more speedy and effectual method of treatment than that now in use, even though it should threaten to reduce them from affluence to comparative poverty.

If this boast of Mr. Syme's have any foundation whatever, all I can say is, that the Edinburgh surgeons, and he in especial, have very much improved in their plan of treatment, which, when I was a student there, (in 1843,) was as bad as it could be.

The University of Edinburgh, the hospital, and the surgeons, have sins enough to answer for; and it is equally arrogant and unwise on the part of this Ishmael of surgery to direct public attention to them. Let any one turn to the pages of your own Journal, Vols. XII. and XIII., and read the revelations of "O. P. Q." and "Jackson Briggs."

Mr. Syme should write a book on gonorrhoea, and illustrate its pathology by a preparation in wax, in the possession of Dr. Alexander Wood. Ophthalmic gonorrhoea should not be lost sight of, and the heaviness of continuous repetition be enlivened by a history of the eye case in which Mr. Liston took such a prominent part, and in which, according to Professor Miller, the Hospital of Edinburgh did not shine. Finally, as episodes, he might introduce the authentic history of the retirement! (God save the mark!) of Mr. McKenzie and Dr. Cormack, etc., from their respective posts.

Before blindly giving his assent to Mr. Syme's assertion, I should recommend every one to read some lectures by Dr. Knox, in the "Medical Times," touching this subject.

I am, &c.,

A SURGEON,

(fortunately) on this side of the Tweed.

A Second Year's Student at the London Hospital.—We have received the quackish advertisement, and we regret to say, that it describes a system of practice only too common in low neighbourhoods. We are almost ashamed to reprint bills of this character, and would gladly hide from view such disreputable doings. If exposure could do away with the practices condemned, our columns should be open to the insertion of every unprofessional note, bill, and placard issued to the public; but we fear that the only certain prevention consists in a thorough reform of the Profession, and a re-arrangement of our relations with the sellers of drugs.

A Country Surgeon.—The Editor of the "Homœopathic Journal" either committed an extraordinary mistake in classing Sir J. Clark and Dr. Locock as partisans of their delusion, on account of their prescribing very small doses of belladonna; or was grossly ignorant of the literature of our Profession. Minute doses of belladonna have been prescribed as prophylactic of scarlatina with great apparent advantage, years before the disciples of Hahnemann were *in esse*. It has remained for an Editor of the present day to claim the writers of such prescriptions as participating in their delusion. As well might they also claim those who direct a carefully-regulated regimen and diet,—the principal, if not the sole cause of any success that may attend the infinitesimal doses.

F. M. S. L.—The Society acted very properly in refusing to listen to the attack on the General Practitioners, and the puff for Physicians. The statement made was so manifestly absurd, that we cannot but wonder that any sensible man should credit it. Those who affect to despise General Practitioners should remember, that some of the most talented physicians have commenced their professional life in that way. Among these we may mention Cullen, Dr. John Armstrong, Dr. James Johnson, Dr. Gillespie, Dr. Massie Good, Dr. A. T. Thomson, Sir D. Dundas, Sir D. Davies, and very many others, including all the medical officers of the army, navy, Ordnance, and East India Company. The charge of drugging is a very erroneous one; when the practice obtains to any considerable extent, it is certainly blameable, but the public have to thank themselves, more than the Profession are to blame. Each case in that respect must stand by itself, as some diseases and some constitutions require more medicines than others. As Dr. Crisp very properly observed, between the general practitioner, the physician, and the surgeon, it is a mere question of honesty; where the first-named may act wrongly in over-drugging, the physician may do the same in over-visiting, and the surgeon in over-dressing wounds, etc. The squabble which the M.D. in question sought to get up, to raise his order at the expense of his professional brethren, would have been altogether unworthy the Society, and would have given much occasion of triumph to our enemies. This M.D. acted like an enemy in disguise.

THE NECESSITY FOR A MEDICAL ETHICAL SOCIETY.

[To the Editor of the Medical Times.]

SIR,—What occurred to me last evening at the opening of a body by two

medical men residing in King's-place, Commercial-road East, the elder styling himself an M.D. St. Andrews, and a contributor to the pages of a medical journal (on scarlatina), it is with much pain I am compelled to lay the facts of the case before the public, through the medium of your widely-circulated Journal; and they are the following:—A man was found dead on Sunday last in Grove-street; a jury was empanelled before Wm. Baker, jun., Esq., and there being so direct evidence as to the cause of death, an adjournment took place, and was subpoenaed to make a *post-mortem* the same evening, which I did, accompanied by Dr. Rygate, of Colet-place. The results of that operation were satisfactory, and the cause of death very evident. Just at the completion of the operation, the two persons before mentioned entered the room, and the elder one informed me, the foreman of the jury (a patient) wished him to make the necessary examination, and be prepared to give evidence at the next meeting of the jury. Would you believe, Sir, that the M.D. did proceed to examine the body, and thrust his hands into the chest through the small aperture not sewed up, and interrupted the young gentleman who was performing it? With pain I compelled him to desist, and completed it myself. As a matter to be expected, crimination and recrimination took place. During sixteen years' practice in the parish of St. George, I am hoped to believe this case stands unique and unparalleled. Conduct so degrading and insulting I, nor any other person, I am certain, ever met with.

Into your hands, Sir, I leave the parties, for you and the public to pronounce a verdict.

I am, &c.,

M. B. GARRETT.

3, New-road, St. George's East.

[The foregoing letter contains allegations of a character so remarkable, that we have felt it our duty to publish it with the view of eliciting some explanation from the parties inculpated, prior to expressing our own opinion on the subject. We cannot condemn any individuals unheard, and upon merely *ex-parte* evidence; but we shall certainly not spare the rod, if we should ascertain that the foregoing statement is correct. It is due to the professional character of the two gentlemen referred to that they should have the opportunity of repelling or explaining away the accusation, and also, on their part, that they should use the opportunity when offered. Mr. Garrett's letter was written evidently in haste, and under excitement, as there are verbal omissions in it that somewhat confuse his meaning; but, as he has appended his name to his letter, in attestation of his good faith, this defect must not be considered to prejudice his case, which, as it stands, is one of the most extraordinary that we remember to have come under our notice. The two gentlemen must stand forth.]

Dr. Taylor, of Huddersfield.—Covers for the Journal are supplied by our publisher upon application, price 2s., and can be had through any bookseller.

Suum Cuique Tribuito must favour us with his name, not for publication, but for our own satisfaction.

Introductory Lectures.—We thank our friends for their repeated offers of these very interesting orations. We must, however, as we have before stated, this year decline them.

We must again request that all communications for the Editor be addressed to the Office, 46, Princes-street, Soho.

X. Y. Z.—We do not believe it. At any rate the statement must be authenticated before we admit it to our pages. There is something very cowardly in an anonymous attack.

The Inquest at Hardingstone has not escaped our notice.

Delta.—Are you bound by a written agreement or not? If not, the agent will scarcely be able to sustain his claim in a County Court, as it is clearly inequitable; if you are, you must show that the situation was not such as he represented it to be, or that the payment was to be made on the salary when received; otherwise, it might be shown that the loss of the situation was by your own fault, and you would be obliged to pay the demand.

Mr. L'Estrange's communication has been referred to our "Commissioner" for the Great Exhibition.

A Country Surgeon's case of Enteritis has been marked for publication.

We propose to continue Mr. Fergusson's Clinical Lectures during the Session.

Mr. Browne, of Tamworth.—We do not quite understand Mr. Browne's letter, but we should as soon think of commenting upon the insolence of his butcher and baker, as upon that of his bandage-maker, or any other of his tradesmen.

THE Letter of our friend the Secretary of the Tower Hamlets Medical Society must again stand over. It is difficult to find room for communications speaking in praise of ourselves, grateful as they may be.

COMMUNICATIONS have been received from—

SECRETARIES OF THE PATHOLOGICAL SOCIETY; SECRETARIES OF THE HARVEIAN SOCIETY; SECRETARIES OF THE LONDON MEDICAL SOCIETY; SECRETARIES OF THE WESTERN MEDICAL SOCIETY; Mr. WEAVER, of the North Hospital, Liverpool; Mr. JONES, of Llanfair, Montgomeryshire; Mr. WALSH, of Half Moon-street; Mr. JOHN JOSEPH GRIFFIN, of Baker-street, Portman-square; DELTA; Mr. GARRETT, of New-road, St. George's East; Mr. L'ESTRANGE, of Dublin; Mr. HEADLAND, of Guilford-street; Mr. PROCTER, of York; Mr. KEATES, of Walworth; SUUM CUIQUE TRIBUITO; Dr. RIGBY, of Berkeley-square; Mr. CLARKE, of Lynton; Dr. WEIR, of Dalsarf, Lanarkshire; Mr. HENRY SMITH, of Caroline-street, Bedford-square; Mr. CAVE BROWN, of Tamworth; Mr. EVANS, of Walthamstow; Dr. HALLEY, of Queen Anne-street; Mr. WILKIN, of Southampton; J. B.; A SURGEON; Dr. TAYLOR, of Huddersfield; X. Y. Z.; A COUNTRY SURGEON.

ORIGINAL LECTURES.

LECTURES

ON

DIGESTION, RESPIRATION, AND
SECRETION.GIVEN AT THE ROYAL INSTITUTION,
TO THE MEMBERS, AND TO THE PUPILS OF
ST. GEORGE'S HOSPITAL.By H. BENICE JONES, M.D., F.R.S.,
Physician to St. George's Hospital.

[Continued from page 374.]

IN my lecture to-day, gentlemen, I purpose bringing before you especially the chief causes which lead to the formation of those calculi which are capable of being destroyed by heat, which give a red colour with nitric acid, and which are soluble in alkalis. One of the most remarkable characteristics of urine is the re-action which it always presents to test-paper. If the whole quantity of urine passed in the twenty-four hours be collected and examined, it will give an acid re-action. If the water passed at different hours of the day is examined, then the degree of acidity will be found to be always changing. So that there is no one constant permanent degree of acidity of the urine. It is as varying as is the state of the acidity of the stomach. Here is the diagram which you saw in the lecture on the gastric juice. (a) One curved line represents the variations of the acidity of the stomach, showing that at the time the stomach is empty the acidity in the stomach is nothing. The curve then touches the line of neutrality. But, when food is taken into the stomach, the acid liquid is poured out, and the contents of the stomach begin to give an acid re-action, which is increased until the whole quantity of acid is secreted. The curve then gradually rises until it reaches the highest point. This varies, probably, with each stomach, and, not improbably, with each meal. But, it may be said, generally, two, three, or more hours after food is taken, the quantity of acid in the stomach attains its greatest height. The food then begins to be absorbed, or to pass out through the pylorus, when the acid begins to diminish, until the stomach is again empty, when it returns to a neutral or a slightly alkaline state. The curve then descends again to the neutral line. Thus much for the curve which represents the acidity of the stomach. Let me now draw your attention to the other curve, which represents the variations of the acidity of the urine.

In the *Philosophical Transactions* for 1849, Part II., you will see some elaborate diagrams, showing the effects of different diets on the acidity of the urine,—different lines, showing respectively the effect of animal food, vegetable food, mixed diet, and abstinence from all food. From the time when food is taken, the acidity of the urine begins to descend; and after two, or three, or more hours, the acidity is at its lowest point. Thus, at the time when the acidity of the stomach is at its highest, the acidity of the urine is at its lowest point. Frequently, indeed, the acidity of the urine is so low, that it passes the neutral state, and becomes distinctly alkaline; and this may occur in healthy persons, whose stomachs are perhaps slightly irritable; certainly it does occur in those who are not subject to any disease which seriously interferes with the process of digestion. After two

or three hours, it is found that the acidity of the urine again increases, rising at first rapidly, then more slowly, until the period when food is again taken, when it again begins to fall. Thus you will see that, as regards acidity, there is an inverse relation between the state of the stomach and the state of the urine. I have shown you the acid reaction of the gastric juice after food has been taken; now let me show you the reaction of the urine as regards acidity, before and after food. I have here four different specimens of urine, passed at different periods of the day. The first was passed just before food, and on examination, it will give a decidedly acid reaction: it was passed just before breakfast, by a healthy person. Here is the next specimen, passed three hours after breakfast was taken; you see that there is scarcely any acid reaction: it was passed by the same person. The third specimen was passed two hours after the second; and you see the acidity distinctly returning. The fourth specimen was passed two hours later than the third, and the acidity is very much more evident,—closely approximating, indeed, to that of the first specimen. (Experiment with test-paper.) The mode that I have adopted for marking these variations of the acidity of the urine, (for the test-paper is not sufficient to determine the actual degree of these variations,) is the following. I have here a tube, graduated into a hundred measures. Pure carbonate of soda is dissolved in so much water, that every measure of this tube contains the twelfth of a grain of carbonate of soda. This forms a test alkali. I have a test acid prepared in a similar way, one measure of the tube containing as much acid as will saturate the twelfth of a grain of carbonate of soda. I then take a 1000 gr. bottle, and weigh the bottle full of urine, and pour it into a little basin, adding the test alkali or acid, while the basin is constantly stirred and gently heated, until I bring it to the point of neutrality. Thus the number of measures of test alkali required to effect the neutralization, gives the quantity of carbonate of soda which will neutralise the acidity of the urine. I find that this is usually much greater in urine passed just before food than in that passed two or three hours after food. I find even, sometimes, that test acid has to be added to the urine which is passed after food, to bring it back to the neutral state. By this method we obtain a sufficiently exact measure of the alkaliescence or the acidity of the urine; and it is thus tables may be constructed:—

Variations of Uric Acid and Acidity.

	Specific Gravity.	Per 1000 grs. Urine Uric Acid.	Per 1000 grs. Urine Acidity.
Mixed Diet.			
Urine at 2 p.m.	1025.0	.. 0.52 grs.	.. 13.07 meas.
Dinner at 7 "	1025.7	.. 0.12 "	.. 26.12 "
at 11 "	1026.7	.. 0.62 "	.. 13.81 "
Vegetable Food.			
at 2 p.m.	1021.6	.. 0.56 "	.. 8.29 "
Dinner at 6½ "	1024.0	.. 0.05 "	.. 26.36 "
10½ "	1026.2	.. 0.64 "	.. 3.29 "
6½ a.m.	1024.2	.. 0.66 "	.. 19.52 "
Animal Food.			
2½ p.m.	1022.7	.. 0.24 "	.. 7.82 "
Dinner at 6½ "	1024.8	.. 0.05 "	.. 21.46 "
11½ "	1029.9	.. 0.77 "	.. 16.50 "

My Table, in the third column, represents the number of measures of test alkali required to neutralise 1000 grains of the urine passed at different times, and when various diets were taken. I was induced to follow out these variations, from observing the action of the urine on test-paper, in urine precisely similar to that which you have seen me test a few minutes since. Before breakfast, the reaction was highly acid, while, in the water passed after breakfast, the reaction was alkaline; and in a few hours afterwards the secretion was highly acid again. I found, that by making careful examinations, the same variations followed, meal after meal, day after day, and for days together.

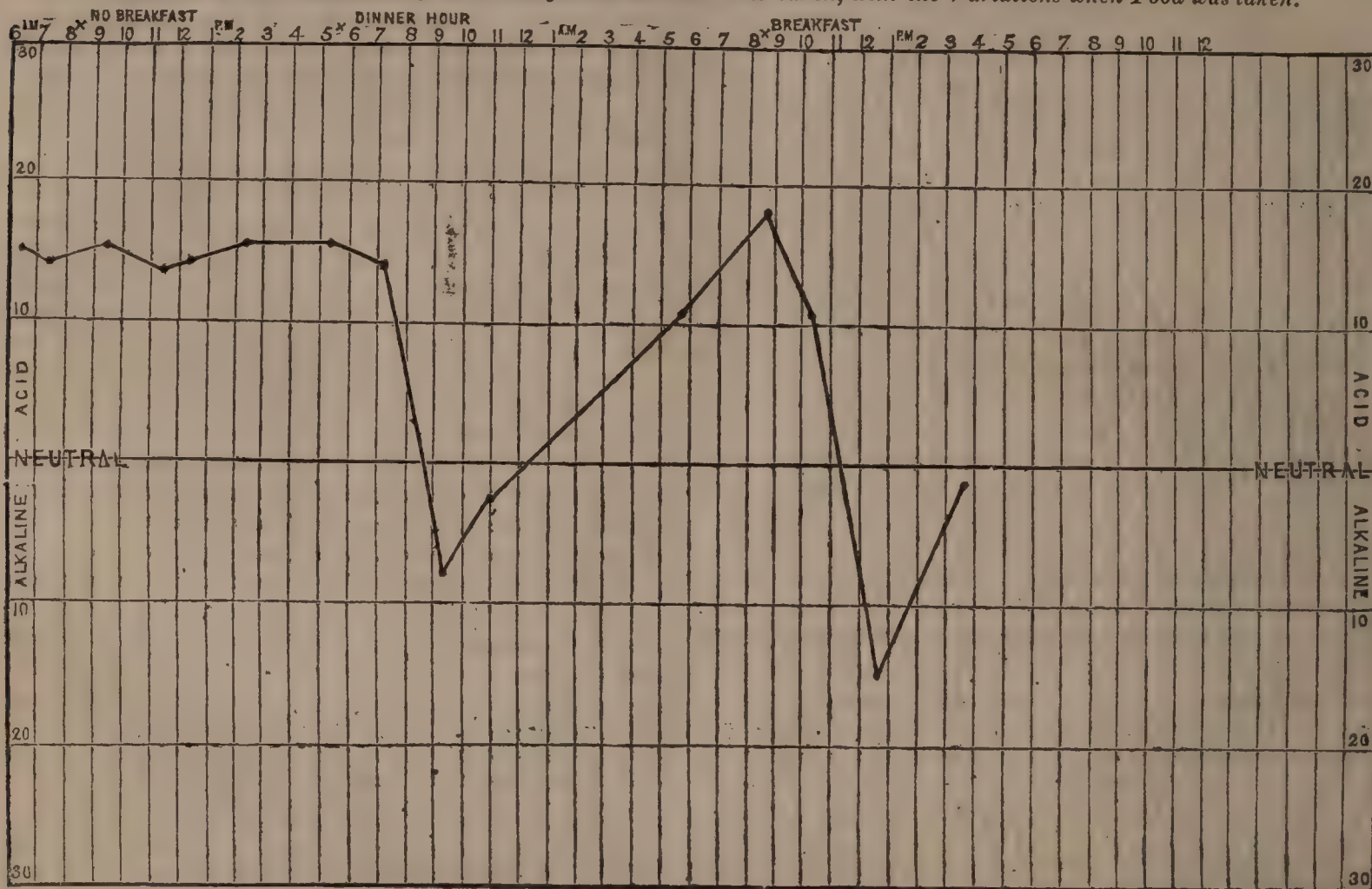
To determine whether these variations in the acidity of the urine were really caused by variations in the acidity of the stomach was not difficult, for this reason: if these changes depended on the state of the stomach, it was very clear that, by allowing the stomach to remain unacted upon by food,

(a) See *Medical Times*, Vol. II., p. 634.

provided no acid was secreted in the stomach, no great variation in the acidity of the urine ought to be found. During fasting, none of those changes which are apparent in the urine when food is taken, ought to occur. Thus, by simply

abstaining from food, I tested whether the variations of the acidity of the urine were really produced by the variations of the acidity of the stomach or not. Look at the nearly straight line in this woodcut—

Comparison of the Variations of the Acidity when no Food was taken, with the Variations when Food was taken.



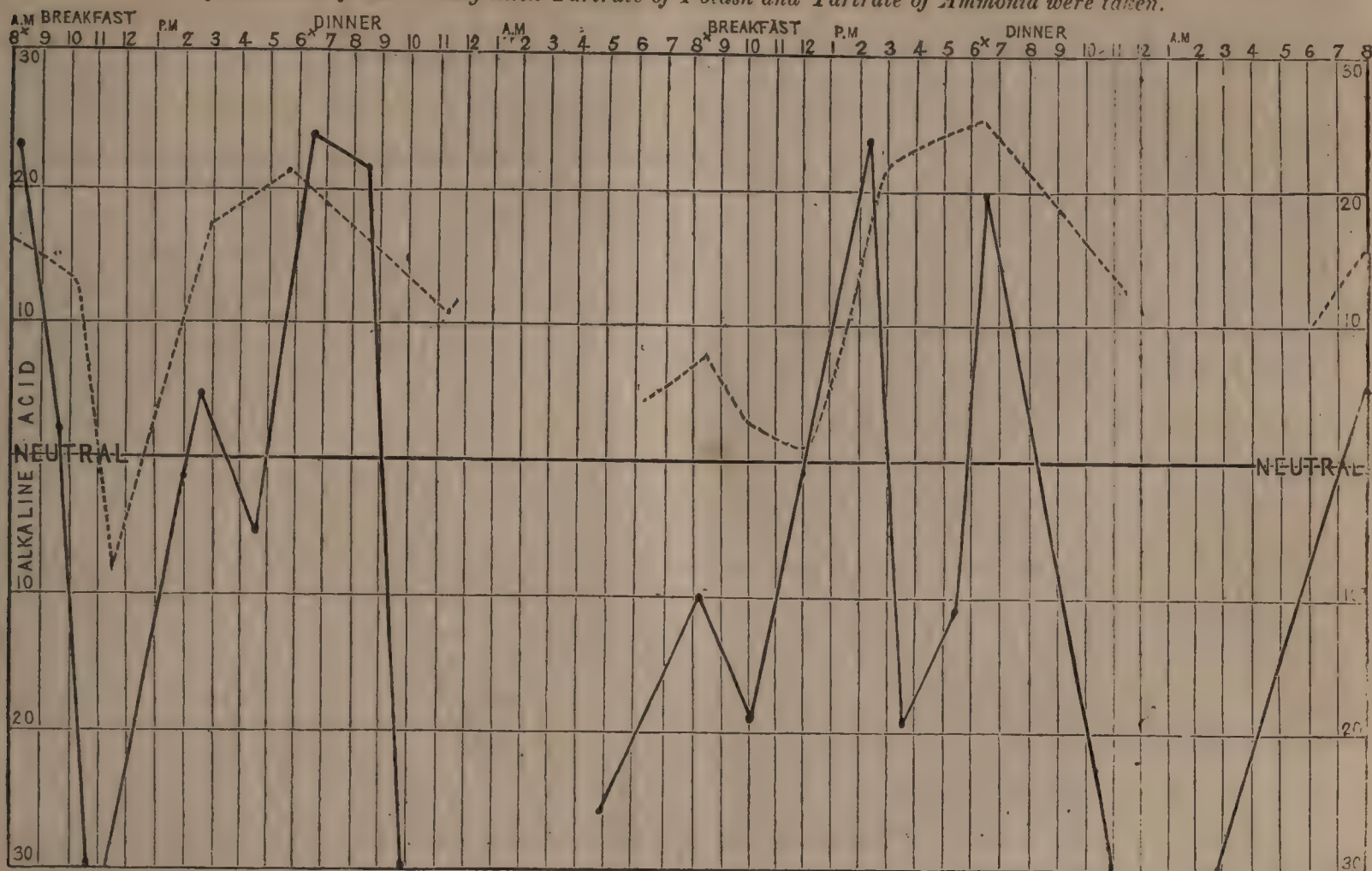
which represents the variations in the acidity of the urine when no food was taken. It was found that, when perfect abstinence was observed, scarcely any change took place in the acidity of the urine, when the specific gravity of the urine was not materially changed. After ten or twelve hours, food was taken, and instantly the acidity of the urine fell, and, in the course of a short time, was below the neutral line. No more accurate test of the influence of the stomach could be applied than this. Nothing can be more evident than the intimate relation which exists between the state of the stomach and the state of the urine.

Let me point out one or two other results which I obtained when examining the variations in the acidity of the urine after different kinds of food were taken. I found (contrary to what might have been supposed) that, when animal food alone was taken, the quantity of test-acid required to render the urine neutral after such food, was greater than when vegetable food was taken; that is to say, that the acidity of the urine after animal food, is less than after vegetable food. Supposing it to be true, that at any one period of the day the acidity of the stomach is inversely proportioned to the acidity of the urine, this would show, that vegetable food does not cause so much acid to be thrown into the stomach, as is caused when animal food is taken. I have mentioned, that the acidity of the gastric juice is the effective agent in dissolving albuminous food; perhaps a less remote cause may be found in the following statement:—When food is taken into the stomach, the acid is poured out there. Of this acid I have already spoken, and have shown you that some portion of it consists of hydrochloric acid, and, probably, of phosphoric acid. If hydrochloric acid and phosphoric acid are set free in the stomach, there must be some decomposition of chloride of sodium or phosphate of soda. If acid is poured out in the stomach, alkali must be set free somewhere else; and it seems to me most probable, that the hydrochloric acid is set free in the stomach, whilst the soda (the alkali) remains in the blood; so that, during digestion, the blood is more alkali-

line than it is at other periods. If the blood is in a more alkaline state, then the secretions which take place from that blood ought at that time to become more alkaline. You will remember, in my lecture on the saliva, I mentioned that Dr. Wright, of Birmingham, observed, that the saliva was more alkaline during digestion than at other times. So, also, according to my own experiments, the urine is at this time more alkaline than at other times; so much so, that sometimes during digestion the urine is so alkaline that it requires as much as 30 measures of the acid solution, equivalent to 2½ grs. of carbonate of soda, to render 1000 grs. of urine neutral.

Having satisfied myself as to the variations in the acidity of the urine, it became an interesting point to determine what was the effect of different medicines. But my time will not permit me to enter fully into this subject. I must refer you to the two papers in the *Philosophical Transactions*,—one in 1849, and the other in 1850—which give the results of experiments during one day on which no medicine was taken, three days on which the medicine was tried, and then a fifth day on which no medicine was taken. Thus, by means of these five days' experiments, I have attained a pretty tolerable certainty regarding the effect of different medicines upon the acidity of the urine. I may say, that the medicines that were tried were sulphuric acid and tartaric acid; and, to see the effect of alkalies, caustic potash, carbonate of ammonia, tartrate of potash, and tartrate of ammonia, were made use of. These substances were prepared with considerable care, so as to insure that there should be no interference in consequence of any impurity being present in them. The most interesting result of all, and the only one on which I shall now dwell, was the comparative effect of tartrate of potash and tartrate of ammonia. It was well known, and stated by many authors long before I commenced these experiments, that tartrate of potash caused the urine to be alkaline. I found that it did so; but I found that it caused it in a different way from what had been stated by the authors who had made experiments on the subject.

[Variations of the Acidity when Tartrate of Potash and Tartrate of Ammonia were taken.



The undotted line in my woodcut represents the effect of tartrate of potash, and at first sight it is evident that the line which represents the state of the urine is much lower than that which marks the variation when tartrate of ammonia was taken. Let us trace this undotted line a little closer. It commences about breakfast time, soon after which it passes the neutral line, showing that the urine then was alkaline; about two it rises, recrosses the line, and then, when the urine had become acid, a dose of five drachms of tartrate of potash was taken, and almost immediately the line descends in consequence of the urine becoming alkaline again. It does not remain so for any length of time, for very rapidly the line descends to its lowest point, and then rises again above the neutral line, and ascends almost as high as it would have done if no tartrate of potash had been taken. You might suppose from this, that the effect on the urine was ended; but it is not; for look at the undotted line. When dinner was taken the highest point had then been reached, for after food the line descends, and it reaches a point some hours after food far lower than it probably would have reached if no tartrate of potash had been taken. Thus, it may be said, the tartrate of potash does not interfere with the variations produced by the state of the stomach, except that a short time after it is taken it renders the urine alkaline, and that the effect of the tartrate of potash becomes again apparent when it afterwards acts with the state of the stomach; then it renders the urine more alkaline than it otherwise would have been. I repeated the experiment on the succeeding day with three drachms of tartrate of potash, the effect of the previous dose still continuing. After breakfast, the line marks the alkalescence of the urine. By twelve o'clock the acidity rose, and reached by two o'clock to a high degree. Then the three drachms of tartrate of potash were taken,—a smaller dose than before,—but almost immediately the urine became alkaline again. But this was not permanent, for the acidity soon began to rise again, until dinner was taken; then the medicine again showed its effect when it was acting in conjunction with the alkali left in the blood, by the acid going, for the purpose of digestion, to the stomach. On the third day, a repetition of the tartrate of potash caused the same alternation to take place, though the dose then was two drachms. I found that 120 grains of tartrate of potash caused an immediate effect on the acidity of the urine, rendering it alkaline in thirty-five

minutes; but that this first effect passed away quickly. This accounts for the statement made by one author, that tartrate of potash does not make the urine alkaline. The real fact is, that the first effect lasts only for a short time, and that you must look for its greatest effect when it is acting in conjunction with, and not in opposition to, the state of the stomach,—in other words, the effect of the tartrate of potash will be greatest when acid is secreted in the stomach, and the effect will be least when the acid is passing out of the stomach; and it is not improbable, that then it might be altogether overlooked.

Having traced the effect of tartrate of potash, look at the dotted line, which shows the effect of tartrate of ammonia. The first day two drachms were taken; the second day nearly four drachms; the third day three drachms; so that about ten drachms were taken in the three days. The quantity was nearly the same as in the experiments with tartrate of potash; but the ammonia salt did not affect the urine in the same way as the potash salt did. However large the dose, I could not make the urine alkaline; the variations in the acidity of the urine proceeding as if no medicine had been taken, with this exception, that the acidity appeared to be increased by the tartrate of ammonia. From this result, it appeared to me highly probable that even tartrate of ammonia was oxidised. I have already shown you that this conjecture was confirmed, by my finding nitrous acid in the urine when tartrate of ammonia or other salts of ammonia were taken into the stomach.

Thus much, gentlemen, for the variations of the acidity of the urine. This will enable me to bring before you the chief object of this lecture, which is to show why it is that the red deposits in the urine take place so copiously. The most frequent form is that which you see in the specimens in the two bottles before you, which are rendered thick by it. This deposit quickly dissolves on the application of heat. It consists of urate of ammonia, and very frequently, probably, of urate of soda. It occurs so frequently with almost every one, that it cannot be considered as a sign of disease, nor even of indigestion. While the urine is warm at the temperature of the body, the deposit is held in solution; and, as I said, it can be at any time re-dissolved by the application of heat. There are two other causes, in addition to the decrease of temperature, which effect this deposit; and, unless these are recognised,

you cannot account for those strange variations which are apt to occur in all people. I have here three specimens of urine, passed at different periods of the day: first, just before breakfast; second, after breakfast; third, much longer after breakfast. The first is thick, the next is clear, and the third thick again. Your first supposition would probably be, that the thick specimens contained more of the matter which forms the deposit than the clear one; but you would be totally wrong in judging by the eye as to the quantity present. For example: the first specimen contains a deposit of urate of ammonia, and the second specimen is quite clear, free from deposit. Now, if you were right in your judgment, I ought to find, in determining the amount of urates by the balance, that the first specimen contains much of this substance, whilst the second contains but little; moreover, the third specimen, which is the thickest, should contain considerably more than the first. But by analysing the specimens, I obtain a totally different result; I find that the specimen which is clear contains most uric acid, and the thickest specimen does not contain so much uric acid as the cloudy specimen. The explanation is this: the first specimen is strongly acid, whilst the clear specimen is neutral, or very slightly acid, and the third specimen is much more acid than the first. This shows that a state of increased acidity may lead to the deposit of urate of ammonia; and that a state of decreased acidity will mislead the eye that judges from appearances.

Let me illustrate the variations of the uric acid more fully, by referring to the Table at the commencement of this lecture; you will see that the urine passed at two o'clock p.m., after the digestion of mixed food, contains on an average 0.52 gr. of uric acid; and its acidity is such, that it requires thirteen measures of test alkali to neutralise it. At seven o'clock p.m., before dinner, the amount of uric acid is 0.12 gr.; and the acidity requires, to neutralise it, 26.12 measures,—the specific gravity of the urine, however, remaining nearly the same. After vegetable food, at two o'clock p.m., the quantity of uric acid is 0.56, and the acidity is represented by 8.89 measures. Long after food the quantity of uric acid is only 0.05, the acidity requiring 26.36 measures of test alkali to neutralise it. At night, after food, the uric acid is increased, but the acidity much diminished. The same Table (No. 1) shows also the variations effected with animal food. The following Table shows the highest and lowest amount of uric acid that I have met with in health, after animal and after vegetable food.

Highest and Lowest Amounts of Uric Acid.

Highest after animal food	..	1.02 grs. per 1000 urine	..	1027.8
„ vegetable food	..	1.01	„	1025.6
Lowest after animal food	...	0.05	„	1024.8
„ vegetable food	..	0.05	„	1024.0

From this Table, you see that it makes no material difference in the quantity of uric acid in the urine, whether animal or vegetable food is taken. Here is a most conclusive diagram, which shows the amount of uric acid, together with the degree of acidity, and the appearance of the urine passed at the same time on three different days.

Variations of the Appearance, the Acidity, and the Amount of Uric Acid.

P.M.	Grs. 1000	Sp. Gr.	Acidity.	Uric Acid.	Appearance.
7 Urine	1029	+	15.5 measures	0.29 grs.	thick.
10 „	1027	—	0	0.33 grs.	clear.
8 „	1030	+	21.5	0.81 grs.	thick.
11 „	1030	—	0	0.96 grs.	clear.
5 „	1028	+	14.9	0.52 grs.	thick.
11 „	1031	+	2.9	0.87 grs.	clear.

These experiments most clearly prove that the deposit does not depend upon animal food or upon vegetable food; that these do not produce a distinct effect upon the quantity of urate of ammonia or uric acid in the urine; but that the thickness in the urine depends upon the degree of the acidity. If the degree of acidity is slight, a large quantity of urate of ammonia may remain in solution; if the acidity is considerable, then even a small quantity of urates may give a precipitate.

The way to determine the amount of uric acid is the following. About one or two thousand grains of urine are taken; hydrochloric acid is added in the proportion of about two drachms to one thousand grains of urine. The urate of ammonia is decomposed; and, on standing for at least

twenty-four hours, the greater part of the uric acid crystallises out. The crystals are thrown on a fine filter, washed with distilled water, dried, and weighed, and thus the quantity of uric acid can be determined. Let me show you the first effect of the acid. I have here a glass jar, containing a liquid which we may suppose to represent urine, but it is really the excrement of the serpent dissolved in caustic potash. You see there is in the solution a slight deposit of urate of potash, but you get no idea as to the quantity of uric acid dissolved by merely inspecting it. As long as it remains alkaline there will be little if any separation of urate of potash from the liquid; but if I add to it hydrochloric acid, see then what will happen. Look at the curdy mass which will be precipitated, so solid that this heavy glass rod will easily stand in it. (Experiment.) Thus you can form no conjecture as to the quantity of uric acid in solution in any fluid by simply looking at it. All the uric acid present must be first precipitated. I added a considerable quantity of hydrochloric acid to the jar. If I had added but a small quantity, I should have precipitated only a portion of the uric acid which was in solution, but by adding an excess of hydrochloric acid, all the uric acid has fallen as a precipitate. It is interesting to notice the form in which this is first precipitated. You have seen that at first it is quite gelatinous, and the glass rod will easily stand in it; but in the course of a short time a change will be effected, and the mass will become much more liquid, so that the rod falls as you see it falling, and in a short time the contents of the jar become so fluid that they can be poured out. The first precipitate is undecomposed urate of potash; it has been called hydrated uric acid, but I do not believe that it is so. The first precipitate is urate of potash, because the uric acid is not set free immediately; it requires that the hydrochloric acid should be some time in contact with the urate of potash to decompose it. So also, if you slowly add hydrochloric acid to urine, you will frequently find a thick deposit formed rapidly; this deposit will redissolve by heat; it will not become changed into an insoluble substance; it will require, for this purpose, to stand for twelve, twenty-four, or perhaps forty-eight hours, and then the precipitate will be far less bulky than before. If the quantity of uric acid be small, and the quantity of acid added be small also, it will require a long time before the whole urate of ammonia will be decomposed, and the uric acid will be deposited in a crystalline form. I have no doubt that this is a most happy preservative from the more frequent formation of uric acid calculi. We have free acid passing off with urate of ammonia in the urine, and they may remain in contact therein for a time, provided the quantity of free acid be not great, without the uric acid being set free, so as to form red gravel. Most commonly urine containing free acid must stand some hours after it has passed from the bladder before red crystals become apparent; nevertheless, sometimes the urine contains so much free acid that the uric acid crystals are found in the bladder, and even in the kidney, I have dwelt on the fact of urate of ammonia not being immediately decomposed by free acid, because I do not doubt that thereby we are daily saved from the formation of that gravel which constitutes that kind of calculus which is found most frequently to occur.

I have thus tried to bring before you the causes which lead to the deposit of urate of ammonia, and to the formation of uric acid calculi. I might say, that the acidity produced by the stomach is the cause; and that, in comparison, all other causes may be neglected. The quantity of acid set free in the stomach is not easily calculated; it certainly produces a greater effect on the urine than three drachms of dilute sulphuric acid does,—most probably the gastric juice produces a greater effect on the urine than six drachms, or perhaps more than one ounce of dilute oil of vitriol. As to the quantity of acid in the gastric juice no right conjecture can be formed as to its amount. We cannot collect the whole of the gastric juice, and even if we could it would be impossible to say how much of the acidity comes from changes in the starch and sugar of the food. However, the variations of the acidity of the urine, when animal food only is taken, shows how much the acidity of the stomach affects the acidity of the urine. The liberation of acid in the stomach is one great cause of the acid re-action of the urine, and occasional increased acidity of the stomach first gives rise to occasional deposits of urate of ammonia in the urine. When the acidity

of the stomach becomes more frequent, these deposits become more frequent in the urine; and when the acidity of the stomach becomes increased in intensity as well as in frequency, then the deposit of urate of ammonia gives place to a formation of uric acid crystals, which ultimately form these immense masses of calculous matter which you see on the table before you.

In my next lecture I shall bring before you the excretion of oxalate of lime, and of the sulphates in the urine.

ORIGINAL COMMUNICATIONS.

ON HYPOCHONDRIASIS, AND OTHER FORMS OF NERVOUS DISEASE.

By H. HUNT, M.D.

(Continued from page 282.)

HYPOCHONDRIASIS COMPLICATED WITH A TORPID OR CONGESTED LIVER.

THE plan of treatment I have just described refers only to hypochondriasis in persons who were previously in good health, in whom the causes of the disease had ceased to operate; whose strength and vital energies had not been impaired; and in whom the general disease was not complicated with any serious amount of local congestion.

These favourable circumstances existed in the cases I have detailed, and explain the facility and rapidity with which they were relieved. But, we are often consulted by hypochondriacs in whom the converse of these conditions exists. The original causes may still continue to exert their baneful influence. The disease, from neglect or mismanagement, may have proceeded unchecked, until the viscera generally, and the liver in particular, have become seriously and even dangerously congested, and the strength of the patient has given way under the combined effects of these untoward circumstances.

I shall now proceed to the consideration of this more serious form of the complaint, which will necessarily require a corresponding modification of treatment, more especially directing my attention to those remedies and general management on which we must chiefly rely for the removal of congestions or obstructions in the liver and other viscera. As the relief of these morbid conditions must be our primary object, a few prefatory observations on the manner in which they may probably originate, will not, I trust, be deemed irrelevant.

In the natural condition of a secreting organ, a current of blood is constantly, though, perhaps irregularly flowing into its vessels. If the function of secretion be properly performed, and there is no obstruction in the efferent veins, this current will pass as freely out of it; partly in the form of blood and partly in the form of secretion, both together being equal to the amount of blood which had flowed to it. The supply and waste being thus balanced, the organ will remain in a healthy state, as far as its circulation is concerned. But if the efferent veins be obstructed it is manifest that an unnatural turgescence of all the veins behind the obstruction will ensue; may we not infer, therefore, that, if secretion be arrested, that portion of blood which, in a healthy state of the organ, ought to have been converted into secretion, and have passed off by the ducts, will be retained in the vessels that supply the secreting apparatus, and thus produce a state of turgescence similar to that arising from direct obstruction in the veins themselves. If this inference be well founded, it will necessarily follow that secretion can scarcely be impeded, even for a short period, without producing an unusual fulness of the vessels of the part. The obstruction having once commenced, as long as it remains this turgescence, this ponding back of the blood, will steadily increase, until the whole organ has become completely engorged; in other words, a state of congestion be the

result. Following up this view of the subject, it is probable that, in recent cases, arrested secretion is productive of no more serious consequence than a preternatural fulness of the vessels, which will recover their normal state on the re-establishment of that function; in many cases, however, not without some violent natural effort, attended by more or less general disorder or illness, of which a bilious attack is a familiar example; or it may be relieved by art, through the agency of medicines adapted to that purpose. Without entering into any speculation on the various mechanical changes which must result from a long continuance of such an unnatural condition of these delicate but important parts, we may fairly assume that a great accumulation of blood, (and it must be remembered unhealthy blood, blood loaded with various kinds of morbid matter,) cannot long gorge and distend the minute vessels of an organ without at length damaging their structure and injuring the delicate apparatus of secretion; injury likely to be followed by inflammation and its consequences, which, unless counteracted by adequate remedial measures, will terminate in organic disease, or diorganisation of the natural structure of the viscus.

Now, in a practical point of view, I wish more especially to fix the attention of my reader on an intermediate condition of the liver and portal system—a condition between that in which there is simply a temporary fulness of its vessels, (before much, if any injury has been inflicted,) which can be relieved by a few active calomel purges, or by the treatment I have described in the preceding papers and that degree of congestion which has produced a palpable enlargement of the liver, to be detected by manual examination. It is of the utmost importance that this stage of congestion should not be overlooked, otherwise the opportunity of relieving effectually the suffering viscus may be altogether lost.

To avoid all risk of being misunderstood, I repeat, that the state of the liver under consideration is one in which, though congestion may have existed a considerable time, and changes in the structure of the organ may have, to a slight extent, taken place, yet no great injury or damage has been done; at any rate, none that may not be repaired. It must, however, be remembered, that the effect of congestion of the liver is not limited to that organ; it will gradually extend to the whole of the portal system; and not only will the veins proceeding from the stomach and intestines—the mesenteric—become gorged, but those of equal if not greater importance, which commence in the mucous membrane, where the arteries of that tissue terminate, will participate in the congestion. Whether we consider the immense number of these vessels, the vast extent of surface through which they ramify, or the vital functions performed by that delicate apparatus (which this state of turgescence of the efferent vessels must necessarily tend to embarrass and obstruct,) it would appear that this portion of the system in connexion with hepatic congestion has not received the attention due to it. It would seem, from the absence of notice, that when congested, these two extremities of the portal system have been considered independent of each other; whilst in reality they are only parts of the same system, suffering alike from the same disordered condition, produced by the same causes.

Difficult as it undoubtedly is to detect this morbid condition of the liver with any degree of certainty, there are yet some symptoms which, taken in conjunction with the history of the case, will afford us valuable assistance in forming a correct diagnosis, although, from their want of prominence, they often escape notice. Thus, where no enlargement of the organ can be detected externally, and no great pain but only uneasiness is produced by pressure, the patient complains, in addition to the symptoms of malaise, of a sensation of a general fulness of the abdomen, of load, and occasionally of tightness or stricture in the region of the liver, more especially in the situation of the left lobe, which sensations, he distinctly affirms, are not relieved by the operation of even active purgatives, powerfully as those medicines may have operated on the bowels; they seem to have passed by, and to have left the source of the mischief untouched and unrelieved.

That these sensations do not arise from flatulence, is evident from the absence of distension.

That the cause is permanent, is made clear by their remaining constant and unvarying.

If not soon relieved, they steadily, and sometimes rapidly increase, so as to become almost unbearable; yet it is not so

much acute pain which is complained of, as a distressing sense of weight, mingled with a feeling of tightness, exciting the fear that something will burst internally.

More commonly these local symptoms continue for a length of time without much alteration or augmentation, creating great local discomfort and uneasiness. The general health gets more and more deranged; the countenance gradually assumes a more unhealthy aspect; the patient's strength and buoyancy of spirits decrease; the state of his secretions varies, sometimes indicating disorder, and at other times evincing in their appearance at least no great deviation from health; as if a sufficient portion of the discerning apparatus remained in a natural state, and carried on the functions sufficiently well to sustain life, but not to maintain health; in this manner preventing the accumulation of matter beyond a certain degree, which, if wholly retained, as in the case of the complete suppression of urine, would be destructive of life. The suddenness with which these local symptoms sometimes subside on the torpid liver being excited to increased action—to pour out a large flow of bile, the immediate general relief consequent upon the subsidence of the symptoms, and perfect recovery of health, which subsequently ensues under judicious management, seem to me to prove incontestably, that they are caused by an unnatural distension of the vessels of the liver, (and what is true of the liver is equally so of other organs,) and that no great injury has resulted from even a long continuance of this unnatural state of the viscus.

To illustrate my position more clearly, I will narrate a striking example of this morbid condition.

A middle-aged gentleman, actively engaged in business, became entangled in pecuniary difficulties, and depressed by other causes of anxiety. He was soon afterwards observed to become desponding, and to lose his activity and energy; his countenance, hitherto healthy, began to look pale, dark, and sallow; he visibly decreased in flesh; his appetite declined, and his nights were sleepless. He found that his bowels, heretofore regular, required assistance from medicine; in short, that general disorder of the system which I have described rapidly supervened. After some time, in addition to his general symptoms, he complained of an uneasiness and discomfort at the pit of the stomach, inclining rather to the right side. Still he pursued his usual avocations, but as an irksome duty,—no longer finding in them a source of pleasurable excitement. He informed me that, in spite of various kinds of treatment, his local and general illness had steadily increased and his strength diminished in a corresponding ratio. At length he became so completely prostrated that he could not raise himself in bed, and his life was considered to be in jeopardy. The uneasiness in the region of the liver was aggravated to a degree almost insupportable. He felt as if something would give way in his stomach, and was convinced that the extreme oppression under which he laboured would destroy him unless it could be relieved. At this period of the disease his bowels were easily acted upon; his urine, though passed in small quantities, was pale, and exhibited nothing unnatural in appearance, nor could any morbid change be detected in it on examination. Of this I was assured by the late Dr. Prout, who saw the case at this juncture.

A change in the treatment was then made, and small doses of calomel were directed to be given every four hours, with the intention of bringing the system under its influence; but before the second dose was taken he suddenly felt relieved from all his local distress. He described the relief as similar in effect to that which he once experienced on the introduction of a catheter when he was suffering from retention of urine, with great distention of the bladder. Almost immediately afterwards he was attacked with sickness, and vomited a very large quantity of dark green offensive fluid. In the course of a few hours a diarrhoea set in, and he passed a still larger quantity of black fetid matter. He was quite relieved by this occurrence, and, under a course of medical treatment, always most important in such cases to remove entirely the whole obstruction, he recovered his former good state of health and elasticity of spirits, after rather a tedious convalescence.

The study of such a case, from the earliest derangement of health to the acme of disease, is highly instructive. Its course may fairly, I think, be traced through the following gradations. Anxiety of mind, in the first instance, depressed his nervous system, destroyed his appetite, extinguished

animal spirits, and arrested secretion. The retention of deleterious matters contaminated his blood and produced general malaise of body and despondency of mind; the turgescence of the portal system first caused uneasiness; then, to use his own expression, a load, and sensation of stricture and of painful distention, yet without any external local evidence of such a condition. The relief so suddenly experienced, followed by the evacuations of morbid matter with which, doubtless, the portal vessels had been gorged; the resumption of active secretion under the influence of medicine, and the final restoration to health, form a regular succession of phenomena in perfect accordance with the order of changes which we should, from *à priori* reasoning, expect to take place under such circumstances. This is, I am ready to admit, a severe and striking case; but by the study of such an one we are able to understand those which are less strongly marked. What happened here in an extreme degree may, and I believe does occur, to a greater or less extent, in all cases of a similar nature; so that, whenever this disorder arises in persons previously in good health, and especially from causes of a mental nature, we may safely infer, that there exists at least an unnatural fulness of the vessels, commencing immediately behind the minute discerning apparatus; although not sufficient to produce a palpable enlargement of the organ. I am the more anxious to establish the correctness of the explanation above advanced, of the pathological condition of the organs of secretion during this intermediate stage of the disease, having frequently, in doubtful cases, drawn from it most valuable indications to guide me in their management. In fact, should the general plan of treatment detailed in the last paper disappoint my expectations, I should lose no time in modifying it, by adopting such measures as will remove, in the first place, the obstruction in the discerning vessels, and restore them to a condition that will enable them again to perform their functions properly. This having been accomplished, we may then treat the case generally as if no obstruction had ever existed.

There is also another symptom indicative of congestion, which deserves especial notice, inasmuch as it often leads the attention and judgment of the medical attendant astray. I allude to continued and obstinate sickness and vomiting, which, when unattended by any marked evidence of obstruction in the liver, is frequently considered to arise from mere irritability of stomach, and is erroneously and ineffectually treated with effervescing salines, prussic acid, and other sedatives; whereas, the cause being more deeply seated in the liver, it can only be tranquillised by remedies calculated to act more immediately upon that organ.

The following is an instance of this complication. A respectable middle-aged woman, who had been reduced to an ill state of health and great debility by anxiety of mind, but in whom the real nature of her ailments was not indicated by any prominent symptoms, complained of constant nausea, and frequently vomited without ejecting anything but a little watery fluid from her stomach. She had been subjected to a variety of treatment, and had taken without avail all the remedies usually employed to allay sickness and irritability of stomach. She came under my care only two days before she died, when her life was evidently in great danger from the exhaustion occasioned by the perpetual sickness and retching under which she had so long suffered; yet no very decided symptoms of hepatic congestion were present. She complained, it is true, of uneasiness in that region, increased on pressure; but no unusual fulness could be discovered by manual examination. Her bowels were regular, or easily kept open; her urine was not unnatural in quality; her tongue was slightly furred; her complexion was dark and dingy; the conjunctiva slightly yellow. I gave her three grains of calomel alone, and repeated it twice afterwards, and endeavoured to support her with stimulants, chiefly brandy and water. After the second dose, the stomach became tranquil, and the vomiting ceased; and on the next day she became completely jaundiced, and her urine loaded with bile; she sank, however, the day afterwards.

On examining the body, her liver was found to be much congested, with no other morbid appearance to account for her illness and death. Since that time, now many years ago, I have often met with similar cases; but, being more correctly treated, the sickness has been soon allayed, and the patients have recovered.

[To be continued.]

DYSMENORRHŒA.

By EDWARD RIGBY, M.D., &c.;

Senior Physician to the General Lying-in Hospital; Examiner in Midwifery in the University of London.

In returning to the subject of dysmenorrhœa, it will not be necessary to offer any general description of this affection, having done so in my former series, (*Medical Times*, Oct. 19, 1844;) but I will merely divide the subject under two heads, *mechanical* and *functional*, in order to simplify it as much as possible, and render any observations of my own more practical.

Under the head of mechanical dysmenorrhœa, come those numerous cases where the catamenial secretion takes place naturally, but where, from the contracted or closed state of the os uteri or canal of the cervix, the fluid is discharged from the uterine cavity with much difficulty and suffering, or is altogether obstructed. The chief feature, therefore, of this species of dysmenorrhœa is, that pain precedes the discharge. It varies in different individuals, sometimes coming on but a few hours before it; in others the patient may begin to suffer for days, or even a week, before the appearance of the catamenia. This will probably depend on the slowness or rapidity with which the secretion comes on, and on the amount of irritability which the uterus manifests on becoming distended with the menstrual fluid. Hence, when the secretion flows fast, and the uterus resents the accumulation within its cavity, we shall probably have a sharp but short attack of pain; the distension of the uterus, and its own contractions, which are generally quickly excited, producing the requisite degree of dilatation for the discharge of the fluid. Where the pain commences some days before the appearance of the discharge, the patient is warned of its approach by a sense of weight and distension in the pelvis, with feeling of discomfort. This soon increases into catamenial pain, occasionally producing, from the increasing size of the uterus, frequent desire to relieve the bladder, and pain on evacuating the rectum.

In mild cases a moderate amount of distension is sufficient to effect the necessary degree of dilatation of the os uteri, and the accumulated fluid is discharged with complete relief to the patient; but where the obstruction is greater, and produces greater resistance, the accumulation goes on, the pain becomes more severe, and now, as the uterus is roused to contract upon the retained fluid, she experiences exacerbations of intense suffering, similar to the severe pain we sometimes see in bad cases of abortion or early miscarriage, until, after a long and agonising struggle, the obstruction is surmounted and the discharge takes place.

In cases of obstructive dysmenorrhœa of this severe character, the uterine system, as well as the general health, suffer considerably. She has scarcely recovered from the effects of one period, before the next is warning her of its approach. The uterus becomes enlarged by this periodical distension, so that the ordinary internal measurement of two inches and a half from the os to the fundus, will become three inches, or even more. The uterus, from the increased size of the cavity, never clears itself entirely of the secreted fluid, but more or less continues to be retained. After a time, the watery portion becomes absorbed, leaving what remains of a dark, thick, treacle consistence, to be evacuated at the next time. Hence it is that, in passing the sound or dilating the os uteri, in these cases, a quantity of dark brown, slimy fluid frequently besmears the instrument, and the patient has a discharge of a similar character for a day or two afterwards, with much relief.

I need hardly say, that the immediate effect of such severe uterine irritation and suffering is to derange the chylopoietic functions considerably; the tongue soon displays that dry, rough, short-napped fur which is so invariably seen under circumstances of uterine irritation. The stomach, liver, and bowels become deranged, with more or less hæmorrhoidal congestion and loaded urine; and this condition re-acts on the uterine system, and increases the irritability and suffering at the next period.

Obstructive dysmenorrhœa seldom continues for any period of time without producing more or less ovarian irritation. The ovaries are well known to present a considerable degree of congestion at these times, even in a state of health; but, under such circumstances, the congestion assumes more the character of inflammation, to the great aggravation of the patient's sufferings. There is severe pain

in the groin above Poupart's ligament, darting down the thigh; the part is very tender upon pressure, and frequently feels to the patient as if swelled; the discharge is attended with exudations of fibrinous matter, and is mixed with small clots, which are more or less broken up as they are forced through the contracted os uteri; chronic inflammation of the ovary is gradually set up, and is not unfrequently attended with severe menorrhagia, as I have shown in a striking case, *Medical Times*, Feb. 15, 1845.

There is no doubt, that a large number of cases of obstructive dysmenorrhœa are due to a congenitally contracted state of the os uteri or canal of the cervix; and, accordingly, we find that, in many or most of these cases, the patient has suffered at her catamenial periods from their first appearance; in others, it has come on some years later; in others, not until marriage. The catamenia may be obstructed in cases of retroversion and anteversion of the uterus, where the os uteri internum or the canal of the cervix become more or less closed, owing to the bent state of the part in this displacement. In those cases which are occasionally seen to occur for the first time after marriage, I presume it is owing to the congested, swollen state of the lining membrane obstructing still further a canal or orifice, which, though contracted, had nevertheless till then allowed the discharge of the catamenia without any peculiar difficulty. There can be little doubt, but that the obstructive dysmenorrhœa which is sometimes seen in connexion with rheumatic-gouty habits, arises from a similar condition of the mucous membrane lining the os and canal of the cervix uteri.

The treatment of obstructive dysmenorrhœa consists in first attending to the general health, and rectifying any functional derangement which may have occurred, and in effecting the necessary degree of dilatation of the os and cervix uteri as shall remove the obstruction which has hitherto existed to the discharge of the catamenia. The dilator which I have been in the habit of using for many years is well known in the shops of our principal instrument-makers, especially Ferguson and Weiss; and is, I think, the safest and best adapted for the purpose. The blades, being made of well-tempered steel, readily yield to any resistance which they may meet with, and thus modify greatly the force which is applied to the part; while the steady pressure which they exert, when opened in the canal of the cervix and allowed to remain so for about a minute, rapidly effects a considerable degree of dilatation. When this is done but a short time before a period, the relief is frequently very striking: the discharge appears freely, with little or no precursory pain; and the patient declares that she has never known a period to pass so easily. If the dysmenorrhœa has been habitual, the dilatation is usually accompanied with a discharge of that dark slimy matter which I have before described, and which had evidently been retained in the uterus since the last period.

How far the effects of this mode of dilating the os uteri will be permanent must always be uncertain; they vary greatly in different individuals. In some, the os uteri has returned to its former condition in 24 hours; in others, the dilatation seems to be nearly or quite permanent.

A still further and more permanent degree of dilatation may be effected by the introduction of a sponge-tent, which, when well made and skilfully introduced, completely dilates the whole canal of the cervix during the night, with but little pain, so that the finger may even pass into the uterine cavity when the sponge is removed the next morning. Generally speaking, it is necessary to use the dilator first, to open the passage sufficiently to admit the tent. My friend, Professor Simpson, was the first to point out the use of metallic tents of different size, which are worn for some weeks, and there is no doubt, that the dilatation which they produce is more permanent than either of the above-mentioned methods. In some patients, however, they produce severe irritation, whereas, in others, they are not only borne easily, but with great relief.

Where these various means of dilating the os and cervix by stretching have failed, we have no choice but of dividing the contracted portion by means of the *bistoir cachée*, which Professor Simpson first used for the purpose. The operation is neither difficult nor peculiarly painful; the incision commences at the os uteri internum, gradually increasing in depth as it descends towards the os uteri externum or os tinæ, just above which it should have completely divided the wall of the cervix. I make but one incision, viz., in front; the amount of discharge is usually

as much as at an ordinary catamenial period, and it is desirable that the operation should be performed as near to the halfway time as possible, since the chance of any profuse degree of discharge is less than at any other period. In one or two days afterwards a metallic tent must be introduced, so as to prevent the part from closing by cicatrization, and to insure a canal of the requisite size; this should be retained for fourteen days, and may then be safely removed.

Lastly, there is no doubt that much of our success in these cases will depend on the attention which we pay to the state of the general health, and the care with which we rectify any derangements of the *primæ viæ*, &c. Mild alteratives and laxatives followed by such combinations of tonics as are considered to exert an alterative effect, as of the nitro-muriatic acid with bitter infusions; and tonics of a stronger character combined with saline laxatives, seem to be the medicines best adapted for the general treatment in these cases.

The local use of opiates to allay pain can scarcely be said to be indicated in obstructive dysmenorrhœa, although, in the other forms of painful menstruation, they are a very valuable class of remedies.

Mrs. D., aged 36, married several years; never pregnant.

March 18, 1849.—Tall, gaunt, pale; complains of general debility, and considerable gastric derangement; has always suffered severely at the catamenial periods; the pain preceding the discharge for three or four days, attended with abdominal distension and great depression of mind; latterly the periods have been very profuse.

Examination per Vaginam.—Os uteri internum nearly closed. I dilated it slightly, and some catamenial fluid escaped.

R. Extr. taraxaci, cochl. min. $\frac{1}{2}$ o. n. ex lacte.

R. Confect. rosæ, ʒj.; acidi sulph. dil. ʒj.; decoct. cinchonæ, ʒxij. Misce. cola bene, ft. mist. cujus sumat cochl. magn. ij. bis die.

March 27.—Feels much better. Extr. aloes aquosi, ʒij.; extr. hyos., ʒiss.; mastiches, gr. xij. M. ft. pil. xx. sumat j. ij. h. s.

R. Acidi hydrochlor. dil.; acidi nitrici. dil. aa. ʒj.; liq. taraxaci, ʒj.; infus. gentianæ, co. ad ʒviij. M. ft. mist. cujus sumat cochl. magn. ij. bis die.

April 12.—Writes from the country, that a catamenial period has just passed over; it came at the right time, without any previous suffering or swelling of the abdomen, as formerly. The discharge was florid, and quite free from shreds, which is quite a new feature to her. She had pain of the back, but it was quickly relieved by the discharge. General health greatly improved. Rep. med.

June 4.—Catamenia appeared four or five days sooner than she expected, but, with the exception of a slight degree of depression, there was no previous symptom whatever. The discharge was decidedly more natural, and less profuse; there was scarcely any of the thick, slimy matter which had been hitherto observed.

R. Quinæ disulph., gr. ij.; ferri sulph., gr. ij.; extr. coloc. co., gr. iv. M. ft. pil. ij. h. s. s. Rep. mist. cinchonæ.

May 12.—These medicines have agreed well with her; feels much stronger; rises at six; is as much in the open air as possible. Rep. med.

The difference in the character of the next catamenial period after the dilatation was very striking; it was not only unattended by any previous pain or discomfort, but the discharge was much more healthy. The treatment was of the simplest kind. Her health improved steadily. I have heard occasionally of her since, and, with one slight exception, the report has always been a most favourable one.

CHOLERA IN THE IRISH ASYLUMS.—Although cholera was very prevalent and fatal throughout the kingdom during the summer and autumn of 1849, with the exception of twenty-four deaths at the Limerick Asylum in the course of a week, and two cases elsewhere, we have to record no mortality from that disease. Its appearance was equally sudden and inexplicable at Limerick, attacking twenty-six persons within a few hours,—the corridors in which it broke out, and to which it was principally confined, being as well-ventilated and orderly as any in the establishment, and the victims themselves, of various ages, previously in good health. We received reports at the time from the Carlow and other asylums, that some of the inmates had been affected with the usual premonitory symptoms; but, by an immediate alteration of dietary, so as to increase their physical comforts, no ill consequences resulted. —*Fifth Report on the Lunatic Asylums in Ireland.*

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

By HENRY SMITH, Esq., F.R.C.S.

(Formerly House-Surgeon to the Hospital.)

CAROTID ANEURISM—LIGATURE OF THE COMMON CAROTID.

A very interesting and instructive case of aneurism of the carotid artery, in which it was found necessary to place a ligature upon the vessel, has lately been in the hospital under the care of Mr. Fergusson. Cases of aneurism, occurring in arteries which will allow of some curative methods by the surgeon, are always affections of interest, inasmuch as the treatment which can be put in force is often attended with the best results to the patient, and the surgeon is gratified with the measures he has had it in his power to adopt. Accidental circumstances, however, will happen, which give much more interest to cases of aneurism. This fact is especially observable in the instance we are going to speak of.

The patient was a woman between thirty and forty, who had spent a life of dissipation and poverty, and had the aspect of being at least ten years older than she really was. She was admitted into the hospital on Thursday, June 13, having a pulsating tumour on the left side of her neck. Eighteen months previously she had been severely exposed, and one of her toes became mortified through a frost bite. Six months ago she first noticed the symptoms of her present complaint, which consisted in cough, and some difficulty in swallowing; and, about the same time, she noticed a small swelling in the spot where the tumour now is.

On examination, a tumour was found to be situated in the centre of the left side, just over the locality of the carotid vessels; it extends somewhat equally in all directions, but has encroached more internally, having pushed the larynx considerably over to the right side; below it extended to within about an inch and a half of the clavicular and sternal articulation; there was strong pulsation, and a general uniform heaving of the whole mass, and the tumour could not be isolated and lifted from the carotid vessels. The peculiar thrill was very distinct when clasped by the hand. It was pronounced to be an aneurism of the carotid artery, Mr. Fergusson thinking that it was somewhat near the bifurcation; the patient complained of difficulty in breathing and swallowing to some extent; her health appeared to be in general respects but weakly. It was determined that the patient should lie quiet for some days, and if no contra-indication arose, that a ligature should be applied upon the common carotid artery.

On the 15th, two days after her admission, a sudden change had taken place in the condition of the tumour; it had increased in size, and the patient was somewhat suddenly distressed by great difficulty of breathing and swallowing; so that on Mr. Fergusson's visit to the hospital at two o'clock, he immediately directed his attentions to her. She was very much distressed by dyspnoea; the tumour had become larger, and, on its surface, it had become red and inflamed, and fluctuation was so very distinct at the most prominent spot, that there appeared to be but little texture between the integument and the aneurismal sac. The woman was in a very low condition, and it was evident that she was suffering much, from her difficult efforts at getting breath; there was no expectoration, or but little; a loud bronchial murmur was heard throughout the chest, but it appeared to arise not from any accumulation of secretion within the tubes, the sounds being of a dry character.

It was quite clear, that, if anything was to be done at all for saving this woman's life, it must be done at once. Mr. Fergusson, therefore, called together his colleagues, and it was deemed proper that the operation of placing a ligature upon the common carotid artery should be proceeded with at once, and that the circumstances of the case admitted no delay. Consequently, the patient was brought down into the theatre, and chloroform was very slowly and cautiously given by Dr. Salter, until she was under its happy influence. Mr. Fergusson made an incision, between three and four inches in length, commencing it on the lower surface of the tumour, carrying it along the sternal border of the mastoid muscle, and prolonging it on to the walls of the chest. The origins of the sterno-thyroid and hyoid were divided, by

which more room was allowed; and, after some very cautious dissection, during which it was necessary to avoid some large veins, the artery was exposed very deeply below the omohyoid muscle, and the ligature was placed around it without any difficulty, and with the slightest disturbance of parts. The wound was closed, and the patient, who had remained perfectly under the influence of chloroform during the whole time of the operation, was removed to bed.

At four o'clock, the breathing was more regular; pulse 86; cough, and tracheal irritation.

At eight o'clock, the breathing was more regular, and the pulse was only 90 in the minute; the tumour was less tense than before the operation was performed.

At ten o'clock, the breathing remained much in the same condition; but the pulse had risen to 120 beats, and the patient gradually got worse, and, having been slightly convulsed, died at three o'clock in the morning, just about twelve hours after the operation was performed.

At the *post-mortem* examination, which was conducted with very great care, it was found, that the aneurism was situated just about the bifurcation of the common into external and internal carotid arteries. The tumour was as big as the fist, and was filled with a quantity of coagula. It lay quite contiguous to the larynx; in fact, when the finger was placed inside the sac, the thyroid cartilage could be felt as a portion of its inner wall; the pneumogastric was also closely attached to it behind; and both these parts must have been greatly compressed. The ligature was found to have been placed about one inch and a half below the aneurism. The organs of the thorax were examined. The heart was flabby and weak, and there was some considerable amount of deposit upon the walls of the aorta, showing that the arterial system was in that condition which is found to be so favourable to the occurrence of aneurism. The brain was examined, but it was perfectly healthy.

Ligature of the common carotid artery has now so frequently and so successfully been performed, that it must be looked upon as an operation likely to be attended with good results, and therefore the surgeon may proceed to it with a considerable degree of confidence when an occasion for its necessity presents itself. The main interest, however, connected with the case just related, rests not merely with the operation itself, but depends upon the particular condition and circumstances which led to this necessity; and those features of the malady which the patient laboured under are to a great degree both interesting and instructive. We have here an excellent illustration of those pathological changes which suddenly occur in an aneurismal tumour, and which render prompt interference on the part of the surgeon very necessary. There are certain conditions and changes which quickly take place in an aneurism, and which will cause the surgeon to alter his proposed mode of treatment, or at least the period of the treatment, and will render the case more or less complicated. Thus, for instance, while a patient with an aneurism in the popliteal space is lying by, waiting for an operation, or perhaps, not sufficiently impressed with the danger of his case, is pursuing his ordinary avocations, it may happen that the tumour suddenly gives way, that the pulsation in it stops, the limb below becomes enormously swollen, and the symptoms of impeded circulation and innervation are marked in the lower part of the leg and foot,—the aneurismal sac has ruptured internally. This is one of the sudden changes which will occasionally take place in the course of an aneurismal affection, and this condition of things calls for the most prompt treatment on the part of the surgeon, and he will have to consider at once which method he should use to save life—immediate amputation, or ligature of the vessel without further delay.

Again, an aneurism which has remained much in the same condition for a length of time, while under the eye of the surgeon, will suddenly increase in size; and this even may occur during the course of treatment by pressure, and will necessitate immediate interference.

In the case just mentioned, we have an example of several circumstances suddenly occurring in connexion with the aneurismal tumour, which rendered it peculiarly complicating. These circumstances chiefly depended upon the situation of the tumour, and the peculiar relations it had with parts of more or less importance.

In the first place the aneurismal tumour suddenly increased in size; its pulsations became more violent, and, moreover, such was the condition of the integuments over its most prominent part, that there could be no doubt that

changes were rapidly occurring which usually take place when an external aneurism is about to burst; for, as is well-known, the prelude to this unfortunate circumstance is a sloughing of the skin and of the sac, by which means the blood is allowed to escape, not altogether in gushes, but gradually, so that the patient in a short time dies from the hæmorrhage, unless the bleeding can be put a stop to.

The other elements to the condition depended upon the peculiar position or situation of the tumour; for being on the carotid artery it lay alongside the windpipe and gullet, and caused great pressure upon these conduits, especially upon the former, so that, in fact, by the increase in size of the tumour and the violence of its pulsations, the larynx was pushed over to the right, and there appeared to be every chance of suffocation by the direct hindrance to the entrance of air into the lungs. Moreover, the tumour lay upon, and compressed the pneumogastric nerve and other filaments which have influence upon the respiratory process, and there can be no doubt that a great part of the bronchial and tracheal irritation under which she was labouring was dependent upon this circumstance.

The only question, then, under all the various circumstances, was as to whether any operation could by any possibility afford the unfortunate patient a chance of life, for there could be no doubt whatever that death would rapidly ensue, either from the bursting of the aneurism or from actual suffocation. Even in her desperate condition any surgeon would be blameable who had allowed her to die from either of these causes without affording her the chance which an operation would give. Even if the ligature of the carotid artery had not been applied, it would in all probability have been necessary to have opened the windpipe to prevent suffocation. During the operation there was so little bleeding and so little disturbance of parts, and the chloroform was attended with such little inconvenience, that death must be considered as due to the effects of the disease itself, and not to the proceeding which it was necessary—for giving a last chance of life, and for the sake of surgery—to put in force.

PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

BRADFORD INFIRMARY.

By W. HEWETT, Esq., M.R.C.S.,
House-Surgeon.

SPONTANEOUS DISLOCATION OF THE SHOULDER-JOINT.

CATHERINE JAKEL, aged 19, a very delicate little girl, became a patient of mine on 8th August, suffering from a pretty severe attack of acute rheumatism.

She was by birth a German, having been in this country about four months, gaining her livelihood by playing the tambourine.

About a week before I first saw her, she got wet through, and had remained for many hours in her damp clothes. A few days afterwards, she complained only of her left shoulder, which was still suffering severely from pain, and an inordinate amount of swelling, from increased synovial secretion, so that the poor girl was quite unable to raise her arm.

This continued for about a fortnight, when, on the subsidence of the swelling, the left arm was observed to be somewhat longer than the right, hanging powerless by the side, and all attempts to raise it being attended with considerable pain.

This, then, appeared to be a case of partial luxation, dependent on relaxation of the ligaments from the over-distension of the joint by synovial secretion.

Such cases, I presume, are not very common, or, if so, I have been unable to find many recorded.

Considering that dislocations of this joint are more frequent than all others collectively, we cannot be too much alive to the causes of such accidents, and to the peculiarities they severally present.

This case could only be confounded with fracture of the neck of the scapula, but the absence alike of crepitus and any local injury, at once precluded that idea.

The symptoms were—a considerable elongation of the limb,

with increased mobility, the arm appearing to hang loosely by the side, together with a projection of the acromion, a hollow beneath it, and the head of the humerus directed forwards towards the coracoid process.

Sir Astley Cooper mentions a case, in which the patella was luxated from a similar cause: probably no other joints but the knee and shoulder would admit of this kind of dislocation from synovitis. It has been said, indeed, that the elongation of the limb in incipient morbus coxarius, is due to this same cause; but the structure of the hip-joint will not allow of any great displacement during life, although after death, by the forcible injection of fluid into the capsular ligament, even the femur has been luxated.

Displacement from mere relaxation of the ligaments is by no means so uncommon, as cases of this kind, from "an abundance of synovia secreted, which must have the effect of distending the capsule and thereby weakening the articulation." Sir Astley Cooper appears justly to have recognised this distinction.

The head of the humerus was readily restored, but immediately became displaced again by the mere weight of the limb; and hence, as Abernethy observes, such cases are very "vexatious to treat."

The treatment consisted in keeping up the elbow by means of a sling, which, at the same time, was brought forward so as to throw back the head of the humerus, the limb being kept thus *in situ* by a roller passed round the trunk.

The poor girl being unable to follow her occupation as an itinerant musician, left England for her native home, and hence, unfortunately, I have lost all further sight of the case.

SINGULAR CASE OF FETAL NON-DEVELOPMENT.

The following particulars respecting a case of congenital malformation of the hands and feet, arising from an arrest of foetal development, may not be uninteresting.

The subject of this anomaly is George Lumbey, a healthy, intelligent little lad, now in his seventh year.

I may first observe that, in addition to the deficiency of phalanges, both his feet are deformed, presenting the ordinary characters of talipes varus; but, by the early application of proper apparatus, much has been done towards remedying this defect.

The right foot is perfect as regards the phalanges, with the exception that the two outer and the two middle toes are respectively united together in their entire length by a broad web of integument.

The left foot is far more defective, the great toe alone being perfect; the second and third toes, which are webbed, have only the first phalanx with rudimentary nails, whilst the two others are altogether wanting.

The hands (more particularly the left, including also the thumb) are entirely webbed, the web being most fully developed between the index and middle fingers, extending the entire length of the first phalanx.

The thumb of the right hand is natural, the middle and little fingers having each the first phalanx and half the second, which terminates in a blunt, conical tip; the index finger has only the proximal phalanx, also ending in a point; indeed, the ring finger of this hand is the only one that is fully developed.

The thumb and middle finger of the left hand have only the first phalanx, both being conical, and wanting the articular extremity. The three others have each a phalanx and a half, with rudimentary nails, and, like the other undeveloped fingers, they also terminate in a point.

Notwithstanding this imperfect condition, the little fellow can lace his boots, button his clothes, and even play at marbles with tolerable success!

NORTH STAFFORDSHIRE INFIRMARY, POTTERIES.

By J. H. PYLECOTT, Esq.,
House-Surgeon.

STRICTURE.—PERINÆAL SECTION.

WE have perused several papers in your Journal during the last twelve months on that *questio vexata* the perineal section. Without enlisting on either side, perhaps it may be useful to report the following case, which lately occurred in this hospital; showing, first, that, in some cases of stricture, it

is at least extremely difficult to pass an instrument into the bladder; and, secondly, that there are also some cases in which the perinæal section may be performed with ease and with the greatest benefit to the patient. With what degree of risk, we would leave those to judge who have had extensive opportunities of judging.

F. H., aged 36, a groom, became Mr. Garner's patient, at the North Staffordshire Infirmary. His stricture, situated in the bulbous portion of the urethra, had existed for five years, and he attributed it to the part being bruised, while riding, by the pommel of the saddle. For the first twelve months, he suffered from occasional attacks of complete stoppage, particularly when he got drunk, or had been exposed to wet. These attacks were relieved by the catheter, baths, etc. For three or four years, however, no instrument has been introduced, though often attempted at St. Bartholomew's last summer, as well as at the Liverpool, and other provincial hospitals.

During this time, the urine has commonly been voidable to some extent, but always in a very fine stream, with much effort; and a constant symptom has been incontinence of urine, which has probably saved him from extravasation. Owing to these symptoms, he became debilitated, nervous, anasarctous, incapable of following his employment, and, consequently, pretty constantly the inmate of workhouses or hospitals. Our surgical staff having been foiled in the attempt to pass an instrument, the patient was placed on the table in the position for lithotomy, a catheter passed down to the seat of stricture in the perinæum, an incision, about two inches and a half long, made in the line of the raphe; the extremity of the instrument cut upon; the knife then carried onwards through a hard, callous stricture, about an inch in length; passing the finger through which, the membranous portion of the urethra, a little before the prostate, could be felt, and the opening of the urethra detected; a director was passed into it, serving for a guide to the catheter, which was finally passed onwards and allowed to remain, having drawn off a considerable quantity of water. A small vessel was seen to bleed per saltem, when the incision was made, and hæmorrhage almost to faintness took place when the patient became warm in bed; this, however, stopped upon a little pressure being used. Some difficulty having been experienced in the introduction of gum catheters in the after treatment, silver ones were used; they, however, produced so much irritation and inflammation of the urethra, with apparently a small abscess around the urethra, in front of the scrotum, that their constant presence was discontinued, being only introduced once or twice a day, and the urine being allowed to escape to a considerable extent through the wound. This, however, gradually closed up, as after lithotomy, and by appropriate treatment the patient's health improved, and he left the hospital on the 17th of April. On May 11 he was strong and able to work, and has continued to do so up to this day, September 29, without the least return of the stricture, and certainly without any instrument having been used for five months.

NORTHERN HOSPITAL, LIVERPOOL.

By JOHN D. WEAVER, Esq.,
House Surgeon.

BERNARD HART was brought to the hospital on October 11, about seven o'clock in the morning, having met with the following accident. Having been taken up on a charge of drunkenness during the night to a local station, some police officers were about to convey him to the Central Station, when, on entering the van for that purpose, he staggered backwards. A police-officer, unwilling to touch the man on account of his filthy condition, applied his stick to support him, which unfortunately passed into the rectum. When examined, the finger was found to pass readily into the bladder immediately behind the prostate gland, the opening being of sufficient size to admit three fingers. He was in a state of collapse when admitted, from which he never recovered, and died about seven o'clock p.m., on the same day. On examination after death the opening from the rectum into the bladder was found to occupy a large portion of the triangular space behind the prostate; but another opening, corresponding with the first, was discovered passing from the bladder into the peritoneal cavity, through which some urine had passed, thus accounting for his speedy death.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Oct. 25.—MEDICAL SOCIETY OF LONDON. *Subject*:—Mr. T. Hunt, "On the Skin as Diagnostic of the General Health." Eight o'clock.
 Saturday, November 1.—MEDICAL SOCIETY OF LONDON. *General Meeting.* Eight o'clock.

THE MEDICAL TIMES.

SATURDAY, OCTOBER 25.

OUR RELATIONS WITH THE HOMŒOPATHISTS.
[No. II.]

To have the insignia of a Profession, without its highest privileges; to be legally a brother without receiving fraternal regard; to find the frank recognition changed for the averted glance, or contemptuous smile; to have your fellowship endured, only because it cannot be abjured; to maintain a forced connexion with a body, the members of which despise and have sought to expel you;—such, homœopaths, is your proud position. Let us consider the efforts by which you have reached it. That it was not unexpected, we have your own confession; (a) this, probably, is some evidence that it was not undeserved. Remember, that this condemnation at the hands of the Profession is unanimous, and proceeds alike from the young and the old; from those who have been brought into contact with you, and have learned your character, and from those who, far removed above all competition, have despised the sinuosities of your course. As Professor Henderson, in the bitterness of his spirit, has admitted, even his own familiar friend and colleague, the Professor at Edinburgh, who has found a lower deep than even in homœopathy, who sought his advice for his only child, has, after this experience, concurred in the sentence against him.

But what means this determined attitude of the whole Profession? Their words are strong,—their acts are stronger still. Not satisfied with denouncing the errors of your opinions, they have disclaimed the honour of your acquaintance. The one step was necessary to mark their contempt for your doctrines; the other, to stamp their condemnation of your character. "The question" between you and the Profession, as Dr. Cowan ably put it at the Brighton Meeting, "is one of principle, not of doses,—one of morals, not of etiquette." Your antecedents tell against you. Hahnemann began his career with vulgar and common quackery, (b) though he ended it with transcendental imposition. We are free to confess, that, apart altogether from the difficulty of believing that sane men can seriously imagine homœopathy to be true, the character of those who have joined your ranks is not such as to avert suspicion from you. We read recently of a festive meeting of your number, and

(a) Having long anticipated such a result, it has been my endeavour to avert it, by such means as I could employ without discredit.—*Henderson's Letter*, p. 4.

(b) "In 1792, Leopold II. of Austria died; and Hahnemann the profound philosopher, then evolving his great discovery, and anxious to conciliate the Profession, drew attention to himself by denouncing the King's physicians, and publicly called upon them to justify themselves for having had recourse to bloodletting. Thus he made himself notorious. Again, we find him imagining that he had discovered a specific and preventive for scarlet fever. Did this benefactor of his species make it public? On the contrary, it is recorded of him, that he kept it secret, though, after Jany and Sulzer had thrown doubts on its efficacy, it was disclosed. Reflect for a moment, says Moore, (speaking of like conduct in others,) what kind of man that must be, who is base enough to conceal a medicine endowed with a power of curing any of the deplorable distempers that afflict mankind. If such a discovery were actually made and kept secret, the discoverer must be a villain for concealing what would save thousands from misery and death."—*Sequel to Wood's Homœopathy Unmasked*. Preface, p. vii.

we marvelled at the odd appearance this modern cave of Adullam must have presented, wherein were gathered together "every one that was in distress, and every one that was in debt, and every one that was discontented."

The pleadings of your professional adviser in the "New Test Act" are managed with consummate tact, and we almost lose our sense of the badness of the cause in the dexterity of the advocate. But the triumph of his skill is in the selection of his witnesses. Young men are sometimes awkwardly candid and communicative; old ones sometimes inconveniently obstinate. The character most serviceable, is when natural cunning has been sharpened by practice, and youthful enthusiasm tempered by policy. The examination of Professor Henderson does justice to his selection. Your *present* object is to show that, after all, Regular Medicine and Homœopathy are not very much at variance, but might consort very well in the same halls, and even occupy chairs in the same universities.

To prove this, Dr. Henderson states that to be a homœopathist is *only* to believe in the existence of a law—"that the substance which produces in the healthy a resemblance of the disease, will cure it in the sick." (a) Again, he is interrogated, "Is that all that is implied in being a homœopathist?" "Strictly speaking, *all*," he answers. "Every physician practising according to that law is a homœopathist, but there is a further difference in practice arising out of this law: that we always give medicines in much smaller quantities than they are otherwise usually given." "Nothing more?" "Nothing more, I believe."

How differently you can speak when the emoluments of a chair are not at issue, let the following passage, taken from a work with which Dr. Henderson is not unfamiliar, declare:—

"The latter, (homœopathy), does not aim at the introduction of a new practice into a solitary branch of the medical art, but demands for the field of its sweeping reformation, the whole territory of practical medicine, joins issue with the old system on every inch of its possessions, and has to beat it from its fastnesses among the morasses of false experience, and the jungles of crude hypotheses." (b)

Which of your two very opposite statements medical men believe, will best appear from the first of those admirable Resolutions for which the Profession are indebted to the Provincial Medical and Surgical Association:—

"That homœopathy, as propounded by Hahnemann, and practised by his followers, is so utterly opposed to science and common sense, as well as so completely at variance with the experience of the Medical Profession, that it ought to be in no way or degree practised or countenanced by any regularly educated medical practitioner."

"Utterly opposed to science and common sense." Strong words these! not stronger, however, than the occasion warrants, and the proof demonstrates. For, *first*, we assert, and proceed to prove, that the very foundation on which your system rests is an imposition, so palpable that we can scarcely suppose that you are yourselves misled by it. Your fundamental law, according to Dr. Henderson, is the following:—"That the substance which produces in the healthy a resemblance of the disease, will cure it in the sick." It is evident, then, that you ought to use no remedy in the treatment of the sick, with the action of which on the healthy you are not familiar. You employ considerably upwards of 200 drugs, and we defy you to point to one of them, of the action of which on the healthy body you have any accurate record. Who made the experiments for you? Ignorant men, utterly incapable of conducting a scientific

(a) "New Test Act," p. 5.

(b) "Defence of Hahnemann and his Doctrines," etc., p. 23.]

inquiry, especially on a matter so nice as testing the action of remedies. What evidence had you that they were fit, either mentally or corporeally, for such a task? Hahnemann tells us, that, among other qualifications, the subjects of such experiments must be free from all chronic disease or hereditary defect of constitution. Who ascertained that this was the case in reference to any of your experimenters? In short, your alleged experiments are perfectly valueless, and cannot be depended upon, as one of your own number has confessed.(a)

In your treatment of disease, then, you are quite in the dark as to one side of your own law. You do not know whether the remedies you prescribe have any real power "to produce in the healthy a resemblance of the disease," and the only way, after all, in which you are led to make choice of any remedy, is by experimenting with it on the sick. The ingenuous Dr. Black confesses this, too, in a passage immediately following the one we have quoted.(b) "Years of experience at the bed-side!" We thought *your* experiments were on the healthy! "Gradually acquainted!" We thought you could arrive at once, by your law, at the medicine which could extinguish disease, because "it produces a resemblance of it in the healthy!" In practice, you desert this altogether, and yet still profess, that it is *the* law which guides you! Oh, rare philosophers! fitting associates for a Macleod and a Ransford!

Second.—We assert, and proceed to prove, that your actual method of administering these medicines is opposed to the "Organon" of Hahnemann, and ought, if he is to be believed, to be followed by injury, rather than cure. In paragraphs cclxxii.—cclxxiv. he lays great stress on this,—that "only one single, simple medicine should be given to the patient at one time." Dr. Henderson and Dr. Ransford have each published cases on the successful treatment of which they found their belief in homœopathy. Strange to say, they both continually violate this law, and yet allege they are treating disease homœopathically; and they assert, that they succeed in their treatment, and this, although *their* method is diametrically opposed to that of Hahnemann. Does not such a fact speak volumes? For example, in the very first case treated by Dr. Ransford, we find this:—"Tinct. aconiti et ipecacuanhæ, one drop of each, was ordered to be given alternately every quarter of an hour." On turning to "Jahr's Manual," we find, that the duration of the action of aconite is from eight to forty-eight hours, and that of ipecacuanha is often five days. Again, in a case headed "Cholera Britannicum," we find the following entry, under Dr. Ransford's own hand:—"Belladonna, antimonium, rhubarb, sulphur, nux vomica, and calcaria, were administered in succession. Her convalescence was complete in eight days." (Page 17.) We leave to those skilled in homœopathic arithmetic to calculate how often the effect of these drugs "must," in the words of Hahnemann, "have obstructed and altered each other's actions on the human body." Nor was this the only error committed in

these *sample* cases. We pray our readers to observe the rapid succession in which the doses were given in the first case, and must have been given in the second, and, having done so, to read the following extract from Hahnemann's "Organon":—"The vital force * * * is usually so violently excited and convulsed by a larger dose, or also by smaller doses of even a homœopathically chosen remedy, given rapidly one after another, that, in most cases, its re-action will be anything but salutary, and will do more harm than good." If, then, in this test case of Dr. Ransford's, the child was cured by what he gave it, Hahnemann was wrong; if Hahnemann be right, Ransford's patent revolver system ought to have "done more harm than good." What would cautious old Hahnemann, who speaks of allowing days to pass before a second dose even of the same medicine is ventured on, have said to this style of practice, which, though contrary to all his rules, and opposed to all his experience, seems to cure as well as his own? Instances of the same kind are numerous in Dr. Henderson's test cases also, as e.g., "Aconit. 6, and bryon. 6, in two hours. Afterwards bryonia every four hours."—P. 92. The effects of bryonia last from four to five days in acute affections; thirty days in some chronic diseases.—(Jahr.) Or, "bellad. 6, bryon. 6, alternately every third hour," (p. 93); or, "nux vom. 6, pulsat. 3, were ordered every six hours alternately,"—the action of the former "lasting from fifteen to twenty days, or even much longer" (Jahr), that of the latter for "four or five days in acute affections, and many weeks in chronic."—(Jahr.)

No wonder that a Reverend Rector, one of the Vice-Presidents of the Hahnemann Hospital, who learned the system from Hahnemann himself, and who was one of his most intimate friends,(a) in the dedication of a sermon preached in aid of the Hahnemann Hospital, observes: "Modern homœopathy rushes through all the sage's precautions like a mad bull through a field of flowers. Now, the consequence of all these hideous mistakes is quite fatal in cases of chronic disease."(b) Again: "The great misfortune is, that nobody reads the Organon, or, which is the same thing, nobody pays any attention to its warnings."(c) Are we to infer from this, that no homœopathist considers it worth reading, or worth believing, if they do peruse it? You act contrary to the precepts of the system, and yet you affirm, that you cure by its means. What a field of inquiry this opens up. Get Everest a bishopric, and hush it up. But, you blame us for not believing your cases, and asserting that they are not real cures after all. Mr. Everest shall be our apologist even in this. "I was totally unaware," he says, "that homœopathy could be thus perverted, and made to imitate so ingeniously all the worst errors of the old system, until Hahnemann pointed it out to me. He read, with me, a case that had been lately published by one of his disciples as a splendid cure, and showed me how; and when the doctor, ignorant of the action of his own medicines, had given too much, and then treated his own storm; and so spun out to many weeks a case which ought to have lasted three or four days; and when, at length, the poor dear patient got out of it," (Query: by the *vis medicatrix Naturæ*, to which homœopathic patients are indebted for many escapes?) "trumpeted it forth to the world as a grand cure. After that I had many opportu-

(a) Dr. Black, see page 59 of his "Treatise," where the following passage occurs:—"Nor are we ignorant of the deficiencies in the arrangement of the symptoms adopted by Hahnemann. Commingling the symptoms of the various experimenters, without noticing what doses were employed, what symptoms were primarily manifested, in what groupes or order of succession they were observed by different individuals, and the slight regard paid to the objective symptoms, render it impracticable to know the organ primarily affected, the generic relation of many individual symptoms, or, what is more important, the character of the total operation of the medicine, so that it may be viewed as a difficult (impossible?) task for one who refers to these records of symptoms to select the right remedy." Such is the humiliating confession of a leader in this new sect! Yet, he is spoken of as a prodigy of genius, and even said to have had a philosophic mind!

(b) "Less embarrassment, however, occurs in practice; because, after years of experience at the bedside, with the remedies thus represented, homœopathists become gradually acquainted with the characters of each, its total operation, and its particular tendencies."

(a) "I lived on terms of the greatest intimacy and friendship with Hahnemann for several years. Reserved to most people, to me he was communicative; and I believe very few people have ever enjoyed so many opportunities of knowing Hahnemann thoroughly as I have."—Letter addressed to Dr. Rose Cormack by the Rev. Thomas Everest, p. 15.

(b) Sermon preached in aid of the Hahnemann Hospital, by the Rev. T. Everest, rector of Wickwar, page 17.

(c) Ibid, p. 8.

nities of seeing similar wretched work, and he used to show me how and when the medicine should have been suspended; and reading by the light of his remarks *the cases now published*, I can assure you the same thing is frequently happening still." (a) Most honest divine! Most rare confession! Most sad exposure! Most palpable imposition detected! A bishopric! A bishopric! Nothing stifles inquiry like a bishopric.

Third.—We assert, and proceed to prove, that what you profess to be guided by in the treatment of disease is often incredibly absurd; and that you must, yourselves, be perfectly aware of the truth of what we now allege.

We observe in Dr. Ransford's pamphlet, that in the first of his experiments he gave a drug, "hepar sulphuris." The case was one of bronchitis. We observe the same drug given by Dr. Henderson in a case of laryngeal cough. We further find among the symptoms this drug is said by Jahr to produce, when swallowed by the healthy, "pain in the larynx and chest," "cough," "loss of voice," "difficulty of breathing." On whose authority does its power to produce these rest? And is it these which renders it eligible for the treatment of the diseases in which it is employed? Its power to produce these rests on the authority of Hahnemann and Jahr, and it is these effects which render it homœopathic to the disease. Then, of course, did it not produce these symptoms in the healthy, it would not be a homœopathic remedy, and ought not to cure similar diseases? Of course not. We observe, that this same medicine is recorded to have produced in the healthy "bad humour, and dislike to seeing relations;" "sadness, and a desire to weep;" "bleeding from the nose in the morning, after singing;" "carcinomatous ulceration of the prepuce." Does its power to produce these rest on the same authority, and has it the same claim on our belief? Undoubtedly. Do you, then, as sane men, believe this? Do you believe that this preparation of sulphur, taken in any quantity by a healthy man, would make his nose bleed, his prepuce become cancerous, and cause him to dislike the society of his friends? You are silent; you know you don't believe a word of it. Why, then, should we accept the one class as true, merely because they are not utterly improbable, and reject the other class, only because they are altogether impossible. (b)

Well may the Provincial Association brand your system with contempt. Well may Liebig tell you that "homœopathy treats truth with scorn and bids defiance to common sense." Well may Golfin say, "This doctrine is a true deception. * * * * Its fundamental principle is one which Nature disowns, and one which reason had condemned even before experience had demonstrated its vain and illusory character." Well may the kind-hearted pity you, the honest despise you, the sarcastic sneer, the indignant condemn, and all united proclaim, in a voice which cannot be misunderstood, that, from such a system, whether its professors be the deceivers or the deceived, the upright and scientific physician must for ever stand aloof.

INQUEST AT HARDINGSTONE.

AN inquest embracing some points of interest to medical practitioners, has recently been held at Hardingstone, upon the body of a woman supposed to have died in consequence of the negligence of her attendant, a Mr. James Fitzpatrick

of Northampton. The body had been interred, but was exhumed for the purposes of the examination. It appeared by the evidence, that the deceased had been taken in labour prematurely, on the evening of the 16th of September, when a dead child was born without assistance. Mr. Fitzpatrick, and a woman, Mary Clark, who had often acted as midwife, were sent for on the emergency, and the latter arriving first, separated the foetus, which she supposed had been *dead several days*. There was much flooding, and the patient was so low that the midwife thought she would die. Mr. Fitzpatrick arrived in about half an hour after the midwife; and the placenta being still retained, he introduced his hand and removed it piecemeal, so that the midwife could not say whether or not the whole had been extracted. He stayed with his patient three hours. It appeared also that, on a former occasion, the deceased had "had a bad confinement."

Here we stop to observe, that the labour was *premature*; that the foetus was so far decomposed as to lead to the inference that it had been *dead several days*; that there was much *flooding* and *exhaustion*; that in all probability the placenta itself was partially adherent, as it was removed in detached portions; that Mr. Fitzpatrick did not arrive until grave symptoms had been manifested; and that he remained with his patient some time after his efforts to effect the entire removal of the placenta.

The patient, however, grew worse, until Saturday the 20th September, when the husband, unable to make "any one hear" at Mr. Fitzpatrick's, called in Dr. Robertson, who arrived about one o'clock that night.

This gentleman "found deceased with a rapid pulse, 132, and exceedingly feeble. Her mouth, and inside her lips, were covered with thrush. She complained of great exhaustion. She had a dark putrid discharge." These circumstances led Dr. Robertson to conclude, that part of the placenta had been retained in the uterus; and in confirmation of this opinion, just before he left, the nurse showed him something that had come from the deceased (*when it does not appear*), which was proved to be a fragment of the placenta. A *post-mortem* examination was not made.

Such being the facts of this case, we now proceed to deal with Dr. Robertson's opinion as to the cause of death, and the ordinary practice and obligation of medical men as respects removal of the placenta. Dr. Robertson said, "It was clearly the duty of the medical man to take away the whole of the placenta, *because every medical man knows that if he does not, he consigns the woman to CERTAIN DESTRUCTION*. It was *not possible* for a medical man who used due care and diligence, inadvertently to leave a portion of the placenta behind:—witness was of opinion that the putrefaction of the portion of the placenta left behind poisoned the blood, and excited the peculiar fever that had caused death. Was satisfied that she did not *die from any other cause*." On cross examination, he averred, that it was of "paramount importance" that the whole of the placenta should be removed, "and if a medical man did not do this, he did nothing—he did not do his duty. The labour being premature made *no difference*," etc. Mr. G. Olive, a surgeon, gave evidence to the same effect.

Now, we take the liberty to demur against the dogmatism of Dr. Robertson. We cannot allow the affirmation, that if a portion of the placenta be left behind, the medical man "consigns the woman to *certain destruction*." The temerity of this assertion is not warranted by experience, nor by the opinions of the best accoucheurs. We have known many instances in which de-

(a) Ibid, Pp. 14, 15.

(b) For a full exposure of homœopathic absurdities we refer our readers to Dr. Alexander Wood's "Homœopathy Unmasked."

composed portions of the placenta and putrid coagula have passed, a few days after labour, from patients who, according to this new teaching, ought to be dead in their shrouds, but who are, on the contrary, living, well, and the mothers of healthy offspring. Far be it from us to encourage carelessness and injudicious confidence on the part of accoucheurs. It is of undeniable importance, that the whole of the placenta, if possible, and consistent with the safety of the patient, should be removed; but it is by no means a maxim in obstetrics that every fragment of it must be removed at all hazards, and by manipulations, that, in certain conditions of the uterus, might prove to be far more injurious than the retention of a portion of this structure. Cases in which it might be justifiable to refrain from persevering efforts to remove the after-birth are, we are glad to say, very few; but some of our best authorities admit their existence, and it is possible that, in this particular instance, with a still-born child that had been dead several days, and an exhausted patient, a train of symptoms had been already lighted up, which persevering manual interference would only aggravate and render more speedily fatal.

Looking at the patient's state before delivery, and the symptoms manifested from that time to her death, we do not think that Dr. Robertson was justified in expressing himself in that tone of infallibility which characterised his opinion. The opinion itself we believe to be unsound. We have understood that Mr. Fitzpatrick is unqualified, and on that ground he deserves punishment; but we cannot allow this incident to be sufficient sanction for an incorrect medical opinion, which, on some future occasion, may be used to destroy the character and prospects of some duly-qualified medical practitioner. We would arrest unlawful medical practice by every legitimate means; but we hesitate to sacrifice the truths of science to such an object.

MR. MAYO, OF WINCHESTER.

WE have very seldom witnessed a more gratifying demonstration of the public acknowledgment of medical services than that which took place on the 21st inst., at the St. John's Rooms, Winchester, the far-famed and ancient school of classical learning. We refer our readers to the summary of particulars given in another part of our Journal, which yet will convey but a very inadequate impression of the great and deserved esteem in which Mr. Mayo is held by all who have the privilege of his personal acquaintance and friendship.

REVIEWS.

Lectures on the Principles and Practice of Surgery. By BRANSBY B. COOPER, F.R.S., &c. Pp. 964. London. 1851.

A good book by a good man is always welcome; and Mr. Bransby Cooper's book does no discredit to its paternity. It has reminded us, in its easy style and copious detail, more of Watson's Lectures, than any book we have seen lately, and we should not be surprised to see it occupy a similar position to that well-known work in professional estimation. It consists of seventy-five lectures on the most important surgical diseases. To analyse such a work is impossible, while so interesting is every lecture, that we feel ourselves really at a loss what to select for quotation, in order to give a specimen of the manner and matter of the book; but, almost at hazard, we extract a singular case of

NON-DESCENDED TESTICLE.

Major R. consulted me respecting his son, who was suffering from symptoms of stone, attended with great irritation along the course of the ureter; on sounding him, I could not detect a calculus,

although he had suffered all the usual indications of the presence of stone for more than a year. He had been sounded by Mr. Hodson, of Lewes, and by a surgeon of Brighton, both of whom had told the father, that, although they could not discover a calculus, they had little doubt of its existence. My friend, Dr. Golding Bird, analysed his urine at my request, and pronounced it healthy: but, as there was considerable irritation about the bladder, I ordered him liquor. potass., with tinct. hyosc., from which he derived no relief. Dr. Bright then met me in consultation, and recommended a belladonna plaister to be applied to the loins, and prescribed decoct. pareiræ; those remedies were had recourse to, but without any beneficial effects. As at this period my patient complained of increased pain in the course of the left ureter, I was induced to make a strict examination of his person, to ascertain whether there existed any local cause to account for the symptoms, when I discovered that the left testicle was lodged in the inguinal canal. The slightest pressure on the testicle produced an aggravation of all the symptoms; I was, therefore, led to believe that they might be referrible to the abnormal position of the testicle. Under this conviction, I determined upon producing, if possible, its descent into the scrotum; I had a truss constructed to press upon the inguinal canal above the testicle, furnished with a strap which passed under the thigh and kept the apparatus perfectly fixed. At the same time I attached the lower part of the scrotum to the thigh by strips of adhesive plaister, and thus maintained the gubernaculum in constant tension, tending, through its instrumentality, to draw the testicle into its normal position. This treatment proved perfectly successful, for in the course of a week the testicle had passed through the external ring, and from that moment every symptom of stone ceased."

"A boy, aged 17, was admitted into Stephen's ward, suffering from all the symptoms of stone in the bladder, with the exception of bloody urine; he was frequently sounded, but a calculus could never be detected. From the experience obtained in the case just recited, I was induced to make an examination to ascertain whether the testicles had descended, and found that the left was not in its natural position, but remained fixed in the inguinal canal. I adopted a system of treatment in this case similar to that I have above described; with the exception, that I had an apparatus constructed by Mr. Bigg, for the purpose of keeping up the tension upon the gubernaculum by means of a spring; and, in the course of a very short time, the testicle descended into the scrotum, and, as in the former case, all the symptoms of stone immediately subsided. I have frequently witnessed most anomalous symptoms of urinary affections concomitant with non-descended testicle; nor can this circumstance be considered surprising, when we remember, that the renal and spermatic plexus of nerves derive their source from the same roots, and are equally liable to disturbance from the same cause of irritation." (P. 573.)

The most important surgical points are thus illustrated by short cases, which, told well, impress the important features of the case strongly on the mind.

The work is one which cannot fail to become a favourite with the Profession; and it promises to supply a *hiatus* which the student of surgery has often had to deplore.

A Manual of Physiology, etc. By WILLIAM B. CARPENTER, M.D., F.R.S., etc. London. 1851. Pp. 582.

It is only a few weeks since we had occasion to review Dr. Carpenter's great work on Physiology, and we have now to notice the second edition of his no less excellent Manual. We can only repeat now what we said then, that we know no other work of the kind at all comparable with this one. While it is written so plainly and clearly as to be intelligible to every student, it is crowded with important facts, that will be acceptable to every practitioner. The section on the Nervous System has been for the most part rewritten, and contains a masterly exposition of the whole subject. We cannot but hope, that the rapidly advancing physiology of the nervous system will, before long, re-act on pathology, and give some better insight into that most perplexing class of maladies—diseases of the head.

While we most cordially recommend this new edition of the Manual, we must state, that we observe in it the same omission upon which we commented in our late Review of Dr. Carpenter's larger work. We mean, an almost total want of references. It would have been very little trouble to Dr. Carpenter to have quoted his authorities, and it would have been a great benefit to his readers. But, after all, this does not in the least detract from the sterling merits of the book, which we have no hesitation in pronouncing the best treatise on physiology which we possess.

On Nervous Affections connected with Dyspepsia. By WM. BAYES, M.D. London. 1851. Pp. 88.

This little book is addressed to the public. Wm. Bayes, M.D., (of what University his work says not,) as an apology for intruding the subject of Dyspepsia on the notice of the public, says that most books on it are *too exclusively professional*.

This production, like all of its class, abounds in the most superficially narrated cases, commencing with, "I was called in to a young lady," etc.

As an example of *facial paralysis*, Dr. Bayes details a case in which not only were the muscles of one-half of the face deprived of motion, and partially of sensation, but the tongue also deviated to one side. This case may be taken as a specimen of Dr. Bayes's medical lore. Religion is dragged in to lend her aid, for M.D.'s who address the dear public must wear a religious coloured cloak; and our author informs his readers, that real religion equalizes the circulation and respiration, and "prevents those sudden and violent fatal terminations which are liable to occur in some diseases where great nervous or vascular excitement exists."

GENERAL CORRESPONDENCE.

THE "MEDICAL DIRECTORY" AND THE PROFESSORS OF THE ROYAL COLLEGE OF SURGEONS.

[To the Editor of the Medical Times.]

SIR,—In the 159th page of the *London and Provincial Medical Directory* (1851), we see two lists; one of the members of the Council, and the other of the Professors of the Royal College of Surgeons of England, with the subordinate offices they also fill. The Professors—men of course distinguished for their great learning and research—are numerous, according to the work here referred to, and are, perhaps, not all so well known to the public as their high position demands. They are—James Paget, (Hunterian,) Richard Owen, John Thomas Quekett, George Robert Skinner, David Henry Monkton, Edmund Belfour, Henry P. Gregg, William Stone, Thomas M. Stone, and E. A. Wilde, Esq., College-hill.

We have the pleasure, in common with the rest of society, to be acquainted with Professors Paget and Owen, and also with Mr. Quekett, whom we did not know to be Professor, although his eminence as a scientific anatomist and as a lecturer places him on a par with his distinguished colleagues. But the other learned men in the same list, including Professors William Stone and Henry P. Gregg, have not yet acquired that European reputation which, doubtless, they deserve, or they would not have found their names in such company. We are given to understand, that Professor William Stone is about to give a course of lectures upon the Natural History of Corporations, and of that of the College of Surgeons in particular. While that mirror of courtesy and good manners, Professor Gregg, will employ his eloquence upon Ethics, and illustrate his remarks by reference to the respect due from an inferior to his betters. Professor Wilde, at the end of the list, is, we presume, some young man wholly unknown, but likely in time to rise in his Profession, so as to be worthily classed with the two distinguished *savans*, Professors William Stone and Gregg!

Who can say that the College does not go far to secure talent of every kind? Where can we find so varied a list? In it the Alphas and the Omegas of science are put into the same bag, shaken together, and brought out as chance may dictate.

We fancy hearing, in an oration delivered at a provincial school of medicine, concluding remarks something in this style:—"May we not be proud of that noble Institution, where the genius of Hunter still presides, and hallows every object by which we are surrounded! May we not rejoice that his mantle has fallen so worthily upon those who have succeeded him,—the names of Abernethy and of Astley Cooper, of Lawrence and of Travers; and, in the present day, those of Professors Paget and Owen, William Stone and Gregg!" etc. etc.

I am, &c.

A FELLOW.

"MEDICAL DIRECTORY."

[To the Editor of the Medical Times.]

SIR,—In the forthcoming edition of the *Medical Directory*, a new and important feature will be introduced, to perfect which, we

respectfully beg your kind co-operation, by permitting this notice of our intention to appear in your widely-circulating Journal. We propose to give a list of medical men practising in the different towns and cities of the Continent possessed of British qualifications. The Messrs. Galignani have kindly drawn attention to the fact; but, as their notice may not meet the eye of many practitioners to whom it is addressed, we are anxious to call in aid their friends at home to supply the information required, which includes the name, address, qualifications, and where obtained their medical appointments now and heretofore, and the titles of any published works. Such information supplied to us will be conferring a service on medical men abroad, and materially add to the interest and utility of the *Directory*.

We are, &c.,

THE EDITORS OF THE "LONDON AND PROVINCIAL
MEDICAL DIRECTORY."

4, Adam-Street, Adelphi.

"ENTERITIS PHLEGMONOSA."

[To the Editor of the Medical Times.]

SIR,—A singularly rapid fatal case of enteritis lately occurred in my practice; the subject of it a stout, young, farm-labourer. He was seized about 7 a.m., after milking, with rather severe pain in the abdomen, accompanied by vomiting; his bowels having been freely moved, once immediately before and once after accession of pain. When I visited him (about two hours after he was attacked) his features were collapsed, surface cold and covered with perspiration, pulse extremely slow, between 40 and 50; a tender but soft and undistended abdomen. I ordered calomel 2 grains, with one of opium, every four hours, and a mixture containing bicarb. soda, tinctures of cardamom and rhubarb, hot fomentations to the bowels, and warm frictions on the extremities. I again saw him at 4 p.m.; no return of vomiting, and he had dozed a little. The pulse was then very small and irregular, (about 50,) the belly hard and distended; but the surface continued cold and bathed in perspiration, and the countenance shrunk and cadaverous-looking. Sinking rapidly increased notwithstanding the free use of stimulants, and he died between 7 and 8 p.m., about twelve hours from the time of seizure.

I looked upon the case as one of perforating ulcer, or extravasation into the cavity of abdomen from some cause, and, consequently, thought it hopeless almost from the first. I was therefore not at all prepared for the autopsy disclosing simple but violent enteritis, without ulceration, hernia, old adhesions, or any obstruction whatever; and, moreover, with a healthy state of stomach, duodenum, and colon, except cæcum, which was distended and dark-coloured, and adjoining portion of colon for about an inch. The ileum and greater part of jejunum were much distended with air, and very dark-coloured, part of the former having been also soft and easily torn. With such early and rapid sinking and collapse from the first, do you think there was any indication or time for active treatment? I shall feel obliged by your opinion in your "Answers to Correspondents." I am, &c.,

A COUNTRY SURGEON.

[The case reported by our Correspondent is an extremely rare one. We are ourselves not personally cognizant of any such severe affection as he describes, although we find it in writers mentioned, we presume, under the term "enteritis phlegmonosa." We should be glad to know the exact state of the peritonæum; we infer that it was healthy, but we should like to be informed upon the point. We believe that our Correspondent's diagnosis was what every one would have arrived at, and that his treatment was most judicious. Under the circumstances, he appears to have done all that the symptoms indicated.—Ed. *Medical Times*.]

DR. ROUTH ON HOMŒOPATHY.

[To the Editor of the Medical Times.]

SIR,—I have read Dr. Routh's able paper with much interest, but I do not at all agree with his observations on what he calls the occasional truth of the homœopathic law. He says, that tartar emetic, which cures pneumonia, will cause it; and that arsenic, which cures scaly diseases of the skin, causes a disease of the skin. In both cases he has not stated the whole facts. Tartar emetic, if injected in large quantities into the blood, will cause inflammation of the lungs, in the same way as will also numerous other substances, which have, however, no such action over pneumonia as

tartar emetic exerts when it is taken into the stomach; *ergo*, it is not the irritant action exerted by tartar emetic, in common with numerous other substances, when injected into the blood, which cures the pneumonia, when tartar emetic is taken into the stomach, or else these other substances would also have equal virtues in curing pneumonia, which is not the case. Tartar emetic acts in some other way which we do not understand. Then, again, let me ask Dr. Routh if he, or any one else, has ever seen pneumonia produced by tartar emetic given in the ordinary way.

With regard to arsenic, its beneficial effects are chiefly seen in lepra and psoriasis; but when an eruption follows its use, which is extremely uncommon, it is not lepra or psoriasis, but an eczematous or ecthymatous eruption. Now, the homœopathic statement is, that a drug produces the disease it cures. But, according to Dr. Routh, arsenic cures lepra, because, in some very rare cases, it produces eczema, and is therefore an instance of "*similia similibus curantur*." Such loose reasoning, and uncalled-for admissions, are rather unexpected from so able a man as Dr. Routh. There are some other very weak points; but, as I only wish to point out what seem to me unnecessary and illogical admissions in Dr. Routh's paper, and not to pick holes, I shall not further discuss them, but conclude by signing myself as both Dr. Routh's and your

WELL WISHER.

P.S. Why does Dr. Routh use the absurd term "*allopathy*"? There are no such practitioners as allopathists. Does any one believe that "*contraria contrariis curantur*"?

DR. TILT ON MENSTRUATION.

[To the Editor of the Medical Times.]

SIR,—I cannot but agree with you in much that you have said in your notice of Dr. Tilt's amusing book on menstruation. My object now, however, in addressing you, is to allude to a very singular oversight of the writer; that is, the careful exclusion of all notice of the researches on the first appearance of the secretion, both by Dr. Henry Bennet, in his *Work on Inflammation of the Uterus*, and by Dr. Routh in his essay in the *London Journal of Medicine*, (March, 1850.) This, after all, may be a very simple oversight and not intentional discourtesy; still it is no less true, that when gentlemen are writing for practice, it is more prudent, and certainly looks more original, to avoid mentioning the names of those from whom they have obtained some (of course very little) information. As a friend of these gentlemen, I have thought it right to notice this singularity.

A LOOKER-ON.

[Dr. Henry Bennet and Dr. Routh are both men of metal, and fully capable of defending their own; although in the present day, even in medical literature, the "good old rule" seems to obtain—

Let him take who has the power,
And let him keep who can.

Much as we have laughed at Dr. H. Bennet and ridiculed the miserable hobby he seemed inclined to ride to death,—by the way, the pace has somewhat slackened since we first put on the curb,—we know him to be a hard-working and observing man, one who, under proper mental discipline, might yet do some good things in his own department. Hitherto Dr. Bennet has not seen as other men see; but the obliquity of his vision is physical and not moral,—more than we can say for all the authors of the day.—*Ed. Medical Times.*]

FEEs TO MEDICAL REFEREES.

[To the Editor of the Medical Times.]

SIR,—So much having been written on the subject of Insurance Offices, respecting their fees to medical practitioners, perhaps you may consider it only an intrusion on my part to trouble you with any further particulars; but as the names of those offices which, through the aid of the medical press, have at last come forward and offered to give some remuneration, have been made known, I think it becomes the duty of every medical practitioner to make public those offices which still adhere to the old practice, and cry "No surrender." I therefore send you the enclosed, to do with it as you please.

In November of last year, I was applied to by an agent of the Life Association of Scotland Office, to fill up a schedule of inquiry for a patient of mine, which I refused to do without an accompanying fee, when I received an answer, that the directors of the above office would pay me a fee of 10s. 6d., the sum insured not demand-

ing a higher fee, and being also the sum stated by the agent to be paid to and received by other medical men in the neighbourhood. The commencement of this communication, I observe by the letters I have kept by me, was on the 8th of November last year, from the agent of this neighbourhood, for which I demanded my fee. I received an answer on the 12th, that a fee of 10s. 6d. would be immediately forwarded to me on receipt of my report, which I filled up, and immediately sent off to London. Now, Sir, what will you say of the conduct of the agent acting in this affair, when I inform you, that it was not until nearly the middle of April in the present year that I was paid my fee by the above agent, and then I was obliged to write to the Secretary, and threaten further proceedings if the sum was not paid.

In the beginning of last month I received two schedules from the Clerical, Medical, and General Life Assurance Company, for two separate persons—though I believe them to have been for a joint assurance; both these parties were living at some distance from my house, one about three miles, the other seven or eight; I therefore wrote the Secretary and informed him that, not having seen them for some months, I presumed it would be necessary for me to pay them a visit,—for which purpose I desired to know if the Company paid any fee, and what that fee was. The following answer was returned:—

"London, Sept., 1851.

"Sir,—In reply to your note of the 18th inst., I beg to inform you that we do not pay fees to the medical referees of parties assuring; we do not wish you to examine Messrs. R. and V., nor is it necessary for you to see them; but if you will answer the letter in the usual way we shall feel obliged.

"Yours, &c.,

"G. W. P., Secretary."

I therefore put aside the schedules and took no further notice of them until I received a letter from, I presume, their agent in the country, offering to pay me my fee; I therefore filled them up and sent them off, for which I only charged 10s. 6d. for both, as I was informed it was of consequence to the parties insuring and for their benefit, and which was duly paid.

I am, &c.

J. CLARKE.

[We have refrained from publishing the entire charge against the agent in the first instance referred to; but his conduct dis-entitles the office to the support of the medical men in the neighbourhood. It is for the office to consider the expediency of retaining an agent who has acted in the manner described. But what shall we say to the shabby behaviour of the Clerical, Medical, and General Life Assurance Company? They yielded justice to importunity, and would have evaded the demand, but for the loss to themselves. That medical men should have been accessories to such injustice aggravates the offence.—*Ed. Med. Times.*]

THE CRYSTAL PALACE: REASONS FOR ADVOCATING ITS REMOVAL, BOTH AS REGARDS SANITARY AND LOCAL POSITION.

[To the Editor of the Medical Times.]

SIR,—When a scheme has been eminently successful, fulfilled its purposes, and redounded to the honour and fame of its projector, it is well to retire with the well-earned laurels, and fulfil the conditions under which the place allotted for its construction was accorded. The merit of its success should not be jeopardised either by an unfair occupation of the site, or by any after failures in its management. I beg, however, to offer—

Six Reasons for the Removal of the Crystal Palace.

1st. On the score of health.

2nd. As to the durability and local position. Concluding with four suggestions for its application.

1st Reason.—Most medical men, and myself amongst them, are of opinion, that change of temperature is very obnoxious to health, whether the temperature be from warm to cold, or from cold to warm; hence, as a winter promenade, the objections to it will be, that the temperature will be different within from the temperature without.

2nd Reason.—All spaces covered in, however large, oppress the lungs, though the temperature within and without may be the same. Even the skies of England, are low, heavy with humidity, and productive of oppression not found in higher and clearer continental skies.

3rd Reason.—If invalids assemble in the palace for exercise, it will be prejudicial to their health. The exhalation from the skin

and lungs of an assemblage of sick persons is not only injurious to themselves, but may contaminate those in health.

4th Reason.—It is a pleasing theory, but will be found a practical error, to suppose that soils, artificial and natural, and the moisture necessary to be supplied for the life and growth of a large variety of plants, shrubs, and trees, including the daily dissolution of some, the disease, and the decay of foliage, etc., of many, will add to the oxygenising and purification of the air, or that horses and birds will contribute to its salubrity. On the contrary, these causes will occasion the evolution of a variety of gases by no means conducive to sanitary advantages, but a positive deduction from the benefits derived from parks and gardens in open spaces, purified continually by the free circulation of uncontrolled air.

1st Reason as to Local Position.—However well chosen the spot for a temporary object, it may be very objectionable for a permanent one. The inconvenience of so large a building as a permanency in that cramped part of the Park is an objection, and an encroachment on the size of the few open spaces the population of a great Metropolis has to enjoy. Other thoroughfares leading to the park and its entrances become more thronged, and the bustle deprives it of any rural characteristic it now possesses, and it is no longer a retreat for children, or a quiet or pleasant walk for those in its vicinity or more distant who seek it as the nearest open space their time will allow them to reach.

2nd Reason.—Any attraction to draw a number of people to principal entrances of a great Metropolis is attended with inconvenience and very considerable danger; accidents cannot be avoided, from numerous vehicles and spirited horses, amidst a pedestrian population. Many residents have their view of the Serpentine and various parts of the Park obstructed by it. And many pedestrians have equal reason to complain of their view of that part of the Park, with the Serpentine in the distance, being also obstructed; and however beautiful the Crystal Palace, Nature's original view of that part of the Park is far superior. Any objection to its removal on account of its weakness or its durability, is totally contradicted by its construction; for it is admitted to be put together with that precision, order, and adaptation, and with all the fastenings so admirably contrived for taking to pieces, that the removal is only a matter of labour, and not materials.

Conclusion, with Four Suggestions for its Application.

1st Suggestion.—The transept to be given to the Commissioners of Woods and Forests to present to His Royal Highness Prince Albert, to apply to any purpose in Her Majesty's gardens or parterres at Buckingham Palace, or Osborne, etc.

2nd Suggestion.—The entire of one-half of the nave to be offered to a Floral, or Horticultural Society.

3rd Suggestion.—The other half of the nave to be divided into two, and one portion given to the Eastern and the other to the Western Hospitals for Consumption, whereby, probably, by the aid of pneumatic chemistry, a medical ante-irritant atmosphere may be supplied for the patients to inhale.

4th Suggestion.—If the public desire to preserve it entirely, and, having shown its removal would be only a matter of labour and not material, it would then be to consider where to place it, as to either of the three parks,—the Regent's, the Victoria, or the Battersea.

The middle and lower classes occupy all London and its environs; taking the circumference of London, any radii of the population would be as near to it in one park as in another.

The higher classes have their carriages for exercise, to convey them anywhere; and at home they have their conservatories, and green-houses, and gardens; therefore they, with their usual magnanimity and liberal sentiments, sanction that plan which meets the public desire, and most likely to afford amusement and pleasure to the mass of their fellow-citizens. I am, &c.

Worthing.

N. HANSON.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

DR. MURPHY, President, in the Chair.

THE THERAPEUTIC PROPERTIES OF CREOSOTE.

Mr. Richardson read a communication on the Therapeutic Properties of Creosote. He remarked, that, during the last visitation of Asiatic cholera, his attention had been called to papers in the *Lancet* and *Medical Gazette*, by Mr. Spinks, of Warrington, on the astringent value of creosote in the treatment of that disease.

Mr. Richardson had not used creosote in any case of Asiatic cholera (because the essays had not come before him until the epidemic had nearly ceased), but he had since fully tested its astringent effects in numerous cases of purging; and he must say, that so admirable a remedy for some kinds of diarrhoea, he had never before met with. The cases in which he had found it so successful were of three kinds: 1. Cases where diarrhoea comes on during the prevalence of an ordinary epidemic, and where it is not excited by foreign matters in the bowels. 2. Cases where a profuse diarrhoea follows the administration of purgative medicines. 3. Cases where an acute attack of diarrhoea is followed by a state of the bowels causing the patient to be suddenly and frequently troubled with small liquid evacuations unattended with pain or much constitutional disorder. (Cases in illustration were related.) The advantages of creosote are these: It often succeeds when other astringents fail; it is speedy in its action; and, lastly, it does not leave the bowels constipated, unless it be given in too large doses, and for too long a time. Occasionally during its use, creosote produces a dry, white, and filmy state of the tongue, with other symptoms of feverishness. These are indications that the remedy should not be persisted in any longer. Indeed, it is rarely required after such symptoms come on, the purging having been generally checked by such time. For children the dose must be small; from the $\frac{1}{4}$, $\frac{1}{8}$, or $\frac{1}{16}$ part of a drop is sufficient for those under two years of age. For adults $1\frac{1}{2}$ to 2 minims is the dose as an astringent. The Author observed, that a writer in a late number of the *Medical Gazette* (Mr. Kesteven) had also pointed out the astringent value of creosote, and had opined that this value rests upon the power which the remedy in question is known to have of coagulating albumen. He (Mr. R.) objected to this notion on the ground that, as a very large amount of creosote was required to coagulate a small quantity of albumen, the small doses medicinally described could not possibly produce such a result in the intestines. Mr. Richardson also alluded to other effects of creosote. He said, that, in elementary treatises on therapeutics, this medicine was described as possessing properties which, notwithstanding an extensive experience in its use, he had never witnessed. The effects to which he alluded were, narcotic, diuretic, and sedative. At the same time, he was prepared to assign to it powerful diaphoretic and anti-spasmodic properties, and also to say, that it acted rather as a stimulant than as a sedative on the vascular system. Its well-known power in stopping vomiting depended upon the dose; if given in its full dose, as an astringent, (two drops,) it sometimes even excites vomiting, in which case prussic acid may be usefully combined with it. To avoid its nauseous flavour, it is best given with syrup of tolu, compound tincture of cardamoms, and water or camphor mixture. It may also be prescribed in combination with the preparations of ether.

Mr. Dendy, in commenting on the interesting and important communication made by Mr. Richardson, said it was fearful to find so many objections raised against recorded opinions. He would venture to ask the author if he had made sufficient distinction with reference to the dose exhibited. Opium, it was well known, was stimulant in small doses, and sedative in larger ones; so, also, might it be proved to be with creosote. He thought its influence in diarrhoea might be attributed rather to its antiseptic action than to its astringent properties, as diarrhoea often depended in children on acidity in the primæ viæ.

Mr. Richardson said he did not know why creosote was astringent, he only knew that it was so. It certainly acted as an antiseptic to decaying flesh, but he did not think its power of removing diarrhoea depended on that property. With respects to its alleged sedative property, he had given it both in large and small doses, and he had not found it possess any such influence on the circulation.

Mr. Streeter trusted that it would not go forth with the sanction of the Society that the premonitory diarrhoea of Asiatic cholera was identical with ordinary English cholera. They were different affections, and required different treatment. The practice pursued by himself in the epidemics of 1832 and 1834, of giving superacetate of lead with opium, (a) after each action of the bowels, had been attended with the most satisfactory results in warding off the impending collapse during the last epidemic. He had recommended this practice in the spring of 1849, when he brought the statistical results of the cholera cases at St. Giles' in 1832, before the Medico-Chirurgical Society, and which facts, to the disgrace of its Executive, had not appeared in their Transactions. Let it not, however, be supposed that lead was the remedy for collapse,—a state which his latest studies of cholera had led him to believe

(a) His ordinary formula was a pill containing superacetate of lead, calomel, opium, and powder of capsicum, of each one grain.

arose from the presence of a prussic acid poison within the blood in the place of the cyanic element of the true urinous excretion.

Dr. Camps suggested that, as Mr. Richardson's paper was one of great value, he should draw out the cases more in detail, and give his views as to the therapeutic properties of creosote at greater length at a future meeting of the Society, as inquiries respecting the medicinal action of remedies must always be of the greatest importance and interest to the Profession.

Mr. Richardson professed himself very ready to do this at a future meeting.

Mr. Harrison would be glad if Mr. Streeter would adduce some proof of the formation of prussic acid in the system during the collapse of cholera. He asked him for the proofs, because the only medicinal agent he (Mr. Harrison) had found of service in treating this disease was prussic acid, and he could bring forward one hundred cases which were thus cured.

Dr. Lankester inquired of Mr. Richardson what number of cases of diarrhoea he had treated with creosote; and also, whether he had combined it with opium?

Mr. Richardson had not had recourse to opium conjointly with the creosote, unless the patient suffered from great pain. He had tried the remedy in about one hundred cases.

Dr. Lankester put the same question to Mr. Harrison as to opium being given in combination with the prussic acid, and was answered in the negative. He then said he was suspicious as to the success of any remedy in this disease, when opium was used with it, as he believed the latter was, in those instances, the principal beneficial agent. Mr. Streeter had used it in his cases when he gave the superacetate of lead, and he (Dr. Lankester) thought it was the opium that did the good.

Mr. Streeter, in reply, observed, that opium may be used by itself in the treatment of choleraic diarrhoea, but no benefit will result; but if it be given in combination with the preparation of lead, then its action would be most beneficial.

GELATINOUS POLYPUS OF THE EAR.

Mr. Harvey exhibited a gelatinous polypus, which he had removed from the meatus auditorius externus of the right ear of a dispensary patient. He observed that this form of polypus is of very rare occurrence. He did not intend to make any observations on its nature or origin, but he was anxious to impress on the Fellows the necessity that existed for its entire extraction when an operation is performed, for if any portion of it be allowed to remain, unpleasant consequences might, and most probably would, ensue.

NEW FORCEPS.

Mr. Harvey then exhibited a pair of forceps which he had had constructed for its extraction, and which he thought would be found to answer fully the object of the operation.

THE AFFINITIES AND PROPHYLAXIS OF VARIOLA.

Mr. Dendy read a communication on the Affinities and Prophylaxis of Variola. He first mentioned the obscurity in which the origin of the disease has been so long veiled, and then alluded to a sermon, preached in 1722, to prove that the devil, when he smote Job with sore boils, was the first variolous inoculator. In the present day, even, after innumerable discussions, there is still an extreme discrepancy of opinion regarding the varieties of pock, as well as the nature, degree, limitation, and value of prophylaxis. The question as to the nature of variola and its affinities is intimately connected with that of prophylaxis; for, if it were proved that the several species of pock are but varieties of the same genus, the subject of vaccine influence would be extremely simple—the substitution of a simple for a severe form of a malady. But, supposing an original identity, there arises the question, By what influence or transmission has vaccinia lost its epidemic character, while it retains its prophylaxis,—varicella retaining the former and losing the latter; while the most modified variola retains both, although shorn of its secondary fever? Varicella, from the absence of prophylaxis, is not a disease of much importance, nor does it belong to the category included in the paper. Bartlett carefully varicellated seven children not previously protected, but failed to produce any effect. Bateman and Rayer, however, had a different belief. In its most confluent form, however, varicella has never been known to produce variola, nor has the latter disease ever been noticed during the prevalence of epidemic varicella; and even if inoculation be practised during its prevalence, the varicella will proceed unchanged; whereas the synchronous insertion of variolous and vaccine matters mutually influence each other to a certain extent. The succession of crops of varicellous vesicles, and their purely vesicular and unilocular character, even when confluent or very deeply seated, mark its dissimilarity. The varioloid disease is, however, of much greater importance. This, Mr. Dendy said,

is the diminutive of variola; their essence is the same; and he therefore calls it variella; for, although its vesicle may dwindle in its birth, or pass at once, about the 7th or 9th day, to the crust, yet if its pus or lymph in extreme attenuation be used to inoculate with, sooner or later the true variolous pustule will be produced. The following is his classification:—

Variola—Small-pox.

Variola popularis—Horn-pock.

Inoculated variola—In a previously vaccinated person.

Variella—Casual variola in a previously vaccinated person.

Vaccinia—Cow-pock.

Vaccinia spuria—The pustule of grease or udder sores, or heterogeneous or foul matter, often attended by bullæ, rupia, or erysipelas.

Vaccinella—Imperfect, or abortive vaccine.

Varicella { Lenticular, chiefly in children.

Conoid, swine-pock,

Globosa—hives—the closest affinity to variola in form, as it has a partial disc; but none of these produce full variola by inoculation.

To be capable of transmission and prophylaxis, the pock must be circular, umbilicated, and cellular, having a hard base, and containing lymph. If such be not the case, even during the crusting of the false vaccine, not only variola but variella may impart the modified form of the eruption. Mr. Dendy next examined the degree of affinity between variola and the disease which he calls variella, the nature of grease, and the various udder sores, and then proceeded to examine the question as to the controlling influence of vaccinia over variola. Of this, he asserted, there could be no doubt; but he considered the statement made by Jenner and Aicken, that vaccination was a perfect preservative from small-pox, was the foundation of the prejudices against it. It has been disproved by Mr. Estlin, who has seen a fatal case of small-pox, the sufferer having been vaccinated by Jenner himself. Mr. Marson also has said that several persons operated on by Jenner have been admitted since into the Small-pox Hospital. Nevertheless, the mortality from small-pox, amounting formerly, in the British isles, to 40,000 annually—one tenth of the total obituary—has been so greatly abated in consequence of vaccination and the diminution of variolous foci, that the author indulged a hope that the disease may be ultimately annihilated. Variella may, perhaps, occur in 5 cases out of 100, giving a prophylaxis of 95 per cent.; the disease also, when it occurs, being much milder than inoculated small-pox without vaccination. The mortality of this modified disorder, as recorded by Thompson, was about 3 in 71; by Dr. Gregory's Report about 6 or 7 per cent.: while of 1300 unprotected persons 500 died of variola. Mr. Grove, of Wandsworth, states that, during the six months, from September to last March, there were 126 cases of small-pox in that parish, of whom 66 had been vaccinated, 1 had had small-pox, and 58 were unprotected. Of the 66 none died, and all had the disease mildly; of those non-vaccinated 16 died, a large number had the distemper in its worst and most perilous form, and several will be disfigured for life. Mr. Waddington, of Margate, adds confirmatory evidence. Small-pox was epidemic in Margate twenty-five years ago: 33 children died, not one of whom had been vaccinated. Mr. Dendy next alluded to cases which were totally unsusceptible of the vaccine virus, which he contrasted with those which manifested extreme susceptibility. He remarked, that it is essential that the vaccine bud or germ have a congenial soil, uncontaminated by another poison, which, like a weed, might choke its healthy growth. Even during the prevalence of specific malaria, children—though the disease be not actually developed—are rendered especially insusceptible of vaccination. In asthenic, strumous, or cachectic systems the vesicle will be blighted early, or it will burst out into excess or depravity of action, somewhat like the double or monster blossom. It becomes a disease more resembling grease or udder-sores, and its prophylaxis, of course, fails. Hence the advantage of a preparation of the system; for it is in these depraved diatheses that variola so often becomes confluent, malignant, and bloody, or terminates fatally, even before the eruption would have appeared. The natural predisposition to infection is effected by a change in the crisis of the fluids. According to the acuteness or intensity of the agents that effect this in the system, will be also the degree or extent of elaboration from the system. In the mild form of vaccine, this depuration is effected by the mere efflorescence of an areolated vesicle, the visible sign of the constitutional influence. In the severer variola, the process of elimination is multiform—diarrhoea, hæmaturia, cellular œdema and effusion, and induration and suppuration of glands, the more malignant form being attended by the bullæ of pemphigus, terminating in ragged ulcers, or deep abscess under the crust. Modified variola or variella is not a mule, as it is reproductive, and may be commu-

nicated like perfect variola, both by malaria and by inoculation. It may also induce the specific fever, without eruption, in children and in nurses, who are protected in a higher degree. Its inoculation for the fourth or fifth time, the author believed, would produce full variola, marked by true variolous symptoms, and he thought it might do so at once. In several isolated cases, in which some years ago he practised its inoculation, there were both the secondary and tertiary fevers, the first a slight erythism on the third or fourth day prior to the general eruption, and the other on the maturation of the pustule. When occurring casually, the first eruption of variella is on the hands, of variola usually on the face and breast. An argument against the identity of variola and vaccinia will be found in their running a parallel course, or in the one overcoming the other, variola being generally the victor when inoculated simultaneously. This draws attention to the question of incubation or latency of a germ. The poisonous atom will sometimes lie in the system for months and years. Rabies has occurred fourteen months after infection; syphilis may produce secondary or tertiary symptoms years after primary disease has subsided. The incubation of variola may be, therefore, somewhat undefined; nevertheless, from experiments, a fair conclusion may be formed as to the usual period of this incubation, when vaccine prophylaxis may be induced; and from these the author judged, that, if on the third day, before the onset of erythism, rigor, and headache, perfect lymph be inserted, prophylaxis is almost certain, assuming three or four days for the premonitory symptoms before the variolous point or papula appears. The vaccine vesicle will then be eight or nine days old, the areola will be becoming indurated, and erythism will exist. It is probable, Mr. Dendy said, that, in this fever against fever, the essence of prophylaxis really exists. If under this influence the variolous papula proceeds, it will resemble umbilicated varicella or horn-pock. If the vaccine be used two days later, especially if there be bronchial or pulmonary symptoms present, it will be useless. The papula may be just apparent, but it will be blighted. There are, of course, exceptions to this rule. A woman was delivered, says Dr. Hennen, while suffering from confluent variola; the infant was vaccinated a few hours after birth. The mother died on the 11th day; the infant had true vaccine, and lived. Eruptive disease is most virulent and perilous in warm climates, and secondary variola is not infrequent there. In the temperate countries, however, the author believes, the occurrence of variola to be most rare after complete vaccination, especially if Dr. Bryce's mode has been adopted. His colleague, Mr. George, who has had most extensive experience, has seldom or never seen variella where five or six perfect vesicles have been produced; and he thinks, therefore, that there is no proof of limitation of influence. Mr. Dendy believes, that quality is better than quantity; that one perfect vesicle is preferable to a crop of pale, undefined vesicles. If, therefore, there be two or three perfect vesicles, with annular and indurated areolæ, combined with erythism of two or three days' duration, and followed by spotted or pitted cicatrices, corresponding with the cells of the vesicles, the impregnation and prophylaxis are as complete as from variola against the influence of malaria. Spurious variola, varicella, and variolous horn-pock may still occur by inoculation. The occurrence of variella from exposure to variolous malaria, in vaccinated children cannot be above 4 per cent. The inoculated small-pox has seldom been, Mr. Dendy believes, followed by a secondary disorder. The case of Louis XVth is an exception. The cases of secondary variola are marked by extreme severity, especially in adults; the fever will be acute or typhoid, and precede the eruption of variella. The cases of three children were given, one, the youngest, unvaccinated, caught small-pox and died; the second child, well vaccinated two years previously, escaped altogether; and the eldest, who was deeply pitted with small-pox, had a severe secondary attack, and also died. These children all slept in the same bed. The nurse, vaccinated in infancy, had a severe, but soon subsiding attack of variella. Other similar cases were adduced from other authors. From all this, we learn that prophylaxis is not a rule without exceptions, either in its direct or subsequent influence. With respect to the question of limitation of influence, by some it has been referred to an abstract law of time. Copland affirms that vaccination is more prophylactic than variolation for fourteen years; and Dr. Gregory has referred to the extreme rarity of variella or modified variola, until fifteen years after vaccination was generally adopted. Mr. Dendy believes that the first opinion may be extended throughout the life. He is of opinion that there is no law of limitation. That some occult change has been effected either in the vascular, nervous, or glandular system is certain, whether we adopt the chemical, animal, or fungoid pathology. A sporule of a fungus may be sown or planted in the cutaneous tissue, as a vegetable seed in the earth, or rather as a

bud is grafted beneath the bark. The cotyledon may thus be unfolded, and the developed germ is thrown up to the surface of the soil, terrestrial or cutaneous, and is there displayed, either as a flower or as a pock, in all its characteristic forms and colours. If the germ be diseased, or if the soil be uncongenial or infertile, an imperfect efflorescence will ensue, a blighted or a bloated flower will be displayed. The soil may be naturally infertile, or it may be impoverished by over-stimulation, as in the area within the circle of the ring-worm, or of those vegetable eccentricities termed "the fairy ring;" both being the result of fungoid sporule spreading in a circle. To complete the analogy, the virus has poisoned the blood, and thrown out its flower on the surface. It has thus done its duty, and the system is thus both protected and depurated. The existence of the sporules was sought to be ascertained in crusts obtained from Mr. Marson, of the Small-pox Hospital. Mr. Dendy, in conjunction with Mr. Grove, of Wandsworth, dissolved them in liquor potassæ, after which black points, which were considered to be the sporules, could be distinctly seen. The notion of a law of limitation is not conclusive. Some concurrent or casual causes may still be the explanation of secondary diseases. A want of balance between the antagonising influences certainly exists; a concentrated, intense, or virulent form of epidemic may overwhelm or saturate a system that would have resisted successfully a milder influence; or a system reduced by disorder, or any other depressing cause, would yield to an attack of disease which in a healthy state might have passed by unheeded. The proof of successful vaccination is not hypothetical; it is displayed in the perfect vesicle and the constitutional excitement. If these requisites be fulfilled, the author believes we shall have little need to re-vaccinate, or to discuss further the vague question of limitation.

Mr. Dendy's very interesting and elaborate paper, of which we have given but a feeble sketch, was illustrated by a series of well-executed and valuable coloured engravings.

Dr. James Bird, after alluding to the great importance of this inquiry, which had been made the subject of one of the investigations of the Epidemiological Society, remarked, that Mr. Dendy's paper apparently referred to two subjects: 1st, the analogy, not to say the identity, of three diseases—variola, vaccinia, and chicken-pock; and, 2ndly, the immunity obtainable from small-pox. He himself thought, that there was a general analogy between all blood diseases, but that they were not identical. The disintegration of the blood was caused by an error of the primary and secondary assimilations, the latter being connected with the excretions of the body. In the three diseases spoken of,—variola, varicella, and vaccinia, he believed that there was evidence of general analogy, but not of identity; the analogy, however, is of such a nature, that vaccination, if it be properly performed, may give immunity from variola either for a certain period or for life, or, at all events, until certain changes take place in the system, or from the influence of climate, as, for instance, a person removing from a tropical to a temperate climate, and becoming exposed to the variolous miasm, may be affected by secondary variola. The nature of the change which insures the immunity from variola has not yet been determined, nor has the period of the limitation of that immunity. It has been shown to exist up to puberty, and even to a much later date. Dr. Bird referred, also, to the difference in the seat of the vaccine and variolous pustules, as indicating a difference between them, the former being under the epithelial surface, and the latter affecting the chorion.

Dr. Crisp remarked, that there were two or three particular points connected with the paper, respecting which he proposed offering a few observations. First, the efficacy of vaccination. That, he thought, no one could doubt who had read with care the weekly reports issued by the Registrar-General; they were sufficient, in his opinion, to convince any one of its efficacy. He had seen several cases of small-pox after vaccination; and, in some instances, it occurred where he himself had previously vaccinated, but not one of the patients had died from the attack. With reference to the occurrence of variola after alleged vaccination, it was important to recollect, that at many of the vaccine establishments the parents neglect to bring back their children after the operation has been performed, for fear of having any of the lymph taken away, and thus it is impossible to verify the success or failure of the operation. The mother is satisfied that all is right, if her child have a sore arm; it is possible, therefore, that in many instances the vesicle is not a perfect one. As regarded the question of revaccination, he would inquire what evidence was there of the necessity for it? The Reports from the Prussian army would show, that of 28,859 of the soldiery who had been revaccinated, in 16,882 the vesicle or pustule had progressed as if nothing had been done previously; in 4404 the vesicle was very irregular, and the arm very sore; while, in 7753, no effect whatever was produced. Now, what practical deduction could be drawn from this? He (Dr. Crisp) did

not think the inquiry would be at all advanced by it. Would the 16,882 revaccinated soldiery have been more liable to small-pox than the others? There was not any evidence to decide that question.

Dr. Lankester thought that the returns from the Prussian army constituted the basis of the arguments used in this country in favour of revaccination. Dr. Gregory said, at a meeting of the Medico-Chirurgical Society, that revaccination was more preventative of small-pox in young persons than in adults. This statement he (Dr. Lankester) could not reconcile with these returns.

Mr. Clarke (interrupting him) explained that Dr. Gregory's opinion was, that revaccination was of no value; that vaccination ceased to be prophylactic at puberty, but that if inoculation were then practised the preservative influence would continue for life.

Dr. Lankester resumed: At all events, Dr. Gregory was opposed to revaccination. Now Mr. Marson, a gentleman whose authority on this point must be great, from his connexion with the Small-pox Hospital, held a different opinion. He (Dr. Lankester) knew that to be the case, from what he (Mr. Marson) had said respecting two of his children, in whom the vesicle was imperfect. Mr. Marson told him that they were certainly liable to small-pox, but it could be rectified by revaccination; which, he added, ought not to be attempted for seven or eight years, as before that time the vesicle, although imperfect, would resist the action of the fresh lymph. Mr. Dendy had omitted to notice an important point, namely, how the child might be considered safe or not, from the appearance of the vesicle.

Mr. Dendy, interposing, said, from the attendant erythema and fever, to which he had drawn particular attention in the paper.

Dr. Lankester said, with respect to the identity of these diseases, it was not improbable that they originated in a common virus, which produced different results, according to the state of the system into which they were received. He illustrated this by the cryptogamic fungi, which arise from the same fungus, but are modified in appearance by the nidus in which it falls. Then with respect to the character of the vesicle, the recency of the matter, and the question as to the virus losing its power by passing through many systems, he recollected that, some eight or ten years since, some new lymph was obtained from a fresh source, and this, when used, had a greater erythema than is now met with. We do not see such an erythema now. Mr. Dendy had not alluded to the popular theory as to the possibility of introducing other diseases by means of vaccination. He thought that Mr. Dendy's opinion on that point was rather heterodox, judging from what he had said on that subject at a previous meeting. This popular prejudice aided the objections to vaccination. The subject was one which required investigation. There is also another opinion, that it stirs up diseases latent in the system, such as scrofula, and brings it into action. These opinions, he was sorry to say, were held by some medical men, as well as by the people, and should therefore be investigated.

Mr. Hunt directed the attention of the Society to the appearance of the vesicle, and said that few medical men were acquainted with Jenner's description of the perfect one, by which he could say, on seeing it, that the person was protected. Not being aware of this, they pass some as safe which Jenner would have rejected. He had asked this question of old Dr. Walker, who said he did not want to see the vesicle, for if he could feel a central prominence, with heat and inflammation around it to a moderate extent on the 10th and 11th days, he should say the person was safe. He (Mr. Hunt) also inquired his experience as to the occurrence of small-pox after vaccination, and the answer was, he had only seen two such cases, and neither ended fatally. He (Mr. Hunt) believed, and so did Jenner, that vaccination was as protective as small-pox, but would not say it was more so. He thought nothing had yet occurred to disprove this: it had not been ascertained how often small-pox occurred as a secondary disease, but he believed it was quite as common as small-pox after vaccination. Jenner's description of the true vesicle coincided with those by Willan and Bateman,—it is pearl-coloured, umbilicated, edges leaning a little over, not perfectly perpendicular, but something in the form of the seed of the malva. This latter sign is seldom spoken of now, and many arms are passed in which it is not marked. The scar shows that the vesicle was cellular. Mr. Dendy had not described it with such particularity. If Jenner, Willan, and Bateman were not too particular, and if we wish to carry out vaccination fully, we must go back to and learn of them; and this has become the more necessary, when such men as Gregory and Marson differ in their opinion of re-vaccination. He (Mr. Hunt) believed re-vaccination to be impossible, if the operation had been properly performed in the first instance, and the vesicle were perfect. He had never succeeded in effecting it; and had never seen small-pox and vaccinia in one and the same person. He did not doubt but that all the medical men present had been vaccinated; and, as all had been probably

more or less exposed to variolous miasm, it would be an interesting question, how many had been subject to secondary variola. (He accordingly put the question, which was not apparently clearly understood by all, but the rough result was, about five cases out of sixty.) The number, then, was about 1 in 12; but he thought it problematical whether those who had had the secondary disease had been thoroughly vaccinated; he thought, from what he had already advanced, it was probable they had not.

A Visiter stated, that, when he was apprenticed at Lewes, his governor was surgeon to the House of Correction. Small-pox broke out, and they vaccinated every one. In one case, small-pox and vaccinia ran their course simultaneously; and his governor spoke of it as something singular. Some years subsequently, after thinking of this matter, he inoculated a cow with the small-pox virus, and vaccinated a child with the lymph thus procured. The vesicle came to maturity earlier, and there was more inflammatory action than with ordinary vaccine lymph. In his brother's practice, a child was vaccinated when it was three months old, had the small-pox when a year old, and again twice afterwards.

Mr. Clarke wished to hear Mr. Dendy's opinion as to the vaccine lymph losing its preservative power at puberty; and if so, whether it was from its being a definite period, or from the change in the system that then occurs. He would also ask the appearance of the cicatrix that indicates safety. He thought great injury was done to vaccination by the expression of a hasty opinion founded on a few facts only. The paper read by the President the preceding night would give them a hint that might be useful, for they could only arrive at a definite conclusion from a great number of facts. Dr. Gregory would have answered Dr. Lankester as Mr. Marson did, still holding his opinion as to the inutility of re-vaccination; for, the first attempt being a failure, re-vaccination would be proper and useful.

Mr. Streeter had, 13 years ago, in the Society, inferred the identity of small-pox with cow-pox, from observation of cases of their simultaneous progress in the same individual. They had been vaccinated at varying intervals after exposure to variolous infection, and before the appearance of variolous eruption. The protective influence of cow-pox was found to coincide with the formation of a perfect areola and its accompanying fever. If a perfect areola formed before the eruption came out, then the progress of small-pox was either entirely arrested, or greatly accelerated and mitigated; but if the areola did not perfectly form, the small-pox eruption passed through an unmodified course. This is of practical importance, for the areola of cow-pox is generally formed by the tenth day after insertion of lymph, while the variolous eruption does not often appear till the fifteenth day after exposure to infection. Vaccination, therefore, will, when performed three days after exposure to variolous contagion, overtake and control the effects of variola on the system. He had known one instance of success, and one also of failure, where the vaccination was delayed till the fifth day. After that time there may be a vague, but there is no intelligent hope of success, and no time should be lost in adopting precautionary treatment and regimen. When so many undoubted cases of small-pox occurring twice in the same person were on record—one such is mentioned by Jenner (a)—can certain or complete immunity from variola post vaccinia be expected? In testing for the continuance of the protecting power by re-vaccination, let not that singular increased susceptibility of the skin to take on this peculiar inflammation conferred by a previous vaccination, and alluded to by Jenner himself, be lost sight of. The presence, character, and duration of this may be the test of the amount of protection remaining in the system from former vaccination, and that punctures not followed by inflammation will prove to be only failures, and no proof of insusceptibility or present security. It was worthy of remark, that lymph taken from vaccine vesicles a few hours before the coming out of a small-pox eruption, and whose areolar stage was prevented thereby, had produced

(a) Case 4.—Mary Barge, of Woodford, in this parish was inoculated with variolous matter, in the year 1791. An efflorescence of a palish red colour soon appeared about the parts where the matter was inserted, and spread itself rather extensively, but died away in a few days without producing any variolous symptoms.* She has since been repeatedly employed as a nurse to small-pox patients without experiencing any ill consequences. This woman had cow-pox when she lived in the service of a farmer in this parish 31 years before.—Dr. Jenner, 3rd edition, p. 13.

* "It is remarkable that variolous matter, when the system is disposed to reject it, should excite inflammation on the part to which it is applied more speedily than when it produces small-pox. Indeed, it becomes almost a criterion by which we can determine whether the infection will be received or not. It seems as if a change which endures through life had been produced in the action or disposition to action in the vessels of the skin; and it is remarkable, too, that whether this change has been effected by the small-pox or the cow-pox, that the disposition to sudden cuticular inflammation is the same on the application of variolous matter."

protective cow-pox when employed (unconsciously of course) by Mr. Bryce, by Mr. Verral, sen., of Lewes, and by himself.

Dr. Winslow inquired, whether there were any statistical facts on record, showing how many cases of small-pox occurring after vaccination were of spontaneous origin, and how many from contagion?

Mr. Dendy, in reply, said, that Dr. Winslow's question would occupy considerable time, and he would not be able to answer it as he could wish. He did not believe that small-pox was ever generated *de novo*, neither did he think that other diseases were ever introduced with the vaccine lymph into the system during the operation of vaccination. He had no hesitation in saying, that all the morbid modifications consequent to vaccination were the result of idiosyncrasy alone. They depend almost entirely on that modification of the system, and not on bad or unhealthy matter, or on the imperfect performance of the operation. So is it with scrofula, which is excited in the pock itself. He did not think that fifteen years of age, or the adult period of life, had anything to do with the question of revaccination, except by rendering the system subject to external influences, and thus also the effects of change of climate may be explained. With respect to Mr. Hunt's remark about the description of the vaccine vesicle,—why it is as familiar as "household words."

THE LETTSOMIAN PROFESSORSHIPS.

Dr. Forbes Winslow, of Hammersmith, the editor of the *Journal of Psychological Medicine*, and Mr. Hancock, one of the surgeons to the Charing-cross Hospital, and Lecturer on Surgery at the school of medicine attached to the hospital, have been appointed Lettsomian Professors to the Society for the ensuing year, in the room of Dr. Rees and Mr. Guthrie, whose period for holding the office has expired.

APOTHECARIES' HALL.

THE preliminary examination in classics and mathematics commenced on Saturday last, and was continued on Monday and Tuesday in the present week. We subjoin the printed papers which constituted the subjects of the first day's examination: on the other days the candidates were examined *vivâ voce*.

PRELIMINARY EXAMINATION.—October 18th, 1851,

XENOPHON, ANABASIS, BOOK I., CHAP. III.

Εκ δὲ τούτου ανίσταντο, οἱ μὲν ἐκ τοῦ αυτομάτου, λέγοντες, ὁ ἐγγίνωσκον· οἱ δὲ καὶ ὑπ' ἐκείνου ἐγκελευστοί, ἐπιδεικνύντες, οἷα εἴη ἡ ἀπορία, ἀνεὺ τῆς Κυροῦ γνώμης καὶ μένειν καὶ ἀπιέναι. Εἰς δὲ δὴ εἶπε, προσποιούμενος σπενδεῖν ὥς ταχίστα πορευεσθαι εἰς τὴν Ἑλλάδα, στρατηγούς μὲν ἐλεσθαι ἀλλοὺς ὥς ταχίστα, εἰ μὴ βούλεται Κλεαρχος ἀπαγεῖν· τὰ δ' ἐπιτηδεῖα ἀγοραζέσθαι (ἡ δ' ἀγορὰ ἦν ἐν τῷ βαρβαρικῷ στρατευματι) καὶ συσκευάζεσθαι· ἐλθόντας δὲ Κυρον αἰτεῖν πλοῖα ὥς ἀποπλεοῖεν.

MORNING EXAMINATION.

Translate the following passages into English:

VIRGIL. ÆNEID. BOOK I.

Talia jactanti stridens Aquilone procella
Velum adversa ferit, fluctusque ad sidera tollit.
Franguntur remi: tum prora avertit, et undis
Dat latus: insequitur cumulo præruptus aquæ mons.
Hi summo in fluctu pendent, his unda dehiscens
Terram inter fluctus aperit: furit æstus arenis.
Tres Notus abreptas in saxa latentia torquet:
Saxa vocant Itali, mediis quæ in fluctibus Aras,
Dorsum immane mari summo. Tres Eurus ab alto
In brevia et syrtes urget, miserabile visu:
Illiditque vadis, atque aggere cingit arenæ.
Unam, quæ Lycios fidumque vehebat Orontem
Ipsius ante oculos ingens à vertice pontus
In puppim ferit: excutitur, pronusque magister
Volvitur in caput: ast illam ter fluctus ibidem
Torquet agens circum, et rapidus vorat æquore vortex.
Apparent rari nantes in gurgite vasto:
Arma virum tabulæque, et Troia gaza per undas.

CICERO. ORATIO PRO MILONE.

Unum genus est adversum infestumque nobis, eorum quos P. Clodii furor rapinis, et incendiis, et omnibus exitiis publicis pavit: qui hesternâ etiam concione incitati sunt, ut vobis voce præirent, quid judicaretis: quorum clamor, si quis forte fuerit, admonere vos debet, ut eum civem retineatis, qui semper genus illud hominum, clamoresque mavimos pro vestra salute neglexit. Quamobrem adeste animis, Judices, et timorem, si quem habetis, deponite.

GOSPEL OF ST. LUKE. CHAP. 15.

Λέγω ὑμῖν, ὅτι οὕτω χαρὰ ἐστὶ ἐν τῇ οὐρανῷ ἐπὶ ἑνὶ ἁμαρτωλῷ μετανοοῦντι, ἢ ἐπὶ ἐννενηκονταεννέα δικαίοις, οἵτινες οὐ χρεῖαν ἔχουσι μετανοίας.

Ἡ τις γυνὴ δραχμὰς ἔχουσα δέκα, ἔαν ἀπολεσθὲν δραχμὰν μίαν, οὐχὶ ἀπτεῖ λυχνόν καὶ σαροὶ τὴν οἰκίαν, καὶ ζητεῖ ἐπιμελῶς, ἕως ὅταν εὕρῃ;

Καὶ εὐρουσα συγκαλεῖται τὰς φίλας καὶ τὰς γείτονας, λέγουσα· Συγχαρητέ μοι ὅτι εὗρον τὴν δραχμὴν ἣν ἀπώλεσα.

1. Give the present tense, first pers. sing., and the first future, of the following verbs: *εἶπαι*, *ἔχουσι*, *ἀπολεσθ*, *ἀπτεῖ*, *ζητεῖ*, *εὕρῃ*, *συγκαλεῖται*, *συγχαρητέ*.

2. Distinguish between *ἐν* and *ἐν*, *εἰς* and *εἰς*, *οὐ* and *οὐ*, *ἢν* and *ἢν*.

ALGEBRA.

$$\left. \begin{array}{l} 5x - 4y = 19 \\ 4x + 2y = 36 \end{array} \right\} \text{to find } x \text{ and } y.$$

EUCLID.

Describe a square upon a given straight line.

AFTERNOON EXAMINATION.

Translate into English the following:—

VIRGIL, ÆNEID. BOOK I.

Urbs antiqua fuit Tyrii tenuere coloni,
Carthago, Italiam contra, Tyberinaque longè
Ostia: dives opum, studiisque asperrima belli;
Quam Juno fertur terris magis omnibus unam
Posthabitâ coluisse Samo. Hic illius arma
Hic currus fuit: hoc regnum Dea gentibus esse
Si quâ fata sinant, jam tum tenditque fovetque.

CICERO. ORATIO PRO MILONE.

Est enim hæc, Judices, non scripta, sed nata lex: quam non didicimus, accepimus, legimus, verum ex naturâ ipsâ arripuimus, hausimus, expressimus: ad quam non docti, sed facti, non instituti, sed imbuti sumus: ut si vita nostra in aliquas insidias, si in vim, in tela aut latronum, aut inimicorum incidisset: omnis honesta ratio esset expediendæ salutis. Silent enim leges inter arma, nec se expectari jubent, cum ei qui expectare velit, aut injusta poena luenda sit, quàm justa repetenda. Etsi persapienter, et quodammodo tacitè, dat ipsa lex potestatem defendendi: quæ non modò hominem occidi, sed esse cum telo hominis occidendi causâ vetat: ut, cum causa, non telum quæreretur, qui sui defendendi causâ telo esset usus, non hominis occidendi causâ habuisse telum judicaretur.

1. Scan the first three lines of the quotation from Virgil, marking all the quantities.

2. Write the 1st pers. sing. pres. tense of the following verbs: *coluisse*, *sinant*, *didicimus*, *arripuimus*, *hausimus*, *expressimus*, *quæreretur*, *usus esset*.

GOSPEL OF ST. LUKE, CHAP. X., VERSES 25, 26, 27, 28.

Καὶ ἰδὼν νομικὸς τις ἀνέστη, ἐκπείραζων αὐτὸν, καὶ λέγων, Διδασκαλε, τί ποιήσας ζῶν αἰώνιον κληρονομήσω; ὁ δὲ εἶπε πρὸς αὐτὸν, Ἐν τῇ νόμῳ τί γεγραπται; πῶς ἀναγινώσκεις; ὁ δὲ ἀποκριθεὶς εἶπεν, Ἀγαπήσεις κυρίον τὸν Θεόν σου, ἐξ ὅλης τῆς καρδίας σου καὶ ἐξ ὅλης τῆς ψυχῆς σου, καὶ ἐξ ὅλης τῆς ὁχλῆς σου καὶ ἐξ ὅλης τῆς διανοίας σου· καὶ τὸν πλησίον σου ὡς σεαυτὸν. Εἶπε δὲ αὐτῷ, Ὁρθῶς ἀπεκριθης· τοῦτο ποιεῖ καὶ ζῆσθ.

Give the present tense and 1st future of the following: *ἀνέστη*, *γεγραπται*, *ἀναγινώσκεις*, *ἀπεκριθης*, *ποιεῖ*, *ζῆσθ*.

EUCLID. BOOK I.

Parallelograms upon the same base and between the same parallels, are equal to each other.

ALGEBRA.

$$\text{Divide } 6x^4 - 96 \text{ by } 3x - 6.$$

MEDICAL NEWS.

UNIVERSITY OF OXFORD.—Dr. Ogle, the Clinical Professor of Medicine, has been appointed to succeed the late Dr. Kidd as Regius Professor of Medicine in this University. The office is in the patronage of the Crown. Dr. Ogle will commence a course of Clinical Medicine, at the Radcliffe Infirmary, on the 1st November. Dr. Lee's Reader in Anatomy (Dr. Acland) purposes to commence his lectures on October 31, at half-past seven p.m., in the Anatomical Museum, in Christchurch.

UNIVERSITY OF CAMBRIDGE.—A grace has passed the Senate of this University, to appoint Dr. Webster an examiner for medical degrees during the ensuing year. The Professor of Anatomy will commence his course of lectures on the Anatomy and Physiology of the Human Body, on the 28th, in the Anatomical School, at 1 o'clock p.m.

THE COLLEGE FELLOWSHIP.—The Council have just announced that the next examinations in classics, mathematics, and French, for the Fellowship of the College, will take place in the first week in November; and that the professional examination for the distinction will take place on Tuesday the 2nd, and Thursday the 4th of December next.

MR. QUEKETT.—It gives us much pleasure to find that this gentleman has so far recruited his health, after his long illness, as to be enabled to commence his annual course of histological lectures on Wednesday, the 29th inst.; and that the publication of the concluding portion of his last course of lectures will at once be proceeded with in this Journal.

BANQUET TO CHARLES MAYO, ESQ., F.R.C.S. AND SENIOR SURGEON TO THE HANTS COUNTY HOSPITAL.—On Tuesday last, the 21st inst., a splendid entertainment was given to Mr. Mayo, of Winchester, by the Committee and Governors of the Hants County Hospital, to commemorate his long and faithful services to that institution. About 150 gentlemen assembled, at six o'clock, at the St. John's Rooms, Winchester, to take part in the celebration of an event so interesting and gratifying. The Rev. The Warden of Winchester College presided on the occasion, supported, on his right, by the guest of the evening and the Mayor of Winchester; and, on his left, by the Rev. the Dean of Winchester and Melville Partal, Esq., M.P. In the vicinity of the chair were noticed Dr. Maberly, head master of Winchester College; the Rev. Dr. Wilson and other Canons of the Cathedral; the Chaplain to the hospital; most of the resident clergy and magistrates, and many of the leading gentry of the city of Winchester and its immediate neighbourhood. The Committee of the hospital, with a degree of generosity which well deserves mention, presented Mr. Mayo with a very liberal supply of cards of invitation to his professional friends, and among those present and resident at Winchester, we observed Dr. Crawford, Dr. Phillips, W. H. Judd, Esq., Surgeon in Ordinary to H.R.H. Prince Albert, and Surgeon-Major Scots Fusilier Guards, James Mee, Esq., 1st Royals, the Medical Officer of the 38th Regiment, W. J. Wickham, Esq., R. W. Smith, Esq., who very ably filled the Vice chair, and several others. There were also present, A. M. M'Whinnie, Esq., St. Bartholomew's Hospital; J. Wiblin, Esq., F.R.C.S.; Southampton; Henry Dayman, Esq., Milbrook; W. Spears, Esq., Totton; John Orsborne, Esq., F.R.C.S., Bitterne; Wm. Druth, Esq., F.R.C.S.; Wimborne; J. H. Lipscombe, Esq., Alresford; J. Winzar, Esq., Salisbury; A. Paul, Esq., Winchester; Messrs. Covey, Basingstoke; C. Fluder, N. Adams, Esqrs., Lymington; — Parker, Esq., Milbrook, etc., etc. After the cloth was removed, and ample justice done to the usual toasts, the Chairman in a very eloquent and dignified manner, next proposed the toast of the evening, and, after passing in review many very interesting details connected with Mr. Mayo's deservedly successful professional career, and passing upon him encomiums which it has seldom fallen to our lot to hear, he said:—"It is my pleasing duty now to propose the health of that most excellent man, the guest of the evening, and to acknowledge the deep debt of gratitude we all owe to him for the eminent, disinterested, and brilliant services rendered to the hospital. It is due to Mr. Mayo to offer to him that sincere and just tribute of our approbation and praise to which he is peculiarly entitled. I give you, gentlemen, the health of Charles Mayo, Esq., the faithful and efficient servant of the Hants County Hospital, during the lengthened period of forty years." The toast was received with the most marked and rapturous rounds of applause, and, after silence had been in some measure restored, Mr. Mayo rose and said:—"Mr. Warden and gentlemen,—It has been well known to many of my friends, that I had for several years past entertained an idea of the propriety of establishing a periodical festival for the benefit of the Hospital; and it is indeed to me a gratifying part of my career, to find that, with a view to introduce so deserving an undertaking, the Committee and Governors of the Hospital should have invited my friends and myself to partake of the good things of this sumptuous entertainment. My first and chief feeling on this occasion must be sincere thankfulness to the Almighty, that my life and health has been so long and vigorously maintained, and that I have thereby been enabled to devote my services, as an humble instrument in his hand, to the carrying out the benevolent purposes of the Charity. In acknowledging, however, how deeply and keenly I appreciate the generous sentiments of esteem which my fellow-

citizens have on this event bestowed upon me for the humble part I have taken in the performance of my duty, I cannot allow the occasion to pass, without tendering to my colleagues at the Hospital my warmest thanks for their excellent co-operation. To those Professional and private friends who have come from the Metropolis, and various parts of the country, to testify their cordial approbation of the great compliment which the Chairman and Governors have paid to me and my long services, I beg also to tender my best thanks; and with a warm sense of my unworthiness, and a sincere desire to impress upon this company and the public how much the charity is indebted to the rev. Chairman and Committee of Governors, for their unwearied care of its best interests, I beg to propose to you the health of the Chairman and the Committee of Governors. Mr. Mayo then sat down amidst the deafening applause of the whole company. The rev. Chairman responded, and said, that his great happiness as a resident of Winchester was mainly to be attributed to his connexion with the hospital. He paid a marked and well-merited compliment to the officers of the Institution. The Chairman next proposed the Physicians and Surgeons to the hospital. Dr. Phillips, who has been attached to the hospital 30 years, returned thanks in a very appropriate manner. Mr. Wickham returned thanks on behalf of the surgical staff of the hospital, and made some highly complimentary observations relative to the guest of the evening. The Dean of Winchester rose to add his testimony to the noble and disinterested services of the medical officers of the Charity, and said, however deserving of public approbation Mr. Mayo might be, —and he believed no man was more worthy of it,—he could not allow the occasion to pass without bearing his individual testimony to the high reputation and long services of the families of the Wickhams and Lyfords of Winchester. The Wickham family had rendered their services to the hospital during a period of nearly sixty years. The family of the Lyfords had attended the hospital upwards of ninety years; and to the great and vast experience of four generations of that family he was, under Divine Providence, enabled to be present among them that evening. He much admired the talent and skill of their city; he had attended the festival at great personal inconvenience; but he had no hesitation in stating, that this was one of the proudest moments of his life; for never before had he met with so many distinguished members of the Medical Profession,—indeed, it was the greatest demonstration of *physical strength* he had ever witnessed. The next toast was, "The Retired Physicians of the Hospital." Dr. Crawford, in a most classical and feeling manner, responded to the toast, and elicited from all present the warmest acknowledgement of his previous services. The Chairman then gave "The health of the Fellows and Members of the Royal College of Surgeons of England," associating with the toast the name of Mr. M'Whinnie. Mr. M'Whinnie regretted that the selection of a gentleman to respond to the toast had not fallen upon some more worthy member of that respected and scientific body; but, however imperfectly he might perform his duty, he felt assured that the College of Surgeons would feel proud indeed to meet with the distinguished honour of being toasted on the occasion. He most cordially concurred in the great mark of esteem paid to the guest of the evening; and he might be permitted further to state, that any honour conferred upon an individual member of that body to which he belonged, would be sincerely appreciated by the whole of the Profession. He begged to return thanks on behalf of the College of Surgeons. Many other toasts very complimentary to the Profession were given and responded to, and the company separated, highly delighted with the occasion which had induced so many members of the Profession to meet together in such harmony and good fellowship.

OBITUARY.—On the 15th instant, aged 61, David Macnamara, Esq., surgeon, of Uxbridge, Middlesex. At Madras, on the 4th Sept., Surgeon G. C. Roe, M.D., Inspector-General of Hospitals. On the 7th inst., aged 28, Robert R. Crucefix, Esq., surgeon, Shepton Mallett.

MILITARY APPOINTMENTS.—Hospital Staff: Acting Assistant-surgeon John Samuel Herron to be Assistant-surgeon to the forces, vice Woodley, appointed to the 41st Foot.

NAVAL APPOINTMENTS.—Surgeon Charles Burdell to be agent at sick quarters at Bristol.

CHINA SQUADRON.—NAVAL PROMOTIONS.—Assistant-surgeon Digan, M.D., to be surgeon of the *Cleopatra*; vice Haire, invalided. Assistant-surgeon Addison, late of the *Hastings*, to be surgeon.

ORDNANCE.—The Master-General has been pleased to appoint Alexander Scott Fogo to be a temporary assistant-surgeon in the Ordnance Medical Department, with the rank and pay of an assistant-surgeon.

MEDICAL APPOINTMENTS AND VACANCIES.—A clinical assistant is wanted for the City of London Hospital for Diseases of the Chest, and a resident surgeon-accoucheur for the Birmingham General Dispensary. Salary for the latter 80*l.* a year, increasing 10*l.* annually for two years, with furnished apartments, fire, candles, and attendance of a servant; election on the 5th November.—The house-surgeon of the Huddersfield and Upper Agbrigg Infirmary is vacant. The successful candidate is required to remain in office three years. Salary not stated; election on the 19th November.—At the West Kent Infirmary and Dispensary, a vacancy has been declared in the combined offices of house-surgeon, dispenser, and secretary, the salary for which is 100*l.* per annum, with residence, but not board. Candidates must be M.R.C.S., L.E. or D., and L.S.A.; and unmarried; election on Nov. 18. Certificates to be sent in on or before the 16th. Duties commence on the 1st January.—Mr. Hancock and Dr. Forbes Winslow have been appointed Lettsomian Professors at the Medical Society of London, in the room of Mr. Guthrie and Dr. Lees. The appointment is for a year only.—A professor of anatomy will be elected for Trinity College, Dublin, on the 24th January next. The salary is 200*l.* a year, and certain fees paid by students attending the Professor's private course of lectures, demonstrations, etc. Certificates and testimonials to be sent in on or before the 10th January.—Dr. Pereira has been elected physician to the London Hospital, in the room of Dr. Frampton. He commenced his professional career, we believe, as apothecary to the Aldersgate-street Dispensary; and, by dint of patient industry, and a steady perseverance in study, particularly in one special branch of the medical sciences, has worked his way up to a physicianship to a London hospital, and that, too, not one of the least known and the least useful. The office of assistant-physician is consequently vacant. Applications from candidates receivable on the 28th instant.

THE QUEEN'S COLLEGE, BIRMINGHAM.—The Queen's College, at Birmingham, has recently obtained powers under a supplemental charter to elect such members of the College as may distinguish themselves during their studies, and who subsequently obtain a diploma in medicine or surgery, or become graduates in medicine, law, or arts, Fellows of the College. We hear that the authorities of the College intend to confer this honour, in the first instance, upon such of the earlier members of the Institution as the Principal and Council may determine to be eligible; and in accordance with the provisions of the charter, two gentlemen, Dr. Roden, of Kidderminster, and Dr. Barker, of Bedford, have been elected Fellows of the College. These, with Mr. G. B. Masfen, of Stafford, are the first three members of the Profession selected for this distinction under the new charter. Among other privileges, the Fellows are entitled to vote at all meetings of the Governors, to free admission to the medical and general libraries, to the museums, to the lectures of the professors in the different departments, and to dine in the College-hall.

GLOUCESTERSHIRE MEDICAL AND SURGICAL ASSOCIATION.—At a meeting held at Cirencester, October 9th, Dr. Collings Robinson gave notice, that he should bring forward, at the next meeting at Cheltenham, the following resolutions:—"1st. That the practice of homœopathy, or the prescribing medicines in what are called infinitesimal doses, under a pretence that they are useful in the cure of disease, is founded in palpable error, is a delusion on the part of the practitioner, a deception on the public, and manifestly dangerous to its welfare. 2nd. That the members of this Association cannot honourably hold any professional communion with homœopaths. 3rd. That, consequently, any member of this Association, who shall hereafter practise homœopathy, or who shall knowingly meet in consultation any professional homœopathist, will thereby render himself unworthy of the membership of this Association."

THE FACULTY OF PHYSICIANS AND SURGEONS, OF GLASGOW, at a meeting held 1st September, 1851, passed the following minute:—"The Faculty, having had their attention called to certain resolutions by the Royal Colleges of Edinburgh, in reference to homœopathy, and heard the opinion of their Council, to whom the matter was referred at last meeting, do now, in conformity with that opinion, express their concurrence in, and approbation of, the views taken by the Royal Colleges, as specially detailed in the resolutions of the Royal College of Physicians; but, as none of the Fellows or Licentiates of Faculty, so far as known to them, have hitherto professed or countenanced this system, they consider any further notice of the subject, on their part, in the meantime, unnecessary."

UNIVERSITY OF ST. ANDREWS.—List of gentlemen who had the degree of Doctor of Medicine conferred upon them 17th October, 1851:—Robert Beales, L.A.C., London; John Brown, M.R.C.S. and L.A.C., Islington; John Cowie, M.R.C.S. Ed.,

Zetland; Alex. Scott Fogo, M.R.C.S., London; Charles Gibson, M.R.C.S. and L.A.C., Newcastle-upon-Tyne; Frederick Goodchild, M.R.C.S., Middlesex; John Frederick Grace, M.R.C.S., London; Nathaniel Jarvis Highmore, M.R.C.S. and L.A.C., Bradford, Wilts; Edwin Humby, M.R.C.S. and L.A.C., London; Chas. Dudley Kingsford, M.R.C.S., Middlesex; Thos. Joseph Wm. Marsh, M.R.C.S. and L.A.C., Surrey; George Miller, M.R.C.S., and L.A.C., London; John Pearson Nash, M.R.C.S., Calcutta; John Roulston, M.R.C.S. and L.A.C., Yorkshire; Thomas Torney, M.R.C.S. Ed., Dublin; Henry Uwins, M.R.C.P. and M.R.C.S., London; John Walling, M.R.C.S. and L.A.C., Yeland, Lancaster; Henry Waldron Watson, Arnold, near Nottingham.

MEDICAL BENEVOLENT COLLEGE.—At a meeting of the Medical Practitioners of Leamington and Warwick, held at Leamington, October 9, 1851, Dr. Jeaffreson in the chair, the following resolutions were passed:—"That the establishment of an Asylum for Distressed Medical Men or their Widows, and a school for the education of their sons, is an object worthy of the cordial co-operation of the Profession, and has strong claims on the sympathy of the public." "That the members of the Medical Profession in Leamington and Warwick, forming this meeting, pledge themselves, by all available means, to assist the accomplishment of so desirable an object, and earnestly exhort their professional brethren, and their friends throughout the country, to aid them in carrying it out." "That a local Committee be formed, consisting of the following gentlemen, for the purpose of co-operating with the Central Committee in London, and of receiving subscriptions and donations from the Profession;—Dr. Jeaffreson, Mr. Middleton, Mr. Boulton, Dr. Homer, Dr. Franklin, Mr. Jones, Mr. Blenkinsop, Mr. Babington, Mr. Hiron, Mr. Watson, and Mr. Prichard." "That Dr. Jeaffreson be requested to accept the office of Chairman, and Mr. Prichard that of Honorary Secretary and Treasurer to the Local Committee."

ROYAL NAVAL BENEVOLENT SOCIETY.—As a beneficial consequence of the regulation giving assistant-surgeons in the Navy ward-room rank, a resolution has been passed admitting them as members of the Royal Naval Benevolent Society, to which position they could not previously be admitted, for want of that rank. They are to pay 5*s.* annually, and 5*l.* An attempt was made to lower the amount to be paid by them to 4*s.*, and 4*l.*, but it failed.

The authorities of the City of London are about to erect a lunatic asylum expressly for the poor of the City of London.

METROPOLITAN INTERMENT ACT.—An important step has been taken under this Act, the first volley firing its machinery into action. It appears that the Board of Health have been in treaty to procure, for the purpose of interring the dead, or to close at their discretion, two of the trading Companies' cemeteries, that at Brompton, and the Nunhead Cemetery. For the former, the sum claimed as compensation was 168,762*l.* 12*s.* 8*d.*, the sum offered 43,836*l.*; for the latter, the sum claimed was 99,349*l.*, and that offered was 39,871*l.* The Brompton Company showed, that they had expended 107,000*l.* for works, and the Nunhead Company had paid 63,000*l.* for the same purpose. As the parties could not come to terms, the affair was referred to the arbitration of Mr. Peacock, Q.C., and the case was ably argued before him. His decision was given on Saturday, the 18th inst. He awarded for the Brompton Cemetery 74,921*l.* 14*s.*, for the Nunhead Cemetery 42,153*l.* 13*s.*, making a total of 117,075*l.* 7*s.*, a sum less than that claimed, by 151,036*l.* 5*s.* 8*d.* The Companies demanded sums larger than their actual outlay, on the ground that they were entitled to compensation for the loss of future profits. The argument of the Board of Health, as given by their counsel, Sir F. Thesiger, was to the effect, that the real test of the value of the works proposed to be taken, and the compensation to be given, was not what they had cost, but what they would sell for in the market.

METROPOLITAN COMMISSION OF SEWERS.—A memorial from Russell-street, Bermondsey, revealed the startling fact, that the main sewer, which supplies the inhabitants of that district with water, is also the means of relieving them of their sewage. It communicates with the Thames near St. Saviour's Docks. When the tide is up, water flows from the river to the houses; when it is down, the sewage runs from the houses to the river. Even this is scarcely a sufficiently bad representation of the state of the sewer; for it appeared from the statement of Mr. Allason, that the sewer was so flat, that the sewage-water penetrated through the bottom into the basements beneath. On a recent visit to the locality, he had found sewage-water to the depth of from twelve to eighteen inches in the cellars.

PROGRESS OF EPIDEMICS IN INDIA AND CHINA.—The troops in the Punjab, natives as well as Europeans, are suffering most

severely from fever, especially at the new frontier posts. The sanitary condition of the troops in China is more satisfactory. During the last week of July and first three weeks of August last year, the deaths were 53, of which 48 occurred in the 59th Regiment. During the same period this year, 11 of the garrison have died, of whom eight belonged to the 59th. This is the more remarkable, since the number of sick has not decreased, the admissions into the hospital being even greater than last year, and, as was expected, upwards of two-thirds of the 150 men who arrived in July have been on the sick-list and unfit for duty. At Lahore, Peshawur, and Sukkur, sickness is very prevalent, and is attended with considerable mortality, both among the natives and the Europeans, particularly in the 96th Regiment. At Peshawur, however, the sick were less in number than they were last year by 100, although the force stationed there has been increased by about 1500 men, principally Goorkas. The hospitals are crowded with patients nevertheless. The principal diseases affecting the troops are fever and ague. At Lahore there are bitter complaints of the neglect in furnishing the apothecaries' stores with quinine; notwithstanding the great prevalence of these diseases, there are only two ounces of that valuable febrifuge in stock in the dispensary of the civil surgeon. The last reports from that town state, that the epidemics are increasing in severity and in mortality among the soldiery of the 96th Regiment. During the previous week several fatal cases had occurred, and at the date of the report 11 more deaths had been reported. 238 cases had been admitted into the regimental hospital during the same time, and only 152 discharged. There were 244 on the sick-list when the report was sent off, being a slight improvement on the return three days previously, when the number of patients under medical care was 286. At the same time, at Anarkulee, there were 17 per cent. of the European foot artillery in hospital. In the Royal Regiment the average has risen to upwards of 30 per cent. Of 90 men of the company of Sappers and Miners, 45, on the 22nd inst., were laid up with fever; the men being exposed for the greater part of the day to the heat of the sun, that exposure is presumed to be the chief cause of their sickness. The mortality is also increasing among the native population. There are immense tracts of broken ground within the lines of the barracks and in the neighbourhood of the towns, and to these, as also to insulation, the outbreak is chiefly attributable. Between the 22nd and 24th of August there was an increase of 400 sick at Lahore. The prevailing fever is not confined to Lahore, and its immediate vicinity; many inhabitants of Umritsers have been attacked, and reports are rife that Julundhur is not exempt from the visitation, as was fortunately the case last year. There are also disastrous accounts of the effects of fever from the other side of the Indus. The whole of the Dherajah is suffering more or less. The 22nd N. I. have between 80 or 90 in hospital at Sukkur, and about half as many laid up in quarters. Almost all the Europeans in the fort belonging to the Ordnance Department are suffering in the same way, and even the natives in the Bazaar have been attacked in numbers. The weather is intensely hot, the thermometer at noon sometimes standing at 100°; throughout the month it has ranged between 83° and 98°. At the north-west station cholera is very prevalent; several Europeans have been its victims, but its ravages have been greatest among the native population. The attack is attributed to the rankness of the vegetation.

CHOLERA IN JAMAICA.—The reports from Jamaica state that the cholera is re-appearing. Eleven deaths had occurred during the week ending on the 29th ult. Prior to the outbreak, which has persisted so long and so fatally, this epidemic was, we believe, almost, if not totally, unknown in the island. During its almost universal prevalence in 1831, '32, and '33, Jamaica, if we are not mistaken, entirely escaped. The causes of the outbreak, and of its extreme severity, as well as of its very protracted sway, must have arisen since that time, or at all events must, since those years, have been brought into vigorous operation. They require the most rigorous investigation by scientific and practical observers, so that the means of eradicating the disease, and preventing its recurrence, may be discovered. In other places, the Grand Canary for instance, in a foul and filthy quarter, and upon foul and filthy people, the epidemic makes a fearful onslaught, destroys its thousands, and scatters the inhabitants, the sick and the healthy, who fly in every direction, abandoning home, and friends, and relatives, to escape the fell destroyer, many of them perishing by the roadside while seeking for safety. This goes on for a few days or weeks, and then the disease disappears as suddenly as it broke out, and the survivors return to their homes again to wallow in the mire, until a fresh attack of pestilence again decimates and scatters them throughout the island. But it is not so in Jamaica. The destruction has been equally great, the ruin and alarm equally extensive; all the appalling circumstances attending the fearful visitation of

a people by the Destroying Angel, have been manifested there as elsewhere, but the disease, after pursuing its course, as in other places, has not disappeared suddenly, but has continued to commit its dreadful ravages; at one while in the towns on the sea-board, at another in those more inland; at others, again, among the European and negro population on the estates of the planters; then again among the soldiery in the barracks; occasionally showing a less degree of virulence, so as to raise a hope it was about to leave the harassed and dispirited population to repose, but again showing itself in almost its pristine vigour and severity. Why is this? Without venturing to question the purposes of the Most High, which no man dare venture to do, we may inquire whether any terrestrial, household, or personal causes exist, thus to sustain and propagate an epidemic of such fearful virulence and fatality, in a manner seldom if ever before witnessed in any part of the globe. The repeated outbreaks of the disease in India alone bear a semblance to it, and they afford but a faint similitude to the repeatedly renewed violence of the Jamaica plague, which, *Antæus*-like, seems to gather fresh vigour each time it touches the ground. The question we have put is deserving the utmost attention of all interested in the welfare of mankind. What is their fate to-day may be ours to-morrow.

AN anonymous donor has presented the sum of 100*l.* to the funds of St. Mary's Hospital. The title assumed by the benevolent individual is, "An Inhabitant of the West."

THE first meeting of the Royal Medical and Chirurgical Society will be held on the 11th of next month.

NEGLECT BY A POOR-LAW MEDICAL OFFICER.—Mr. Farnell, Poor-law inspector at Bury, Lancashire, has been engaged in an inquiry into a charge of neglect against Mr. Hinxman, medical officer of the Bury Union, for not attending to the sick poor when furnished with orders from the proper authorities. On the 7th August an order was obtained and presented for his attendance on a man named Carr. No one visited him till the 9th, in the morning, when Sellers, the apprentice, a lad sixteen years of age, who had been with Mr. Hinxman only six months, and only ten months away from school, saw him, and ordered a magnesia draught. On the 12th the boy again visited him, and the man died on the 14th. Another medical man had been called in in the interim, but too late to be of service. Mr. Hinxman did not call once on the man. Sellers stated, that he was sometimes left in entire charge of the sick poor, when his master was absent from home, with directions to call in another medical man if there were difficulties to be surmounted. He (the apprentice) had already commenced the practice of an accoucheur, and had performed that duty on more than one occasion alone. He had not reported Carr's case to Mr. Hinxman, conceiving himself perfectly able to manage it, nor did he report to him in another case, a fatal instance of small-pox. Three cases altogether were investigated, in all of which the apprentice attended and prescribed, the Union surgeon not only not visiting, but being totally unacquainted with their existence. At the conclusion of the inquiry, Mr. Farnell intimated that, though the apprentice appeared to be greatly to blame, Mr. Hinxman would have to bear the responsibility, and the depositions must go to the Poor-law Board. There can be but one opinion as to the gross impropriety and temerity of this ex-schoolboy, in undertaking, single-handed, and single—we had nearly said half-headed—the treatment of such serious diseases as small-pox, etc., and keeping concealed from his master that he had such cases under his care, thereby endangering his employer's reputation and position, and, what is worse still, causing the loss of two lives, which might perhaps have been preserved had they received efficient medical attendance.

ON THE NERVES OF THE UTERUS.—At a recent meeting of the Biological Society of Paris, M. Boulard read a paper on this subject, which he sums up in the following terms:—"The result of our dissections has placed us constantly in opposition to those of Dr. Robert Lee, and on reading, for the first time, after having finished our researches, the description of this anatomist, and on looking at the plates which he has published, and afterwards on studying the same memoir by Dr. Snow Beck, ('Philosophical Transactions,' 1846,) we were greatly surprised to find ourselves in complete accordance with the latter author." M. Boulard also states that the nerves do not enlarge during pregnancy, which conclusion is drawn from a dissection of a uterus taken from the body of a young girl, 12 years of age, and of another from the body of a woman who died during parturition. On comparing the two, they did not present any appreciable difference in size. He further remarks:—"We have never found either ganglia or plexuses on the uterus. Indeed, it is sufficient to cast the eyes over the walls of the gravid uterus, after the peritonæum had been removed, to recognise how easily the muscular fibres, the veins, the lymphatics,

etc., could be mistaken as nerves and ganglia, especially when the preparation had been macerated for some time."—*Gazette Medicale*.

THE MAHARAJAH GHOLAUB SINGH, being in very bad health, and placing no confidence either in the skill or honesty of the native hakeems, has applied to the British authorities to send him an English physician. This is a compliment paid alike to the skill of our medical men and the honour of our country, for the Maharajah was lately our deadly foe.

EXTRAORDINARY CASE.—An inquest was lately held on the body of a boy five years of age, by Mr. Baker, at Bow. The boy had suppressed scarlet fever, with an affection of the brain, and Mr. Garman, surgeon, was called in. The boy improved under his care, but the father being prepossessed in favour of Morison's pills, and also a teetotaler, suspended all medicines, beef-tea, wine, etc., and commenced exhibiting Morison's pills. The result was, the child became unconscious; the mother then refused to give any more of the pills, but it was too late; the child died the next day. The evidence of the surgeon proved these facts, and he expressed his belief, that if the medicines, etc., had been continued, the boy would have recovered. "As to the pills," he said, "they never did any good, nor much harm." In this opinion the foreman of the jury coincided; for, said he, one of his workmen took thirty of No. 2 at a dose. The coroner also agreed in this, for at an inquest held by him some years since, an old woman, on oath, stated that she had taken 300 before breakfast. He then proceeded to stultify this opinion, by referring to cases in which persons had been tried for manslaughter, death having resulted from the use of these innocuous pills. In summing up, he said the conduct of the father was highly improper, after a medical gentleman had been called in, to withhold food and medicine which he had ordered, for the father had no right to take his child into his own hands. The mother had acted very wisely in not letting the child have any more, for it might have placed the father in a very peculiar position. The jury returned the following verdict:—"That the deceased died a natural death, which may have been accelerated by withholding the nutriment ordered by the medical gentleman." This almost amounts to a verdict of manslaughter; but we advert to the case here, to express our surprise at the opinion offered by Mr. Garman, and which we have put in italics, that Morison's pills do not do "much harm." Surely, Mr. Garman must be unacquainted with the results of their analysis, and with the facts that have been elicited on several occasions at inquests and trials for manslaughter, or he would not have given forth such a statement as that. We would recommend him to read carefully the trial of Salmon, the tobacconist of Farringdon-street, which took place some years since, and he will then be better able to judge whether they are or are not innocuous. We must say, we never expected to find any medical men, except Richard Tothill, of Heavitree, state that these quack preparations were innocuous. We trust sincerely that the reporter has committed an error in furnishing an account of what Mr. Garman said. The Profession has a right to expect an explanation from him.

REGISTRATION NOTABILIA.—The deaths registered in the Metropolitan districts, in the week ending last Saturday, exhibit a small increase on those of the preceding week. The average was 906; but if this average be raised in proportion to the increase of population, it becomes 997, which differs not much from last week's mortality.

Epidemics.—The table of fatal causes shows, that 229 persons, 158 of whom were children, were carried off by one or other of the 21 diseases that are classed as "epidemic." These diseases in the aggregate do not at present produce a mortality equal to the average of corresponding weeks; but, under particular heads, namely, typhus and diarrhoea, the numbers exceed the usual amount at this season. Typhus was fatal in 67 cases last week (the average being 53); and this disease appears to be on the increase. In the Church sub-district of Bethnal-green three deaths from typhus occurred on the 11th, 12th, and 15th October, at the respective ages of 14, 16, and 23 years; the first in Cumberland-place, the second in North-street, and the third in Trafalgar-place. Mr. Briggs, the registrar, reports, that the occupiers in these localities complain of the bad state of the drains.

Scarlatina and Malaria.—Scarlatina in this return numbers 43 cases; while the corrected average of corresponding weeks is 58. Though the mortality, as collected over the whole Metropolis, is not remarkable, the complaint has fallen severely on particular families. At 3, Lower Chapman-street, in St. George-in-the-East, the daughter of a shoemaker died at the age of eight months from "exhaustion consequent on scarlatina (12 days)." This (says Mr. Chatwood) is the second child that has died in one family within nine days. The father attributes the illness

of both to noxious effluvia arising from an uncovered cesspool in the yard of the house. In Walworth, at Laurel Cottage, Hill-street, on the 9th and 13th of October, two daughters of a musician, aged respectively 18 and 3 years, died of scarlatina, the former after 21 days' illness, the latter after 14 days." Mr. Turner, the registrar, mentions that "four members of this family have died of this disease since the end of September, the first two severally on the 1st and 3rd of October. Four others have been suffering from it, but are now recovering. The family, which consisted of 12 persons, occupy a small house of four rooms." In the same sub-district, at 26, Portland-street, the son of a journeyman brass-finisher, aged 3 years, died of "scarlatina (7 days)." This is the second death in the family from the same complaint within six days, one having occurred on the 9th, and the second on the 15th October. Also in Walworth, at 7, James place, Hen-and-chicken-lane, two sons of a warehouseman, aged respectively 3 and 9 years, died, the former of "scarlatina maligna (7 days)," the latter of "scarlatina (1 month), dropsy (7 days)." Of five children in this family the two now mentioned died on the 12th and 15th October, two are convalescent, and one is in a doubtful condition. Besides the above, Mr. Turner, in this Weekly Return, reports 3 deaths from scarlatina in various streets, and adds that the disease is very prevalent throughout the whole of his district.

Small-pox.—Fifteen deaths, only one of which was that of an adult, were registered last week as caused by small-pox. Two cases, in which it is stated that vaccination had been previously performed, occurred to a child of 7 months and a man aged 80 years. With reference to a case which proved fatal in Camden-town, and in which vaccination had been performed without effect, Mr. Holl states, that two other children in the family had been successfully vaccinated and escaped the contagion. An infant is also registered this week who died of chicken-pox.

Diarrhoea, which numbers 42 deaths, continues to decline, though it is still rather more fatal than usual for this late period of the year.

Phthisis or Consumption has been rather fatal during the week, the deaths resulting from it amounting to 138. This is a greater number than in any corresponding week of seven previous years.

Miscellaneous.—Fifteen deaths are ascribed to disease of the liver, in four of which cases the fatal complaint is specified as "cirrhosis." The four persons who died of cirrhosis were females.—In Hackney, on the 15th October, the daughter of a carpenter, aged 2 years, died from "inflammation of the intestines, caused by swallowing plum and cherry stones."—At 23, Gray's-inn-lane, on 15th October, the son of a tailor, aged 2 years, died of "diarrhoea and ulcerated bowels for nine months." Mr. Holmes adds, that "this is about the worst part of Gray's-inn-lane; some of the houses are in a filthy state."—In Camberwell, at 4, Elizabeth-place, Wyndham-road, Oct. 15, the widow of a porter, aged 45 years, died of "disease of the heart and hypertrophy." Mr. Searle states, that "this is the widow of Anthony Fawcett, who, on the 30th ultimo, murdered two of his children, and afterwards committed suicide, being at the time in a state of insanity."—Registrar-General.

DEATHS in the Metropolis for the week ending Saturday, October 18, 1851.

CAUSES OF DEATH.	Oct. 18.				Sum of Ten Weeks.
	0	15	00	All Ages.	
ALL CAUSES	425	367	184	981	9058
SPECIFIED CAUSES	423	337	184	975	8997
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	158	49	22	229	2387
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	16	18	39	505
3. Tubercular Diseases.	66	128	5	199	1677
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses, ...	35	41	21	97	998
5. Diseases of the Heart and Blood-vessels	1	23	12	36	278
6. Diseases of the Lungs, and of the other Organs of Respiration ...	60	38	31	129	1140
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	12	35	21	68	626
8. Diseases of the Kidneys, &c. ...	2	9	3	14	77
9. Childbirth, Diseases of the Uterus ...	...	9	...	9	102
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	5	2	■	62
11. Diseases of the Skin, Cellular Tissue, &c. ... ..	...	■	...	2	12
12. Malformations	3	...	...	3	24
13. Premature Birth and Debility ...	27	...	...	27	182
14. Atrophy	34	1	...	35	174
15. Age ... ..	...	...	44	44	448
16. Sudden	5	2	■	11	87
17. Violence, Privation, Cold, and Intemperance	14	9	2	25	218
Causes not Specified ... ..	■	...	...	■	61

TO CORRESPONDENTS.

One of the Old School would not cavil at the general use of chloroform, if he were more cognizant of our operating tables.

Inquirer.—Report has it that the good Doctor does pray at the bedsides of his patients. A wicked wag wrote of him,—

“He has the grace, as well as face,—
Since he is no magician—
To recommend his ruined case
Unto the Great Physician.”

Mr. Jones shall hear privately from us in a few days.

A Countryman in Town forgets that the Aldersgate School is as a tale that was told. It sunk long ago to the tomb of all the Capulets. It is quite true that in its palmy days the demonstrator of anatomy had his hair curled every morning, and walked to his class under an umbrella, lest his hat should disarrange his curls! Alas, *Troja fuit!* where are they now? They, too, have fallen beneath Time's relentless hand, and a few stray and grizzly locks are all that now remain to remind us of the past care bestowed upon them.

P. C.—It is mean and cowardly in the extreme to hawk at game small as Mr. Kingdon, when nobler quarries are said to be on wing. Let our Correspondent lay before us an authenticated case, in which any physician or surgeon, however high his social station, has met a homœopath in consultation, and we, in our turn, will bring it before the Profession. No high-minded medical man can meet a quack, and least of all a homœopath. To consult with him about treatment is indeed a farce; and as for diagnosis, we refer our readers to our leading article of this day for our opinions upon that point.

THE alarming state recently produced by chloroform upon the operating-table at St. Bartholomew's Hospital did not escape us. Indeed, a report of the case was in print; but understanding that Mr. Stanley was about to deliver a clinical lecture upon the subject, we determined to delay our report until a knowledge of Mr. Stanley's views would increase its value.

M.R.C.S.—We know not whether it be orthodox to examine a lady on a bed, or heterodox to perform the same manipulation on a drawing-room sofa; but this we know, that the disgusting details of the case in question had better been confined to the parties concerned.

A Subscriber, Northampton, is referred to our Leader on the subject. Whatever be Mr. Fitzpatrick's non-qualifications, Dr. Robertson had no right to express himself as he did. The act of leaving a portion of the placenta under such circumstances, rather than injure the uterus by renewed, and, probable, fruitless attempts to remove the remaining piece, was quite right and proper. The error was, in not endeavouring to obviate the poisonous effect of a putrifying portion by frequently washing out the uterus and vagina, and thus, in some degree, to counteract the puerperal fever of which the patient died. In all probability, this of itself, and in a few hours, would have removed the piece which had been left.

[To the Editor of the Medical Times.]

SIR,—A few days ago I read in a local “paper” to which I subscribe, a letter from an itinerant lecturer on mesmerism (in reply to one which appeared in the previous Number), in which the following passage occurs:—

“Now, Sir, when such men as Sir David Brewster, Dr. Simpson, Professor Forbes, Professor Bennett, and Professor Goodsir, veterans in science, and universally acknowledged to be most careful and cautious experimental philosophers,—when such profound experimenters as these attest the reality of clairvoyance, is it too much to expect this learned scribe to suspend his sneers, and allow ordinary mortals to attach some weight to the evidence of their senses?”

I shall feel greatly obliged by your informing me in your “Answers to Correspondents,” if the assertion here made is true, or whether any, or how many, and which of the owners of the influential names here paraded so publicly are in favour of the truth of this class of mesmeric phenomena. If, as I suspect, the statement is wholly or in part false, I shall be glad to be able to contradict it, and thus counteract any false impressions it may have made on the minds of the public. A reply to my initials, W. C. G., will much oblige.

[We believe we may safely assert, that in the cases at least of Professors Simpson and Bennett, the above charge is not only false, but must be known by its author to be so; inasmuch as these gentlemen, when they have made any declaration on the subject, have always most pointedly repudiated clairvoyance. In regard to the others, we are not able to speak from personal knowledge: and we believe that Sir David Brewster may even have given occasion to the report. The probability is, that the falsehoods stated of Professors Simpson and Bennett are repeated in the cases of Professors Forbes and Goodsir.

A Subscriber for the Last Seven Years, Brighton, has been deceived by his agent. He had better apply direct to the printers.

It is our intention to publish a list of the members of the Profession who received prizes at the Great Exhibition.

J. W. T.—Most willingly.

[To the Editor of the Medical Times.]

SIR,—“Accidental hæmorrhage,” or that arising from the separation of a part of the placenta from the fundus or side of the uterus, in consequence of a blow, or violent emotion of the mind, or from spasm of the body, is doubtless as unavoidable in the individual cases we have to treat, as the “un-

avoidable hæmorrhage” from placenta prævia: but in the one, the “accident” must happen first; in the other, the hæmorrhage must inevitably take place. Therefore the one is conveniently called “accidental”—the other, “unavoidable.”
I am, &c.
ANON.

Inquirer.—We have prepared a Review of Dr. Ransford's “Reasons for Embracing Homœopathy.”

[To the Editor of the Medical Times.]

SIR,—With regard to the rights and privileges of the Medical Profession, I believe no one has made a more noble stand than yourself; but I think you, even, have not gone so far as needful; and, allow me to add, that this is the opinion of several eminent medical men of my connexion.

Now, these gentlemen and myself are ever anxious that the “Medical Times” should be what its title implies: that it should contain the true feelings of the mass of practitioners; and, as it is impossible that you should be able to see everything, and as we are convinced you are always ready to listen to the voice of the Profession, we have addressed this appeal to you.

You spoke out about the Pharmacy Bill, and no doubt will speak again;—we are not yet out of danger from it. Let the Profession know this, and they will all be willing to withstand to the back-bone this monstrous innovation upon their rights and privileges. Do not permit it to rest here, and we shall have cause to hold your name in grateful remembrance.

I hear whispers “That a College of Dentistry will ere long be established in this Metropolis.” Sir, permit it not. Such an institution would be detrimental to the interests of our noble profession. Dentistry is certainly a part of the healing-art,—it comes within the domain of surgery, and, as such, none but “members of the Royal College of Surgeons” should be allowed to practise that part of our Profession.

Take your stand, here, Sir. If we are to have a separate profession for dentistry, why not for ophthalmic medicine and surgery? Nay, more! We may as well have a College whose diploma shall allow the possessor to amputate, and another to extract tumours; we may as well have fever-physicians and brain-physicians,—and thus become mixed with, and not distinguished from, leg-doctors, and all other quacks by whom we are pestered. Sir, to establish such an institution as a “College of Dentistry,” will be the first step to overturn the “rights and privileges of the Medical Profession.”

With regard to quackery, too,—you, Sir, have done much, and we hope you will do much more. Expose, Sir, every connivance with it, till homœopath, mesmerist, hydropath, coffinite, and every other system of quackery and deceit shall recoil and die at your penetrating glance.

We are ready to acknowledge that the “New Series of the Medical Times” is decidedly an improved one, but have a few suggestions which we wish to communicate. First, with regard to reviews. This is a very important part of a medical journal, and requires much labour expended upon it. We think this department of the “Medical Times” is well conducted, and meets with the sympathies of your brethren; but it is well known that many books issue from the press which ought to be discountenanced by the Profession. It is usual to treat these productions with contempt; but we think good would ensue if you were to condemn them at once, and warn us to avoid the bad, as well as to keep company with the good. The last book you disapproved of was Tilt's late work, which truly deserved condemnation. We hope you will take up the subject, and condemn a few more.

New inventions claim a more prominent part than you allow them; but lately we have had many in connexion with your admirable series of Exhibition notices. And let me say, that the “Medical Times” is too good to throw away, and is well worth binding; but, then, who wishes to see in a bound volume, constituted of such beautiful papers as those in the “Medical Times,” interspersed with “Notices to Correspondents,”—the greater part of which are uninteresting except to one person. But we do not wish you to cease to give your Answers to Correspondents; but we think you might manage to place these upon the cover, so that they need not be bound up with the volume, and those parts which would be interesting to all, you might insert in some other way. Besides, there is frequently a whole page of advertisements, which must be bound up in your volume, and which thus tends to disfigure it. The space that is now generally devoted to Correspondents, might be advantageously occupied with new inventions, or anything else of general interest to the Profession, and you would not then be so pressed for space. One page of the cover might be appropriated to Notices to Correspondents, and the rest to advertisements, and would not be bound up with the volume. If you need room for advertisements, you can put a double or even treble, or more cover; for as this part would not be bound, it would not affect subscribers, and the advertisements would surely pay for a sheet of paper additional. It is hardly fair to make subscribers pay for what is of no use.

Finally, Sir, we hope you will still continue to receive that steady support which you do, and deservedly. No journal can compare with the “Medical Times” in point of richness of original communications; in point of accuracy in reports of the London practice of medicine and surgery; in point of accuracy and beauty of type; or in point of the genuine advice or encouragement of its editorial articles.

It is with these thoughts that we have penned these lines, hoping thereby to improve that which we love, and which is ours; for the “Medical Times” does not belong to a monopoly, nor is it governed by the doggishness of one man; but the “Medical Times” belongs to the Profession. We cannot do without it, therefore it ought to contain our united opinions, and be indeed the “Medical Times.”

With these views we request you to publish this letter, as it is not the opinion of one person, but of a Society.—I am, &c.,

SECRETARY TO THE MEDICAL M. I. S. SOCIETY,
TOWER HAMLETS.

COMMUNICATIONS have been received from—

MR. GARRETT, of New-road, St. George's East; DR. RODEN, of Kidderminster; E. H.; MR. HAYES, of Birmingham; DR. LIGHTFOOT, of Great Ormond-street; DR. CAMPBELL, of the Aberdeen Lunatic Asylum; A CONSTANT READER; A WELL-WISHER; A SUBSCRIBER, Northampton; ONE OF THE OLD SCHOOL; A FELLOW OF THE EDINBURGH COLLEGE OF PHYSICIANS; P. C.; M.R.C.S.; MR. ROBERTSON, of Union-place, New Kent-road; MR. WALDRON BRADLEY, of Martley, near Worcester; DR. WATSON, of Glasgow; INQUIRER; A COUNTRYMAN IN TOWN; MR. J. B. HAYES, of Birmingham; A SUBSCRIBER FOR THE LAST SEVEN YEARS; W. C. G.; ANON; EDITORS OF THE MEDICAL DIRECTORY; J. W. T. INQUIRER.

ORIGINAL LECTURES.

LECTURES ON HISTOLOGY.

DELIVERED AT THE

ROYAL COLLEGE OF SURGEONS, LONDON.

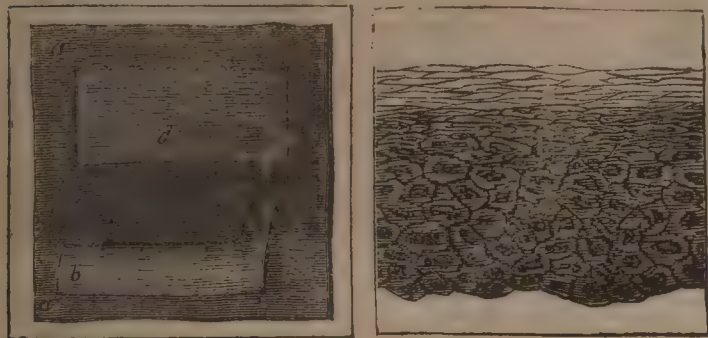
By J. T. QUEKETT, Esq.,

Assistant-Conservator of the Hunterian Museum.

(Continued from page 141.)

I NEXT come to speak of the pigment developed in the skin, and must first state, that, until the last few years, a coloured layer, distinct from that of the cuticle, and termed *rete mucosum*, was supposed to exist in the skin of the negro; a similar layer was subsequently found in the skin of the white man, but was devoid of colour. I here show you two preparations by Hunter; the one, the skin of a negro, as represented by *a*, in *Fig. 66 A*, in which, in addition to the cuticle *b*, the black layer, *c*, termed *rete mucosum*, is shown; while in the other, which is called the skin of a European, a similar layer, but unstained with pigment, is turned down; these layers, however, are nothing more than the last formed portions of the cuticle.

A Fig. 66 B



I next send round a vertical section of the skin of a negro, *Fig. 66 B*, in which you will find, that not only the cells but the pigment is most abundant in the deepest layer, and, as you ascend towards the free surface, the pigment decreases in quantity, and the cells become flattened into the form of scales, in which the pigment is absent. The next specimen is the under surface of a portion of the cuticle of a negro, which has been dried prior to its being mounted in Canada balsam; you will see that the cells containing the pigment are of a more or less hexagonal figure. In another specimen from the same skin, which I now send round, *Fig. 67 A*, you will have a better opportunity of noticing the disposition of the cells. The preparation is mounted in fluid; and you may notice, that the general surface is pitted, and that the greater part of the pigment-cells are arranged around the pits, into which the papillæ of the true skin fit, and many pigment-cells are situated at the bottom. I next show you a vertical section of the skin of a woman of middle age, *Fig. 67 B*, in which you may discern a stratum of black pigment in the lowest portion of the cuticle, but the upper part of the same is quite white. The specimen is interesting in another point of view, as in the cuticle you will observe numerous hairs, each having sebaceous follicles on either side, and in the centre of the field you may notice one follicle enormously dilated, and a quantity of granular matter has escaped from it; this is a good example of one of the forms of the disease termed *acne*, which consists essentially of an enlargement and suppuration of the sebaceous follicles. The colour of the hair depends entirely upon the pigment developed in the cuticle; and it is a well-known fact, that in those animals, as the pig, in which you have occasional patches of black hair, the skin from which such hairs grow is also black; so, in the Albino, the hairs are white, because no pigment is secreted.

[No. 631.—VOL. III., NEW SERIES.]

A Fig. 67 B



Pigment is developed in peculiar situations under certain circumstances, as around the nipple during pregnancy, and in certain spots on the face, termed freckles, after exposure to a summer's sun; in both these instances the colouring matter will disappear on the removal of the exciting cause. Pigment is also secreted by the cuttle fishes in a special gland, termed the ink-bag, and such pigment is used largely by the artist, under the name of *sepia*; it is also secreted in cells in certain states of disease, termed *melanosis*,—a fine specimen of which in both ovaries of a female is now before you. In this lung of a calf, you may notice a lobule here, and there quite black, whilst all the others are perfectly white. I show you a section of one of these black lobules, and you will see that the pigmental matter is deposited in the form of irregular granules in the parenchyma of the lung, and such lobules would no doubt contain nearly as much air as the whiter ones.

There are some particular instances in which pigment is secreted in large quantities in various parts of the human face. I here show you a drawing of a remarkable case occurring in a young woman; this was described by Mr. Teevan, in the "Transactions of the Medico-Chirurgical Society," for 1844.

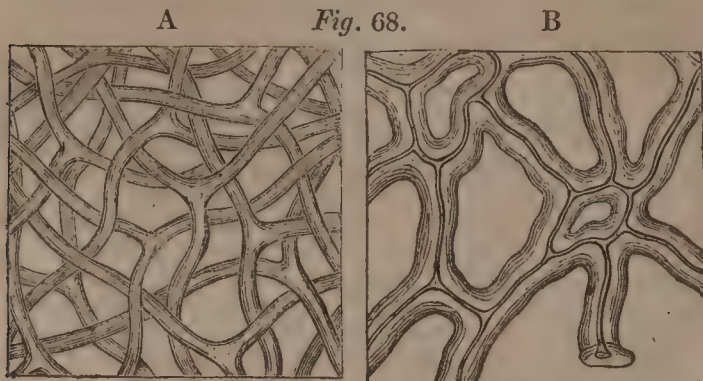
I possess some pigment given me by Mr. Squire, the distinguished chemist in Oxford-street, which used to appear under the right eye of a young female, and was capable of being brushed off with a camel's hair-pencil; it is contained within cells like those of epithelium, and consists of granules. Mr. Squire tried various experiments upon it, and found that he could not remove the colour either by the strongest acids or by chlorine.

Having now described the principal forms of true cellular tissue existing in animals, I next pass on to consider the mode in which inorganic material is deposited so as to form what is usually termed the skeleton. I have already spoken of the earthy or inorganic element of bone, so that this will not be included in the present category. As we proceed, we shall find that, in the majority of instances, the material is developed and is still contained within the interior of cells, and that every part, however solid, has an organic basis. We will begin our examination with the vegetable kingdom, and again bring before your notice one or two examples of the mode in which earthy matter exists in plants; and it will be found that there are two states, one in which crystals, termed *raphides*, occur in the interior of cells; these have no connexion with the vegetable tissue itself, but are nothing more than ordinary crystals produced principally by the combination of lime with some of the vegetable acids contained in the interior of cells; and, as I have before stated to you, they may be produced artificially. The other mode in which earthy matter exists in plants is in direct union with the vegetable tissue in the case of grasses and canes, as before shown. Silica is intimately blended with every part of the investing cuticle, and sometimes with cells and vessels more deeply seated. I show you, in the first place, a portion of one of the layers of an onion, in every cell of which either a single octohedral crystal of oxalate of lime, or a stellate mass of the same, may be seen; these can be isolated from the vegetable matter by maceration, and by chemical examination may be shown to differ in no respect from similar crystals obtained from the urine.

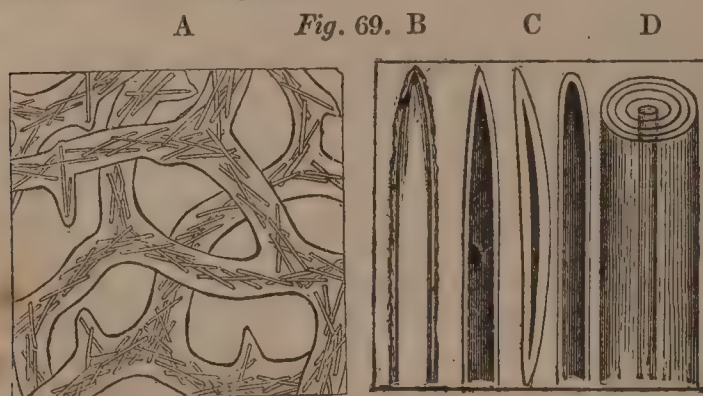
I next send round a portion of the cuticle of the under side of the leaf of *Deutzia scabra*, which has been boiled and macerated in nitric acid for some time, to remove all trace of organic material; you will notice, however, that, not only are the cells of the cuticle quite distinctly seen, but the hair and even spiral vessels are as perfect as in an ordinary specimen, and although it is nothing but a mass of silica,

yet the perfect shape of the most minute structure is retained. The silica, therefore, is intimately combined with the vegetable tissue.

I shall now commence an examination of the lowest forms of animal life, and show you that the hard calcareous or siliceous element of their skeletons is developed within cells, and still retains organic matter as its basis. I shall begin with the sponges; and the first specimen shown you will be a portion of the horny skeleton of Turkey sponge of the best kind; it consists, as shown in *Fig. 68 A*, of branched filaments, which, in some species, are solid; in others, as in those of the genus *Verongia*, *Fig. 68 B*, are hollow; and one is forcibly reminded of their resemblance to the filamentous tissue of the *Boleti*, a specimen of which has already been shown you; and no doubt these fibres, as those in the *Boleti*, were originally cells.

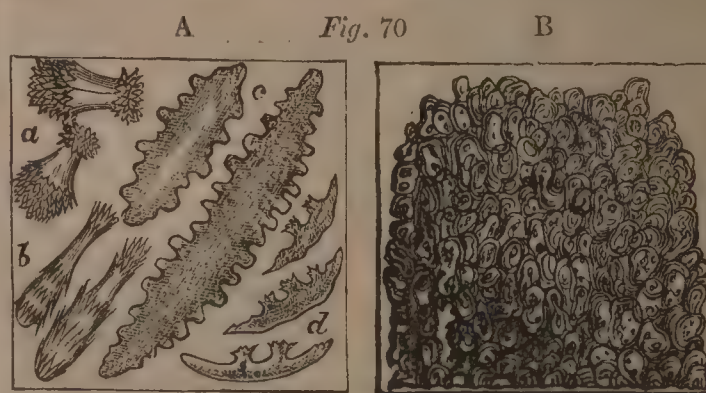


I now send round another portion of horny sponge, in which numerous elongated siliceous bodies, termed spicula, as shown in *Fig. 69 A*, may be observed; these are not of a crystalline nature, like raphides, but always more or less cylindrical, and are made up of concentric laminæ; they contain a central cavity, as shown in *Fig. 69 D*, and are of an endless variety of shapes, some being characteristic of different species and genera. I cannot show you that they have an organic basis by dissolving away the silica, as then all trace of animal matter disappears; but if a portion of sponge containing large spicula be heated red hot in the flame of a blow-pipe, it will often happen that the organic matter will be carbonised, and therefore readily seen on the exterior, as at *B*, and in the interior of the spicula, as shown at *C*. We have, however, a genus of sponges termed *Grantia*, after their discoverer Dr. Grant, in which calcareous spicula are found; these may readily be decalcified, and an organic basis will remain, retaining, to a certain extent, the tri-radiate form of the spicula.

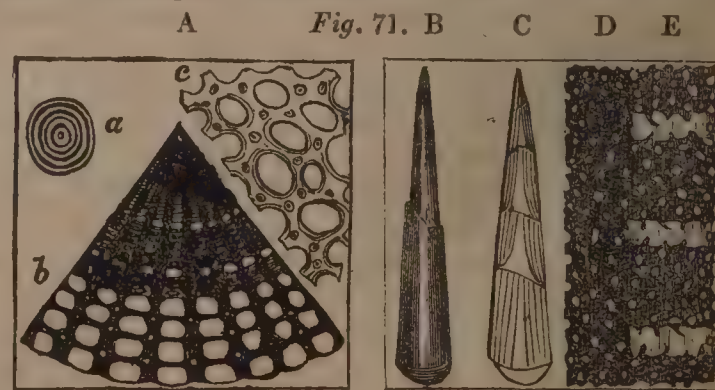


We next pass on to the Infusoria, of which all the *Diatomacæ*, as before stated, possess a siliceous skeleton; if, when in a recent state they be boiled in acid, a perfect cast of their minutest configurations may be observed. In the next class, viz., Zoophytes, we have not only an abundance of material for examination, but we have in them the most favourable opportunities of displaying the organic structure. In the *Gorgoniadæ* we have either a central, horny, or calcareous stem, surrounded by a fleshy matter, containing polypi, and an abundance of carbonate of lime; we have also, as in the specimen of Sea Pen I now send round, spicula of carbonate of lime more than half an inch in length, which project, as you may see, in the form of spines from the outer surface. I show you a specimen of these spicula which have been separated from the fleshy matter by boiling in caustic potash; they are of many forms, as represented by *a, b, c, d*, in *Fig. 70 A*, and most of them are of a beautiful crim-

son colour. If I take some of the same spicula, and treat them with a minute portion of dilute hydrochloric acid, you will see in the specimen I now send round that the calcareous matter is being removed, but an organic basis, retaining to a certain extent the shape of the spicula, and in some cases the colouring material also, still remain. If I were to take one of the spicula from the Sea Pen the same thing would be observed on a larger scale. The animal basis of Zoophytes, as you will see by the specimens from the Museum I now pass round, was well known to Hunter, but more especially to the late Mr. Hatchett, who prepared and described many of these specimens before you, in his paper on Shell and Bone, in the *Philosophical Transactions*. The masses of coral now on the table, when treated with acid, exhibit most clearly an organic basis, which in some cases, as shown in *Fig. 70 B*, is in the form of cells, but more frequently in that of thin flakes, which are readily carried away by the bubbles of gas, and there is often a difficulty in getting a good view of them. Most persons imagine that the large masses of coral which form reefs of hundreds of miles in extent in some of the tropical regions, are built up by the polyps which belong to the coral; such, however, is not the case, for some considerable portion of the coral is formed, and even the cells for the polyps before the polyps themselves are developed, thus proving that coral, as will presently be shown in the case of shell, is distinctly a cellular formation.

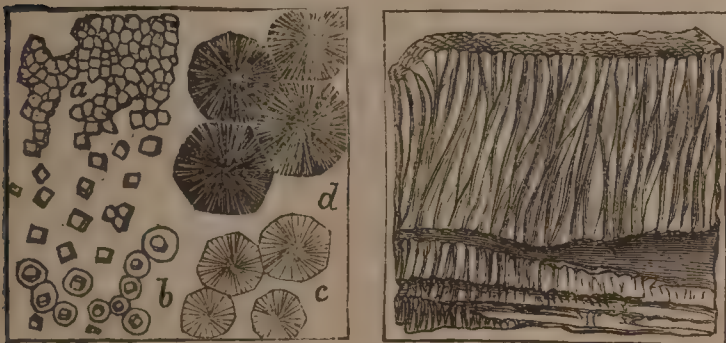


The same may be said of the calcareous spines and shells of the Echinodermata; all, as represented by *a, b*, and *c*, in *Fig. 71 A*, can be distinctly shown, to be made up of cells, and we have a very remarkable instance of the life of the spines of Echini, in the power which they possess of reparation after injury. It not unfrequently happens that the spines are broken across, most probably by the bite of some fish or crustacean; in a short time the fractured extremity has a considerable amount of new matter added to it, which differs slightly in structure from the original spine, so that in a section the line of fracture can be distinctly seen. In the remarkable specimen, represented by *B*, and in section by *C* in *Fig. 71*, there are indications of no less than three fractures, each of which has been repaired. A section through one of the lines of fracture is shown at *D E*; the portion of the old spine is represented by *E*, and the new material by *D*. It is certain that the spines have no vascular connexion with the shell, they being articulated to tubercles on it, and kept in place by strong ligaments; the powers of reparation, therefore, must be inherent in the organic basis of the spine itself. If a portion of the spine be decalcified, the cells will be plainly seen, and in those of the genus *Cidaris*, the outer margin or crust is traversed by cells which are elongated into tubes.



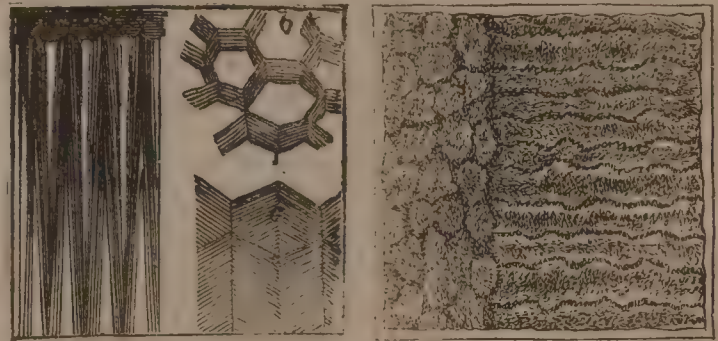
In the shells of mollusca, the cellular structure and

the organic basis are most clearly shown. I now take a thin lamina of the shell of a pinna, and, after dividing it in halves, I will send round one portion in its natural state, and the other I will submit to the action of acid, and you will see that the one specimen can hardly be distinguished from the other. The cells are of hexagonal figure, and in many pinnæ not unfrequently exhibit nuclei; a similar cellular structure is also found in oysters, but the cells are, generally speaking, not so regular. It often happens, however, in these shells, that portions of a brown horny membrane are found between some of the laminæ; these appear to be parts of the shell imperfectly formed. When a thin portion is examined microscopically, as in the specimen I now send round, it will be found to exhibit little or nothing else than a multitude of minute nearly equal-sized rhombohedral crystals of carbonate of lime, as shown at *a*, in *Fig. 72 A*. If I decalcify a portion of this layer, I shall find that each crystal is surrounded by a cell-wall, in some cases of a circular figure, as at *b*, in others somewhat like the crystals in shape; and it would appear that the power of crystallization had in this layer overcome that of the vital or modelling power of the cell. Most of the bivalve shells, as in the case of the pinna and the oyster, consist of two kinds of structure, the outer coating being composed of layers of cells superimposed so as to form prisms, and the inner one of a dense, shiny material, also developed from cells, which is termed nacre; this very soon loses its cellular character in most shells, but there are others in which true cells are retained throughout life. The term "prismatic structure" has been applied to the first kind, and that of "nacreous" to the last. I now show you a vertical section of the shell of a pearl oyster, *Fig. 72 B*, the dark-coloured outerlayer is the prismatic; the inner, or almost structureless, is the nacreous; the former exhibits transverse striæ; these are the indications of the layers of cells of which the prisms are built up. Some of the prisms are shown more highly magnified at *a*, in *Fig. 73 A*, and at *b*, *c*, the transverse markings, indicating the cell-walls, are plainly exhibited.

A *Fig. 72.* B

I will now show you a vertical section of a pinna shell, which has been decalcified, and you will notice that, in some parts, the layers of cells are separated from each other, and, in one spot in the centre, one of these layers is so bent that its flat surface may be seen. You will then observe, that the cells are hexagonal, and that they adhere more firmly to each other in the horizontal than they do in the vertical direction. The prismatic layer is invested externally by a membranous structure, termed periostracum, which performs an analogous function to that of the periosteum of bone. In the specimen I now send round, which is a portion of the periostracum of a species of *Trigonia*, you will notice not only a beautiful series of hexagonal cells, but that most of them have a delicate transparent nucleus in the centre. The periostracum nourishes the outer portion of the shell; and it is in the thin portion of it, on the edge of the shell, that new cells are formed prior to their development into prisms. In some shells, more especially in the tooth of *Mya arenaria*, as represented by *c d* in *Fig. 72 A*, we not unfrequently obtain other examples in which the power of crystallization has been stronger than that of the modelling power of the cell-wall, for we find that the cells forming the prisms of the tooth, instead of depositing the calcareous matter in a homogeneous form, exhibit a series of crystals arranged in a radiating manner. In most of the univalve shells, all trace of cells and prisms are speedily lost by the coalescence of the cell-walls, and you will recollect, that I have frequently mentioned this subject before, when speaking of the cellular

tissues in plants and animals; that in the former class the cell-wall rarely, if ever, disappears; but that in the latter it most frequently does so; in shell, however, it appears that we have a transition stage; and examples are very frequent, as shown in *Fig. 73 B*, in which we have at one end perfect cells, and at the other a portion of the wall absorbed, whereby long laminæ are formed; it is to these laminæ that all the iridescent colours of nacre are due.

A *Fig. 73.* B

I have now given you an abundance of examples to prove that all these forms of calcareous matter, whether Gorgonias, Corals, Echinoderms, or Mollusca, are not masses of inorganic material, but that each has an organic basis essentially cellular, and within the cells of which the inorganic material is secreted and deposited; and I have, moreover, shown you examples in which it would appear, that the power of crystallization had overcome the vital or modelling power of the cell-wall. Other points in proof of the life of the cell will be brought forward in my next lecture.

ORIGINAL COMMUNICATIONS.

ON THE PATHOLOGY OF THE UTERUS;
ITS ANATOMY AND PHYSIOLOGY.

By T. SNOW BECK, M.D. Lond., F.R.S.,
Fellow of the Royal College of Surgeons of England,
Physician to the Farringdon General Dispensary and Lying-in Charity.

[Continued from page 380.]

THE EXISTENCE OF ULCERATION AS A
COMMON DISEASE.—(Continued.)

THE confidence expressed by Dr. Bennet, as to the existence of inflammatory ulceration of the neck of the uterus in the virgin female is increased, if that were possible, when speaking of the presence of ulceration as an exceedingly common disease in women who have borne children; launching against preceding writers charges of "the grossest disregard to every-day experience, and of the laws of pathology."—P. 155. To whom this charge is really applicable may appear in the sequel. The description of the appearances termed ulceration, is too long to permit it to be quoted entire, and hence arises the necessity of selecting those parts which will, I expect, convey the correct meaning of the author. These have been divided into paragraphs, for the convenience of reference.

(1.) "When the mucous membrane which covers the cervix is inflamed, it ceases to present to the touch the unctuous surface which characterises it in health; at the same time the entire cervix becomes tumefied and enlarged, but remains soft, the swelling being merely that of congestion. If the inflammation extends to the deep-seated structures, or if it commences there, the cervix is more or less indurated, as well as enlarged. Brought into view by the speculum, its surface is found to offer a vivid red tinge, instead of the pale rosy colour of health. On the inflamed surface we find a certain amount of muco-pus. The presence of this muco-pus is very important in a semeiological point of view, as both redness and tumefaction of the cervix may be produced by mere congestion, especially if it is carried to a morbid extent."

(2.) "When inflammation attacks the cavity of the cervix, important modifications take place, both in the os uteri and cervical canal; it expands, becoming more or less open, as

does also its external orifice, the os uteri, the lips of which are everted. The fact is certain; a more or less patent state of the os and cavity of the cervix uteri is the invariable concomitant of inflammation. This anatomical change is invaluable in a semeiological point of view. Should the inflammation of the cervical mucous membrane extend to, or exist simultaneously in the cavity of the uterus, the dilatation becomes complete throughout; the natural resistance of the os internum is no longer met with, and the sound passes freely into the uterine cavity. The mucous membrane that lines the cavity presents a dark livid-red hue, which may be traced with the eye to a considerable depth. This surface bleeds easily on being touched with the probe, especially if excoriated or ulcerated, which is not the case in the healthy condition. (It) also secretes muco-pus in more or less abundance; and this muco-pus filling up the cavity, can often with difficulty be wiped away. Even when there is no pus present, the cavity of the cervix is often completely filled with glairy, transparent mucus, evidently secreted by the mucous follicles of the inflamed lining membrane. The presence of large quantities of this glairy mucus, along with an open state of the os uteri, may be considered pathognomonic of inflammation of the cavity of the cervix. The existence of inflammation, in the great majority of instances, is soon followed by the manifestation of the ulcerative process. Ulceration generally appears first round the os, and just within the cavity of the cervix; sometimes it extends, more or less, both inwards and outwards over the cervix. When an abrasion or excoriation only is present, the cervix is generally of a livid red, and these granulations are often so minute, that it is at first difficult to ascertain whether the mucous membrane is abraded or merely congested, or to perceive the limit of the ulceration when once it has been ascertained to exist. The doubt, however, may be solved by lightly touching the suspected surface with the nitrate of silver. The abrasion immediately assumes a much whiter hue than the region which is merely congested. In its more decided form, ulceration of the cervix uteri is susceptible of presenting every possible variety. Owing to the nearly invariable existence of the ulceration around and inside the os uteri, the germ of the latter is always considerably modified. The lips of the os swelling, enlarging, and expanding, the orifice of the cervical cavity opens; this opening of the os uteri being much more considerable when ulceration is present than when inflammation alone exists. In slight cases, the end of the finger only passes between the patulous lips of the os uteri. In more decided and more chronic disease, half or more of the first phalange of one, two, or three fingers will enter its cavity. This is more especially the case when the lips of the os uteri are very much hypertrophied and indurated."

(3.) "The secretion from the ulcerated surface, whatever its seat, is necessarily purulent. It may be secreted scantily or in abundance. It may be mixed with a good deal of mucus, or remain uncombined. The thick, tenacious, ropy, transparent, white of egg mucus, seems scarcely ever to take place in any quantity, unless inflammation be present in the interior of the cervix. The vaginal discharge is not unfrequently tinged with blood."

"Inflammatory ulceration is generally followed, in the course of time, by important changes in the structure, size, and form of the organ,—the cervix becoming larger, but at the same time remaining soft and elastic. I have repeatedly found the cervix enlarged, swollen, and congested, but perfectly soft, after years of disease, especially when the disease has been limited to the cavity of the cervix, or to the immediate vicinity of the os,—the size of the uterine neck thus affected varying from that of a small walnut to that of a man's fist. The induration and hypertrophy are generally confined to the cervix; but sometimes they pass on to the body of the uterus, then, obviously, also the seat of inflammation.—P. 97—111.)

Pains in the "lumbo-sacral, ovarian, and lower hypogastric region," disordered menstruation, and various sympathetic symptoms are also given; yet, "extensive inflammatory and ulcerative disease of the cervix may indeed be present for years without giving rise to pain, or to any well-marked local symptom; the only evidence of its existence, especially to a superficial observer, being functional derangement of the uterus and general sympathetic reactions."—P. 123.

(1.) In the first groupe, the signs of inflammation are

detailed with tolerable correctness, yet there are objections to, and serious omissions in, the enumeration of the signs. (a) It appears a practical as well as a pathological error to include inflammation of the mucous membrane, and inflammation of the substance of the neck of the uterus under the same description. They are not only pathologically distinct, but they are clinically different; the symptoms and treatment of the two not being alike. For instance, inflammation of the proper substance of the uterus may exist and induce serious constitutional symptoms, without being accompanied by any discharge; whilst inflammation of the mucous membrane may be present, and be attended with considerable vaginal discharge, but with little constitutional disturbance. The presence of muco-pus, which is said to be very important in a semeiological point of view, is but the evidence of inflammation, and, it may be, trifling inflammation of the mucous membrane; whilst redness and tumefaction of the cervix may be the signs of inflammation of the substance, and not mere congestion. I will not enter into the difference in the treatment, as that will be considered hereafter. (b) The omissions are important. No mention is made of tenderness, nor of heat of the part; nor is it noticed that the arteries are felt to pulsate with much increased force and fullness, when "the deep seated structures" are involved. These signs, which invariably accompany inflammation, are local signs of as much importance in inflammations of the uterine organs, as of any other part of the body; yet all mention of them is omitted.

(2.) In the second groupe, the modifications in the orifice and cervical canal, by which they expand, are considered as the invariable concomitants of inflammation, and as invaluable in a semeiological point of view. Speaking of these changes, Dr. Bennet says: "It is difficult to account satisfactorily for the change which inflammation thus produces in the cervical cavity of the uterus. It may be owing to paralysis of the submucous muscular fibres which encircle it, induced by the inflammation of the adjacent mucous membrane; or it may be the result of inflammatory distension of the submucous cellular tissue."—P. 98. Neither of these hypotheses, however, will explain the supposed change. Suppose we admit, for the sake of argument, the first proposition to be correct, that the inflammation of the mucous membrane paralyzes the submucous muscular fibres,—How is this to produce distension? The submucous fibres are not the only muscular fibres in the organ, and, if they should be paralysed, the other fibres are not, and would resist, according to this hypothesis, the opening of the orifice and canal. Where, again, is the distending force to come from? Is a paralysed fibre to exert a distending force, and overcome muscular fibres which are not paralysed? Not only is this untenable, but the whole explanation rests upon a fabulous basis. Although it is not expressed, yet it is distinctly implied, that the orifice and cervical canal are kept closed by the active contraction of the muscular fibres, and that, when these are paralysed, the orifice, by some unexplained force, opens. The whole of this is not only without the slightest foundation, but is actually opposed to all our knowledge on the subject. The same theoretical explanation of supposed phenomena, and the same disregard to observed facts, has led this author to the fabulous assumption of the existence of an internal sphincter at the internal orifice of the uterus, and which has been already refuted. The second hypothesis, that the open condition may be the result of inflammatory distension of the submucous cellular tissue, is not more tenable than the first. Suppose the submucous cellular tissue to become distended; it would occupy that part where least resistance is met with, *i.e.*, the cavity of the canal and orifice, and, after filling these, it then might force asunder the walls of the organ. But this would produce occlusion of the orifice, not the open condition described.

That the open condition of the orifice of the uterus is frequently met with in practice, no one who has seen much of uterine disease can deny. But it is a serious error to state, as is here done, that it is produced by, or is a sign of inflammation of this organ. So far as I am aware, it is never met with except in women who have been pregnant, or when changes similar to those of impregnation have been produced in the uterus by the presence of polypi, etc.; or where carcinoma or other heterologous deposit occurs in the substance of the organ. But in all these cases, the open condition of the orifice is produced by an actual increase of substance in the walls of the cervical canal. There is no

doubt of the fact, and I have seen many cases with this open condition of the orifice, which was accompanied with low inflammation of the organ; but in these cases the orifice and cervical canal remained open, so as to admit more than one finger into the cervical cavity, after the cure of the inflammation, and after all morbid symptoms had passed away; and hence, I feel justified in concluding, that the inflammation was not the cause of the open condition. Furthermore, I have many times met with this state after a perfectly healthy parturition, where no symptom of inflammatory action had existed from first to last: the examination being made, as exceptional cases, to test the accuracy of the statements upon this point. And I have met with the same condition of the organ in examining the bodies of patients who died from acute disease, and who never complained of uterine symptoms during their life-time. In these cases, after carefully examining the uterus, I could not discover any morbid sign which indicated previous inflammation; no effusion of lymph, no exudation corpuscles, nor pus corpuscles, or other product of inflammatory action. There was simply an enlargement of the muscular substance of the organ, which held a medium state of development between the unimpregnated uterus and the uterus at the full period of pregnancy. From these facts, I feel justified in concluding, that the open condition of the orifice is not caused by inflammation, and that those who take this as the "pathognomonic" sign of inflammatory action or of ulceration, commit a radical and serious error. The condition of the uterus, which causes the open orifice, might, with great propriety, be called an hypertrophy of the organ, seeing that when present in the diseases which are not organic, it consists of an enlargement of the natural tissue, without any new deposit. But this would not convey the *rationale* of the actions which have, in the great majority of instances, led to the enlargement. By hypertrophy I understand the gradual enlargement of an organ, beginning from its natural size; but here the enlargement is caused by an arrest of the absorption, which, in a healthy state, takes place after parturition, and reduces the uterus to the normal size. For this reason, I have preferred the designation "deficient absorption after parturition," to that of hypertrophy; although, when the actual anatomical condition of the organ is considered, both these terms have the same signification.

The correct pathology, then, of this organ leads to a ready and satisfactory explanation of the open state of the orifice frequently met with; but it also shows the singular fallacy of the statements which have been made as to the frequent existence of ulceration, of which this condition is taken as the pathognomonic sign. When the proper tissue of the uterus becomes increased in size, either by the natural enlargement of the muscular substance, or by the deposition of any heterologous deposit, the uterus acquires more the character of a hollow organ, and the internal cavities become enlarged. With the enlargement of the muscular substance, the orifice remains open; yet this condition is compatible with robust health of the individual, and does not require medical interference. However, this state, which permits of a larger circulation of blood in the organ than in the healthy condition, renders the substance of the uterus liable to attacks of a slow, or congestive inflammation, and which is apparently perpetuated by the recurrence of the catamenia. Here, the signs of inflammation are superadded to those of simple enlargement; and the walls of the organ become more tense and firm, and, as a natural consequence, the internal cavities are slightly enlarged, whilst the glands situated between the arbor vitæ, when implicated in the inflammation, throw out an increase of their natural secretion, in the form of a tenacious white-of-egg mucus. The implication of the glands, however, is far from being the rule; yet, when it does occur, then the open condition of the orifice, with the lips firm and elastic, and the secretion of much white-of-egg mucus, are evidences of a very troublesome affection; but there cannot be a greater fallacy than to say they are "pathognomonic" of ulceration; or that the disease requires the treatment recommended for ulceration. An affection of these glands themselves, by which they are swollen and distended, with increased secretion, will produce a very similar condition of the parts, yet form a very dissimilar disease.

In the affection, such as I have described, the mucous membrane often "presents a dark livid-red hue," from congestion, which "bleeds easily on being touched," and on the surface of which an abrasion or excoriation is not un-

frequently found. But the irrationality of laying any stress upon these secondary conditions, while the primary disease is overlooked, is too obvious to require further notice. Yet it is upon this foundation that the late morbid hunting after ulceration is based. "The assertion that this ulceration is generally a secondary affection, is evidently an error," says Dr. Bennet; whilst he further states, that he has frequently seen cases where ulceration was at first the only lesion, and where he has watched the gradual manifestation of deep-seated induration under the influence of this ulcerative disease. According to this pathology, the destruction of the ulceration, which occasions and keeps up chronic metritis, is essential before the disease can be cured. And from these views being adopted, I have known a female examined with the speculum five weeks after a perfectly healthy parturition at the full period, and in whom this enlarged state of the uterus remained. Here the dark-coloured and congested tissues were declared to be "extensive ulceration;" the nitrate of silver was freely applied, and followed by alarming hæmorrhage. I want words to characterise with sufficient force the absurdity of these statements, and the impropriety of this treatment, and yet to keep the condemnation within the due limits of a scientific discussion.

(3.) In the third groupe, the secretions described are the result of congestion or of congestive inflammation, but are by no means evidences of ulceration. The purulent fluid, as a vaginal discharge, upon which so much stress is laid, is the produce of the vagina; for whenever pus is secreted by the uterus, it is formed in too small a quantity to escape externally and constitute a discharge. The "important changes in the structure, size, and form of the organ," said to follow inflammatory ulceration, are, no doubt, descriptions of morbid appearances which occur. But, certainly, they are not produced by inflammatory ulceration, as the phrase would lead one to infer; nor does ulceration, in the majority of cases, attend these morbid states. It is unnecessary to go over the subject again; but I may remark, that, while ulceration occasionally exists as the consequence of previous morbid conditions of the uterus, to attribute to this ulcerative disease the importance which has been attached to it, is but to indulge in a singular chimera. The pains and general symptoms described are not peculiar to any uterine affection; but the statement, that, "extensive inflammatory and ulcerative disease of the cervix may, indeed, be present for years without giving rise to pain, or to any well-marked local symptom, — the only evidence of its existence, especially to a superficial observer, being functional derangement of the uterus and general sympathetic reactions," is too contrary to clinical observation to be passed over in silence. It would be impossible to explain the error of this remark, did we not know that Dr. Bennet appears unable, either from his anatomical or pathological knowledge, to distinguish between enlargement of the uterus from inflammation and enlargement from other causes. To him, all enlargements are "inflammatory hypertrophy," the result of "inflammatory ulceration;" and when an enlargement of the organ is met with, it is immediately attributed to these causes, no matter how contrary to common sense or to the established principles of pathology the statement may appear. However, the errors of this method have been sufficiently pointed out to require repetition. Yet upon this explanation alone can we account for passages similar to the following: — "We are thus authorised to suspect the cervix to be affected, from the isolated existence of any of the following symptoms: sterility, increased pain during menstruation, a great change in the duration or amount of the menstrual secretion, slight continued pain in the lumbar or ovarian regions, bearing-down, a permanent vaginal secretion, pain in congress, modified uterine sensibility, etc. Indeed, any one of the various symptoms which I have enumerated and described, may exist alone, in a slight form, as the sole local indication of the existence of inflammation and ulceration." (P. 150.) These principles, when acted on, must lead to most unwarrantable practice; yet they appear too contrary to clinical experience to receive any credit. It is only necessary to direct attention to them, for their fallacy to be discovered.

On reviewing this examination of the alleged existence of ulceration of the uterus, I come, then, to the conclusion, that there is no evidence whatever of the existence of this morbid state in the virgin uterus; while in the impregnated condition the frequency of this disease has been very seriously

exaggerated. In the virgin, chronic inflammation of the uterus and inflammation of the mucous membrane of the vagina have both been described as ulceration, from the apparent inability of the author to distinguish between the two diseases, and from the introduction of a singularly erroneous system of pathology,—a system that may be compared to the exploded doctrines of Broussais—referring all morbid changes to inflammation; but with the further obvious fallacy, that the inflammation is here said to be occasioned and kept up by ulceration, which is produced without any assigned cause. In the uterus after impregnation, the enlarged condition which sometimes remains after abortions and parturition has not been understood; the open condition of the orifice which attends it has been erroneously described as “pathognomonic” of inflammatory ulceration; the deep-coloured and congested mucous membrane has been described as ulcerations; while the same singular system of pathology which attributes these morbid changes to the previous existence of ulceration has been continued. That ulceration occasionally exists as the result of the modified nutrition of the part, caused by the previous morbid states, is what none can deny; but that it is of “very frequent occurrence,” or that it is a primary disease occasioning other morbid states, is what no one acquainted with the subject, or knowing the morbid actions of the human body, can in any case admit.

9A, Langham-place.

(To be continued.)

CASE OF PHTHISIS PULMONALIS, ACCOMPANIED BY PHENOMENA OF UNUSUAL CHARACTER.

By ALEXANDER HALLEY, M.D.

MR. T. W. M., holding office under the Postmaster-General, received an appointment in January, 1846, to the Post Office at Hong-Kong, to which he at once proceeded. He was at this time twenty-one years of age, about five feet nine inches in height, of phlegmatic temperament, well formed but thin, with pale anæmic countenance, a tendency to stoop, with occasional despondency. Up to this time I am informed he had never suffered from any serious illness, but had enjoyed uniform good, though not robust health.

Until the early part of June, 1850, he maintained his usual vigour and spirits. At this time, however, Dr. Harland, of Hong-Kong, who attended him, writes me, that “he had a slight attack of pneumonia on the left side, for which he was cupped, leeches, and blistered, besides taking calomel and opium. He soon appeared quite well, but has since suffered from repeated slight attacks, and there is now considerable dulness in the upper part of both lungs, but chiefly in the left. His pulse continues about 90 when at the lowest; but, with the least exertion, or excitement, rises to 120 or more, immediately. The skin hot and dry during the day, but at night bathed with profuse perspiration, so that he is obliged to get up and change his sleeping dress. After a time he was advised to go up the coast for change of air, but lost rather than gained, as he had a fresh attack of inflammation, and suffered severely. He now had antimonial ointment applied to the chest with marked relief; took simple expectorants, but appeared to derive most benefit from cod-liver oil, though from the small quantity in the Colony, he only continued it for a short period.” He left Hong-Kong for England at the end of September, 1850, and I saw him on the 29th of November following, when he appeared much thinner than when he left home; his hair had fallen off considerably, so that he was nearly bald, though not grey; his eyes much sunken; cheeks hollow and waxy, though as yet no distinct hectic flush was visible; his stoop had slightly increased; cough short and frequent, without expectoration during the day, but profuse and difficult in the morning, between four and five a.m., occupying more than a quarter of an hour before he could get rid of it, and then with considerable prostration from the exertion. The voyage he considered had improved his condition, though he had suffered from dyspeptic symptoms, but not from sea-sickness. He had now no appetite. There was considerable fulness in the infra-clavicular region of the chest, particularly on the left side, where distinct vibration was imparted to the hand, especially when he coughed. The whole regions of the chest very dull on

percussion, more particularly in the infra-clavicular and supra-scapular regions, there being a circumscribed, very resonant spot, situated midway between the left nipple and sterno-clavicular articulation. The respiration weak and laboured, bronchial; the expiratory murmur being most distinct, with interrupted mucous rhonchus. Pulse 94, very excitable; bowels regular; urine high coloured, but sufficient in quantity. I impressed upon him the necessity of strict attention to warm clothing, etc., and of avoiding the exciting causes of his complaint, and ordered him the following mild mixture:—

R. Oxymellis scillæ, syr. simplicis, spirit. ætheris nitrici, aa. ʒii.; tinct. camphor. comp. ʒiv.; aquæ ad ʒvi., capiat cochl. duo magna 4tis vel 6tis horis urgente tussi.

January 14, 1851.—Feels considerably better; expectoration still difficult; pulse 92, not quite so excitable. Continue mixture, with addition vini ipecac. ʒss.

January 27.—Continues improving; has had no expectoration of blood since he left Hong-kong, and now expectorates more freely, and sleeps better, but complains of little appetite, and a disposition to the profuse perspiration at bed-time.

R. Emplast. picis 8 by 5 to be applied below left clavicle.

R. Quinæ disulphatis ʒss.; acid. sulph. dil. ʒss.; syr. aurantii ʒiij.; aquæ destillatæ ad ʒviiij. Capiat unciam bis indies.

March 1.—Feels much better; night sweats less profuse; appetite better; but little cough or expectoration; sleeps well, no headache, bowels and urine regular and sufficient; pulse 84.

About this time he evinced a strong desire to have a change, and shortly afterwards wrote me from Dublin in good spirits, but complaining of “inactivity of liver.” I saw him again on the 7th May, when his pectoral symptoms had evidently increased in intensity, and I strongly dissuaded him from an early consummation of a matrimonial project, upon which his mind seemed strongly bent. My remarks produced no sensible effects at the time. He remained calm, and betrayed no particular emotion, seeming satisfied with the reasons and advice I had given him. I now, however, lost sight of him, until the 29th May, when an intimate friend of his called to tell me that, after leaving me on the 7th, he had not gone home, but had wandered about for two days and nights, and eventually gave himself up to a policeman, requesting to be taken home, where he had remained ever since, avoiding all conversation or exertion; in fact, perfectly mute and motionless. At first he would just answer one or two questions with a simple affirmative or negative, and again relapsed into perfect torpidity. When I first saw him in this state, his bowels had not been relieved for a week, so I ordered him a calomel and jalap powder to be taken immediately, to be followed by a hot-bath. The bowels were relieved, and after the bath a large quantity of thick, very offensive urine passed. I now ordered him to be very carefully watched; and stimulants, with an aloetic purgative mixture to be given as he required them. A slight improvement took place—but transient—and after two days he became so completely inactive, that it was necessary to have an attendant constantly with him, to see that he performed the ordinary wants of life. His evacuations did not pass without medicine, and, if undisturbed, he maintained the position in which he happened to be placed throughout the whole day, yet did not refuse food or medicine when given to him. He slept well; his pulse still maintained its rapidity, 92—98, but he was daily becoming more emaciated and weak. I ordered him a mild milk diet, of which he was particularly fond, and the oleum jecoris aselli, which he readily took when handed to him. The cough again returned, and was again relieved by the same mixture and hydrocyanic acid. His general health improved, but the torpidity continuing, Dr. Southey was requested to meet me, and ordered a light citrate of iron tonic, which seemed to suit him. The same torpidity remaining, with the Doctor's approval, I, on the 23rd July, inserted a seton into the nape of the neck, which was well borne by the patient, though the colour left his cheek. In a few days he seemed more composed and natural, gradually improving up to the 4th August, when he recovered his speech, conversed, and moved as usual. The day following he spoke calmly, but in a depressed tone, on the subject of his marriage. The weather now being warm and fine, and thinking under all circumstances that a change of scene was advisable, he went to Ventnor, in the Isle of Wight, where he stayed, I believe, a

fortnight, but not feeling so well, returned home at the end of September, since which I did not see him. On the 30th ult. he brought up a considerable quantity of purulent matter with blood, and becoming gradually weaker, sank on the 6th instant, conscious to the last.

I regret that there was no opportunity afforded of examining the state of the lungs and brain *post-mortem*; probably some points of interest might have appeared in their pathology. The frequent relations of abnormal affections of the mind with lesions of the respiratory organs especially, have been before noticed; but phthisical patients are usually hopeful and lively to the last, and it is seldom one meets with so total a torpidity of the mental and corporeal functions, arising from simple melancholia, such as might have resulted in this instance from the blighting of his matrimonial hopes. I cannot help thinking that in this case there was some connexion between the torpidity of the nervous centres and the impairment of the respiratory functions. Little could be done for the actual disease. The irritation of the seton seemed to rouse the nervous energies, and certainly produced the most marked benefit, relieving the breathing, and dispelling a torpidity which had existed for three entire months without one cheering "gleam of sunshine."

14, Queen Ann-street.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

LONDON HOSPITAL.

By NATHANIEL WARD, Esq., F.R.C.S.,

CASES OF STRANGULATED HERNIA, IN WHICH THE OPERATION FOR REDUCTION WAS PERFORMED WITHOUT OPENING THE SAC.

Case 1.—Elizabeth Darling, a rather thin woman, nurse by occupation, unmarried, came under my care on the 4th of April, 1851, with a strangulated left femoral hernia. The gut had descended thirty-one hours before admission, and she attributed its descent to her having lifted a child rather suddenly. Sickness came on in about thirteen hours, and was preceded by a pinching sensation at the navel, and the lower part of the abdomen. On the day prior to the protrusion her bowels had acted regularly. Before admission the taxis had been twice applied by the surgeon under whose care she was. I again applied the taxis after she had been placed in a warm bath for twenty minutes. As the reduction could not be effected, I proceeded to operate, and returned the hernia without opening the sac, the line of incision being that practised by Mr. Gay. The impediment to reduction was found in Gimbernat's ligament, on the incision of which, at the angle between it and Poupart's, the gut was readily returned into the abdomen.

3ss. of tinct. of opium was given at night time. The bowels acted twenty hours after the operation, without the exhibition of any medicine; and, on the day following, diarrhoea supervened, the bowels acting eight or nine times. The purging was checked by chalk and logwood; and, on the same evening, she complained of great dyspnoea. A blister was applied to the chest, and a quarter of grain of morphia given. Three days after the operation the skin was cool, pulse 90, and tongue clean. She was ordered a mutton chop, and from this time made a rapid recovery, the wound having healed on the seventeenth day.

Case 2.—Susannah Rigsworth, a laundress, aged 44, came under my care on April 7, 1851, with a left femoral hernia twice the usual size. It had descended thirty-six hours before her admission, after lifting a pail of water. Its descent was followed by a "dragging pain in the belly," and, in four hours, by sickness, repeated twelve times before her admission. She had worn a truss for six years, but had discontinued it for the last twelve months. Her bowels had acted freely the day before the gut came down. The warm-bath and taxis proving unavailing, I reduced the hernia after an incision over the neck of the tumour, as practised by Mr. Luke. Several large inguinal glands and condensed cellular membrane were situated in the line of the incision. Hey's ligament and the inner part of Poupart's ligament having been incised, the reduction of the intestine was easily effected; and there remained behind what appeared from the feel to

be omentum; and the tumour, according to the patient, was reduced to the same dimensions it had had for some time before the recent descent.

Diarrhoea came on on the afternoon following the operation, and was checked by logwood and chalk; no purgative medicine had previously been administered. No symptom worthy of note came on afterwards, and the wound had healed on the 15th day.

Case 3.—Elizabeth Hober, aged 65, widow, and an inmate of a neighbouring workhouse, came under the care of Mr. Critchett, on April 13, 1851, with a strangulated right femoral hernia. The gut had descended twenty-four hours before her admission, and she could attribute its coming down to no unusual exertion. She said, however, that, a short time before its descent, she had had a sudden attack of vomiting, attended by pain in and about the navel, and a sense of dragging. Sickness soon followed. Her bowels had been rather relaxed previously.

The warm bath and taxis were had recourse to without benefit. The hernia was reduced after operation, the incision being made over the neck of the tumour, and Gimbernat's ligament having been incised. It was remarked at the time, that the angle of union between that ligament and Poupart's was very tense. The sac was not empty after the return of the bowel, but contained a small portion of omentum. The bowels acted shortly after the operation, without any purgative medicine. Nothing interfered with the patient's recovery, and the wound had healed on the seventeenth day. This patient had been subject to a reducible hernia for twelve months, but had never worn a truss, and had never previously had symptoms of strangulation.

Case 4.—Maria Simmonds, aged 59, the mother of 15 children, came under the care of Mr. Luke, on May 25, with a strangulated right femoral hernia. The symptoms of strangulation had existed sixteen hours before her admission, and prior to their occurrence the patient had been very much constipated. She had been making no particular exertion before their supervention, and the only symptom she felt was, that the hernia, which had never been reducible, became suddenly somewhat larger than usual. The warm bath and taxis were ineffectually had recourse to, and the operation was consequently performed without further delay. A vertical incision was made in front of the lower part of the external oblique tendon. It commenced a little above the neck of the tumour, and terminated opposite to it, and the hernia was reduced without the sac having been opened. The impediment to reduction consisted in several irregular bands, without any definite character, just below Poupart's ligament. On the reduction of the gut, the sac still gave evidence of being partially occupied by omentum. The bowels acted twenty-seven hours after operation, the patient having taken three ʒij. doses of sulphate of magnesia, at intervals of four hours, and having had one enema. She remained quiet nine hours before she took the sulphate of magnesia. The operation of the purgative was preceded by considerable abdominal pain and tympanitis. The wound had healed on the twentieth day, shortly after which she left the hospital.

This patient had been under the care of Mr. Adams four months previously, and, from the notes taken at the time by Mr. Hall, the dresser, it appears that she had been subject to rupture for three years, and which she could readily reduce herself, but the day before admission failed in so doing. Her bowels had not been open for three days. Mr. Adams, after the usual attempts at reduction had been had recourse to, exposed the neck of the sac by an incision of the fasciæ, and tendinous structures in front of it, but found that he could not reduce the tumour. The sac was then laid open; a large quantity of omentum was exposed, and beneath this was found a knuckle of intestine, congested, and of a brownish colour. Old adhesions connected the sac with the omentum, and recent, the latter with the gut; these last were readily broken down with the finger, and the gut easily replaced in the abdomen after the neck of the sac had been incised. The omentum was allowed to remain *in situ*. The wound had healed on the sixteenth day. The circumstance of Poupart's, Gimbernat's, and Hey's ligaments having been cut into, in this operation, accounted for the indefinite character of the bands met with in front of the sac when the patient came under the care of Mr. Luke.

This woman was again admitted into the hospital on August 20, with slight symptoms of strangulation. She stated, that the rupture was constantly coming down, but that she

generally managed to reduce it. It then occupied a space equal to the palm of the hand, was convex, and prominent one inch from the abdominal surface. It was not particularly tense, and the bulk of the tumour was composed of irreducible sac and omentum; for, on the following morning, after an enema, the exhibition of opium, and the application of ice, the irreducible sac and the adherent omentum could be distinctly felt; the gut, which had descended on the previous evening, had returned into the abdomen, and the finger could be passed, with the omentum before it, into the femoral ring, which was twice its ordinary size.

Case 5.—Sarah Warren, aged 34, a weak and pallid woman, four months pregnant, came under the care of Mr. Curling, May 30, with a strangulated right femoral hernia. The gut had come down without any particular exertion, and while her truss was on, thirty hours before her admission. The ordinary symptoms came on shortly after its descent. The taxis and warm bath failing to effect reduction, an incision was made over the upper and inner part of the tumour. Immediately after the incision of Gimbernat's ligament, copious arterial hæmorrhage came on from two distinct points, the one deeply situated at the inner part of the wound, the other externally. Some difficulty was experienced in securing the inner bleeding vessel. She had been subject to rupture for six years, and it came down originally on the day following a heavy and protracted labour. She had since worn a truss, which acted imperfectly. She could, however, easily reduce the rupture. The bowels had been quite regular prior to the recent descent. The patient was purged five hours after the operation, no medicine having been given. Peritonitis, accompanied with its usual constitutional symptoms, rapidly set in, but was checked at the end of the third day by the application of leeches to the abdomen, and the exhibition of calomel and opium. At this time her gums had become tender, and she suffered from considerable general depression. Two ounces of wine were ordered to be given daily, and she gradually recovered without any further untoward symptom. The wound had healed on the twenty-eighth day, shortly after which she left the hospital.

Case 6.—Sarah Taylor, aged 48, mother of one child, came under the care of Mr. Luke, with a strangulated left femoral hernia, on July 27. The gut had come down twenty-one hours before her admission, an hour after which the operation was performed. The hernia was easily reduced after an incision of Gimbernat's ligament. The bowels acted about thirty hours after the operation, some small doses of sulphate of magnesia and an injection having previously been had recourse to. The wound had healed on the fourteenth day.

This woman had been subject to rupture for two years. She had never worn a truss, having been always able to return the gut without any difficulty; and, prior to its irreducible condition, her bowels had been regular in their action.

Case 7.—Lydia Thompson, the mother of eight living children, aged 38, a silk-weaver by occupation, came under the care of Mr. Wordsworth on August 19th, with a left femoral hernia strangulated, rather smaller than usual. The symptoms of strangulation had existed for twenty-four hours before admission. She could give no accurate account of when the gut came down, but said that, for the last three or four months, she had had a fulness in the upper part of the thigh, and fancied that three or four days before she came into the hospital she had strained herself. During the twenty-four hours before admission she had "pains like labour pains" at the navel, and had been sick ten times. The taxis and warm bath proved unavailing, and an incision was made over the neck of the tumour so as to expose the inner part of Poupart's ligament. This, as also Hey's ligament, was found to be very tense. They were both incised, and the hernia subsequently readily reduced. The bowels acted very copiously nine hours after the operation, a small dose of house medicine having been previously given; in fact, she was purged fourteen times in rapid succession. Opium checked the diarrhoea, and from this time she progressed rapidly to recovery. The wound had healed by primary adhesion on the fifth day, and she left the hospital on the fourteenth.

Case 8.—Mary Watkins, a healthy countrywoman, aged 40, mother of three or four children, came under my care early in the morning of September 17th, 1851, with a left strangulated femoral hernia. It was about the ordinary dimensions, and had descended fifty-four hours before her admission. The bowels had previously been regular. A

dragging pain soon came on from the stomach to the tumour, and on the two following days was accompanied with sickness, occurring five or six times during each day. There was but slight pain in the tumour.

Two attempts, each lasting about ten minutes, had been made before her admission to effect reduction, but failed. The warm-bath was used, and the taxis ineffectually again applied shortly after she came in. The operation was then had recourse to, and the gut reduced, Gimbernat's ligament having been incised, and the line of incision of the integument and fasciæ in front of it, having been that recommended by Mr. Gay.

A common enema was administered thirty-nine hours after the operation, shortly after which the bowels acted freely. She was ordered a mutton chop on the second day, and a pint of porter also on the third. The wound had quite healed on the fifth day.

This woman had been subject to the rupture for eight years; but, until the last descent, had been able to reduce it without any difficulty. She had never worn a truss.

Remarks.—The treatment of strangulated femoral hernia, as conducted in the above cases, was followed by very satisfactory results. These I attribute to the sac not having been opened, to the early period at which the operation was had recourse to, and the subsequent treatment that was adopted. The advantage of not opening the sac, in recent herniæ particularly, has been so prominently and clearly put forward by Mr. Luke, and advocated also by other able and experienced surgeons, that little further can be urged which can in any way substantiate their remarks. The strongest argument which can be adduced as corroborative of their opinion is the evidence of fact. Here are eight cases following closely on each other, and all terminating favourably; one only requiring active treatment in the progress to recovery.

The various sources of impediment to the reduction of strangulated femoral hernia, which are situated external to the sac, call, I think, for a few remarks. It is curious to read the various descriptions as to what is termed the seat of stricture, or what would, in my opinion, be more properly termed the impediment to reduction. Some authors claim Gimbernat's ligament; others, Poupart's, Hey's, or the deep femoral ligament; others, again, the transverse fibres that strengthen the sheath of the vessels below Poupart's ligament. Now, it would appear, *à priori*, from a consideration of the anatomy of the femoral canal, that the sharpest and most resisting structure would constitute the chief impediment to the return of the bowel. Gimbernat's ligament has this peculiarity, and, in numerous cases of femoral rupture, particularly in small and recent protrusions, an incision of this ligament is quite sufficient to effect reduction. It is worthy of remark, that Gimbernat's ligament is in intimate relation with Poupart's and Hey's ligaments. An incision of the two latter, consequently, could not be made without relaxing somewhat the former, as illustrated in cases 2 and 7, where, on the incision of Poupart's ligament, the hernia was readily reduced. Now it is true, that after the incision of Gimbernat's ligament, or its relaxation by an incision of Poupart's, a rupture in many cases cannot be reduced, but returns easily on the further division of the transverse bands strengthening the sheath of the vessels. These bands are then spoken of as the seat of constriction; but they clearly constitute mere secondary impediments, no case having, to my knowledge, occurred in which their division alone, without the previous incision of Poupart's or Gimbernat's ligament, was sufficient to allow of the reduction of the contents of the hernial sac. I conclude, therefore, that Gimbernat's ligament is the principal impediment to reduction. In small and recent hernia, it is usually the only impediment; but when the tumour has existed for some considerable time, and has much increased on its original dimensions, it distends considerably the lower part of the canal into which it has descended, and presses on, and renders tense and hypertrophied different series of fibres, such as Hey's ligament and the transverse fibres of the sheath, which structures were, in the small condition of the rupture, lax in comparison with Gimbernat's ligament, and exerted no injurious effect on the tumour. These fibres, then, in the majority of herniæ of long standing, which, before the super-vention of symptoms of strangulation have increased on their original dimensions, require division as well as Gimbernat's ligament, in order to effect the reduction of the gut.

In the above cases the operation was had recourse to without any unnecessary delay, and immediately after the warm

bath and a careful application of the taxis had been ineffectually used. Taking the average of the eight cases, the operation was performed in each within twenty-four hours after the descent of the gut.

In the subsequent treatment of the greater part of the cases, no purgative was exhibited. The exhibition of aperient medicine after the reduction of the gut, calls for careful consideration on the part of the surgeon. If the patient's bowels have been unusually inactive, as not unfrequently happens, (and as occurred in *Case 4*;) prior to the descent of the bowel, and the supervention of symptoms of strangulation, I should consider it quite proper to endeavour to act on the intestine (by purgatives by the mouth, or enemata, preferring, however, the latter,) shortly after reduction, inasmuch as a loaded condition of the alimentary canal would tend to keep up, if not to advance, the inflammation which had come on in the originally strangulated portion. If, on the contrary, the bowels have been natural, or more than usually active, prior to strangulation, I cannot see the necessity of such a course being pursued as a rule. In the one case they will generally act within twenty-four hours after the operation, without the administration of any medicine; in the other, opium will generally be called for, in order to prevent the recurrence of diarrhoea, or check it if it supervene. In *Case 5*, it will be remarked, that considerable hæmorrhage came on during the steps of the operation, from two distinct points. The external source of bleeding was from a wound of one of the superficial pudic arteries; the internal bleeding vessel, which, from its depth, (being situated between Gimbernat's ligament and the neck of the sac,) was secured with some difficulty, was in all probability some large irregular branch from the deep epigastric. *Case 4* is remarkable, inasmuch as the patient was successfully operated on twice within five months. In the first operation, it was found that the reduction, without opening the sac, could not be effected, owing to recent adhesions between the bowel and the sac, and which did not yield till broken down by the finger. In the second operation, it was not found necessary to open the sac, as the gut easily returned after the application of the taxis when the bands in front of the neck of the sac had been divided. It is reasonable to infer, that, in the first descent, the inflammatory symptoms were more severe than in the second; because, had such not been the case, the operation without opening the sac would have been sufficient for reduction.

ST. MARY'S HOSPITAL.

By E. R. WORLD, Esq., M.R.C.S.

DISEASE OF BONE—OPERATION.

THE practice of removing necrosed and carious bone, for which we are so much indebted to the surgeons of the North, is scarcely so common, or so well understood, that a notice of such proceedings is likely to be unacceptable. Many circumstances would indeed engender the supposition, if not prove the fact, that the majority of surgeons,—those for whom our reports are written,—scarcely recognise it as legitimate practice; at all events, as that which should be frequently adopted. A marked distinction should be made between bone that is merely exposed, and that which is diseased. After wounds and contusions, or even abscesses, a bone may be denuded of its general and its special covering, the periosteum, and be yet healthy; that is, not actually, or absolutely diseased; and never is this better shown than in injuries to the scalp, with extensive loss of pericranium, of which St. Mary's at present affords some excellent examples. Without such discrimination, there are many parts of the body, where the bone forceps and the gouge would, perhaps, be injudiciously used. But the evidences of unhealthy bone are fortunately too unmistakeable. The long interval of time between the present sinus with its peculiar discharge, and the attendant thickening of skin, with its adhesion to subjacent parts, and, if locality admit it, to bone, which also is thickened and swelled in the vicinity of the disease, indubitably speak of true osseous mischief, which is generally rendered positive to the touch of the probe.

The following cases demonstrate the value of the practice that is inculcated.

NECROSIS OF THE LOWER JAW.

William Mann, aged 28, admitted into Cambridge-ward, under Mr. Coulson, July 18, 1851. A year ago an abscess formed in the right cheek, attributable to the cutting of a wisdom tooth, and opened within by ulceration. Shortly after, about two months, an abscess appeared on the outside of the cheek, near the angle of the jaw. In vain was treatment tried to heal the fistulous opening, and, although diseased bone was not distinctly discernible, there being some doubt about it, Mr. Coulson determined to seek for what he felt certain did exist,—bone under some condition of disease,—especially as the symptoms induced him to believe that the disease was very limited.

On the 24th July the integument was raised, and the search commenced. A somewhat tortuous cavity was exposed, at the bottom of which lay a tightly wedged bit of dead bone, less in size than a small cherry-stone. Sutures were applied. All that was possible to heal by the first intention did so unite, and on the 1st of August the man left the hospital well.

NECROSIS OF THE TIBIA.

Mary Campion, aged 44, admitted into Victoria Ward 8th August, 1851, under Mr. Coulson. Two years ago, after an attack of diarrhoea, the left leg swelled, and over the spine of the tibia, in the centre of the leg, an abscess formed and burst. This was succeeded at various periods by others. At the present time there are three fistulous openings over the tibia, each of which leads to exposed bone; and the patient's health has been undermined from the constant suppuration.

A flap of integument was raised, and two cavities, each about the size of a sixpence, were brought into view; these communicated, and an isthmus of bone, in a doubtful state of health, formed the vault or roof. This was cut away with Hey's saw, and beneath it lay a long but very thin bit of bone, quite loose. It was taken out, and the sides of the cavity, which were decidedly carious, were gouged. Here the same fortunate termination as in the other case followed, and the patient left quite well on Sept. 12.

There is just now in the Albert ward a case allied to the foregoing, which was operated on by Mr. Haynes Walton. Several sinuses on the front of the tibia, of two years' duration, led to exposed bone. The young man was incapacitated for work.

A three-sided flap was made, the brawn-like skin carefully dissected to some extent, and the bone exposed. Singularly enough, there was a resemblance to Mr. Coulson's last case. There were openings which communicated in the same manner, but there was wanting the loose bone; caries alone existed. That isthmus of bone was also cut away and the cavity carefully gouged. Mr. Walton very rarely adopts the crucial incision—never where the ends of the flap would be formed out of unhealthy skin, and in this instance the skin was peculiarly implicated—his objection being, the greater trouble of keeping such flaps apart or turned back, the after difficulty of adaptation, the likelihood of the angles sloughing, and, should there be union, the scar that is made; for, as a rule, greater deformity is produced by the crucial than by any other kind of incision for reflecting skin.

This case exemplifies not inaptly what was advanced about the practice of operating on diseased bone, for it had been the opinion of several surgeons, who saw him prior to his admission, that nothing operative should be done. Reparation has been slow,—a large cavity required to be filled; but he is now so far recovered, that he is moving about the ward, and will quit the hospital in a few days, the wound having nearly cicatrised over.

CALCULUS IN THE BLADDER.

The number of lithotomies that have been performed since the short period of the hospital's career, is, for that disease, proportionately great. Four children have already been operated on, and all have done well, without having ever evinced a single bad symptom. Three of them have been under Mr. Coulson, and their respective ages were, four years, one year and eleven months, and eighteen months. The last was on Wednesday, the 8th inst., when Mr. Coulson remarked, that it was the youngest child he had ever operated on. There is nothing more concerning them worthy of record, for in neither did difficulty or irregularity present itself. The frequency of stone in childhood is well known. Mr. Coulson mentioned some statistics on the subject,

taken from the report of the Norfolk and Norwich Hospital. From the year 1772 to 1816, a period of forty-four years, the number of operations were 478, and 227 were on children under fourteen years of age.

TERMS OF SUBSCRIPTION.

	£	s.	d.
<i>Twelve Months (pre-paid)</i>	1	10	0
<i>Six Months (do.)</i>	0	16	0
<i>Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.</i>			
<i>Post-Office Orders to be made payable at the Post-Office in Coventry-st., to Mr. JAMES LUCAS, 46, Princes-st., Soho.</i>			

TO ADVERTISERS.

Terms for advertisements (which should be sent to the Office before 2 o'clock on Thursday) :—

	s.	d.
<i>For eight lines or less</i>	6	0
<i>Each additional line</i>	0	6

TO SUBSCRIBERS.

Portfolios for holding the Numbers of the current Volume have been prepared, price 2s. 6d. each. May be had by order of any Bookseller.

Cases for binding the Volumes, in cloth, gilt lettered, are now ready. Price 2s.

Orders should be given, without delay, for back Numbers or Volumes that may be required to complete Sets.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

- This Evening, Nov. 1.—MEDICAL SOCIETY OF LONDON. *General Meeting.* Eight o'clock.
- Monday, November 3.—EPIDEMIOLOGICAL SOCIETY. Half-past Eight o'clock.
- Tuesday, November 4.—PATHOLOGICAL SOCIETY OF LONDON. Eight o'clock.
- Wednesday, Nov. 5.—GEOLOGICAL SOCIETY. *Subjects:—1. "Notice of the Occurrence of an Earthquake in Chili." 2. Professor Sedgwick, F.G.S., "On the Cambrian, Silurian, and Devonian Rocks of Cornwall and Devon." Half-past Eight o'clock.*
- Thursday, November 6.—HARVEIAN SOCIETY. Eight o'clock.
- Friday, November 7.—WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON. *Subject: Dr. Barclay, "On a Case of Severe Neuralgia Terminating in Insanity." Seven o'clock.*
- Saturday, November 8.—MEDICAL SOCIETY OF LONDON. *Subject:—Mr. Gay, "On a New Method of Treating Diseases of the Joints." Eight o'clock.*

THE MEDICAL TIMES.

SATURDAY, NOVEMBER 1.

INVESTIGATION AT THE GENERAL HOSPITAL, BIRMINGHAM.

ON Friday, the third of October, an investigation was commenced at the Birmingham General Hospital, the Earl of Dartmouth in the chair, respecting certain charges brought by Mr. Thomas Gutteridge against Mr. Alfred Baker, one of the surgeons of the Institution.

The first charge was that of performing the operation of ovariectomy upon a young unmarried woman, without imparting to her or to her friends a knowledge of the very great danger which she ran; and without obtaining the sanction and concurrence of his colleagues.

The second charge was that of performing upon an aged man, the *distal* operation for the cure of a supposed aneurism of the arteria innominata, also without the assent of his colleagues.

The operations seem to have been performed in a proper manner, although they had for their unhappy result the suddenly hurrying to their last account two individuals who, but for surgery, might still have been alive. The girl was kept about an hour upon the table—the cyst of the diseased ovary being adherent to the walls of the abdomen, and requiring separation. She died the next day.

The subject of the second charge, a man aged sixty-six, underwent the operation of having a ligature placed around the right carotid artery, for supposed aneurism of the arteria innominata. He died soon afterwards, and, upon examination, it was found that there was no aneurism, but merely a dilatation of the aorta.

There was also a third charge, but that was not entertained. The result of the investigation is as follows:—

"The Weekly Board are unwilling to separate without recording their unanimous opinion, that Mr. Baker is entitled to retain the full confidence of the Governors and Subscribers.

(Signed)

"DARTMOUTH, Chairman."

The facts which have come to light, and the evidence given during the investigation, are of such an extraordinary nature, that we cannot forbear analyzing the Report, as it appears in the *Birmingham Mercury* of October 18, 1851, and then leaving the Profession to judge whether the Weekly Board of this public hospital for the relief of the poor does not sadly need a Government Superintendent; and whether some of the "doctors" who figured at the trial would not be the better for a medical schoolmaster.

We shall confine ourselves, for the present, to charge the first—the case of ovariectomy,—an operation which no human being with a conscience, and in the possession of his reason, would lightly undertake,—an operation, the propriety of which, in *any* case, is denied by many of the first surgeons in the Metropolis, and the dangers of which have been held up to public observation times out of number.

As we have nothing to do with the mental obliquity which makes respectable and truthful men describe the same facts in a totally opposite manner, we will omit the evidence in accusation, except in so far as it may illustrate certain points, and proceed at once to the defence.

Mr. Baker, with the wish to prove that his patient knew the nature of the operation which she was about to undergo, called the Rev. Thomas Rawlins, chaplain to the hospital:—

"The Rev. witness *thought* that the patient herself told him, that she was about to undergo a very serious operation; the *precise* nature formed no part of his conversation, but she *seemed* in much apprehension about it."

"Elizabeth Hodgkinson, a nurse at the hospital, stated, the mother of the patient had told her, that Mr. Baker was to open her down the stomach, and take a bag from her; but she (the mother) did not wish the daughter to be told lest it should frighten her."

The evidence of the Rev. Gentleman does not go for much. All patients, the subjects of a serious disease, are glad of consolation in their affliction, and any operation is sufficient to excite anxiety and fear; but the nurse makes a statement which was denied by the mother of the patient in the examination upon the first day, October 3.

Mr. Baker: "Did you describe to the nurse, that your daughter's belly was to be opened, and a bag taken out?" The Mother: "No, Sir, I never uttered such a word."

The evidence of Mr. Eccles is also important. Mr. Baker, it is affirmed, asked the patient, if she would like to have the disease cured? To which she replied, "Yes, if it could be done without an operation." "Mr. Baker then, on walking away, said to a pupil, 'I shall not ask her again, but I shall do it.'"

It next appears, that there was no proper consultation

among the medical and surgical officers respecting the propriety of the operation; and that this apparently arose from the fact, that very strong adverse opinions were entertained by some of the older members of the staff.

A very good account of the whole proceeding, as regards the operation, is given by Mr. Hayes; but, upon cross-examination by Mr. Gutteridge, that gentleman is made to say,—“I have always understood, that tapping is an operation which should be put off as long as it possibly can be; and, on account of the extent of fluid in this case, I think it would have been attended with most imminent risk.” The Birmingham surgeons, however, had the advantage of seeing the effect of the rupture of the sac, and the sudden escape of the whole fluid during this operation of ovariectomy. If the loss of the fluid was dangerous in one case, it must be infinitely more so in the other.

Dr. Francis Elkington, an ovariectomist, next offers his evidence. As regards Mr. Baker's proceedings with the knife, we think it proved that no more mischief was effected than is usual in these cases. The cyst could not be got out without so considerable an amount of violence as in all probability would cause death. That, however, was no fault of Mr. Baker's, the operation having been once commenced. But what are we to think of Dr. Elkington, when he coolly informs the Court, “that ovariectomy is *not* more horrible than an operation on a large rupture where much bowel is gathered”!

“Are you aware,” said Mr. Gutteridge, “that the London Hospital surgeons have operated for ovariectomy ten times?” “I am.” “With what results?” “Nine deaths and one recovery.”

Now, in opposition to this statement, we have, in Dr. Elkington's evidence, the assertion of Dr. Clay, of Manchester, that out of fifty-one cases operated upon by himself, there were thirty-four recoveries and only seventeen deaths.

How are we to reconcile these conflicting statements? The mortality which occurred in the London hospitals is most undoubtedly correct. There could not have been any want of skill, and the patients were placed under circumstances most favourable for recovery.

Can there be any want of accuracy on the other side? Is the operation ever pronounced “successful” because it does not kill the patient on the table? We fear there is some ground for such a supposition.

Dr. Robert Lee, whose analytical acumen is undoubted, has announced the following conclusions, which we believe to be in all essential points correct:—

The operation of extracting the ovarian cyst has been performed 114 times: 74 patients have recovered, and 40 have died,—making the average mortality nearly 1 in 3.

Of the 114 operations, in 24, or rather less than 1 in 5, the operation was obliged to be abandoned.

That in the 90 cases, where the tumour was removed, nearly 1 died to 3 recoveries.

That where adhesions existed, the mortality was 1 death in 2½.

And with these conclusions before him, Mr. Baker has the assurance to ask Dr. Evans, “Are not many of the most eminent men of the day in favour of the operation?” We answer, as did Dr. Evans, most emphatically, No. The feeling against it is increasing; it should never be undertaken except with the full concurrence of the patient's friends, after long and anxious consultation, where it is become clear that the disease, if left to pursue its own course, will speedily destroy life; and where paracentesis is not advisable. But against indiscriminate ovariectomy we raise our voice. Let it be remembered, that when

we get possession of truthful returns of cases, in which there can be no deceit, the mortality is greater than is represented even by Dr. Lee, and sufficient to make any man pause. According to the evidence of Mr. Hodgson, the President of the Royal Medical and Chirurgical Society, “Tapping is not always a safe remedy. In 46 cases, 20 died after the first tapping; 16 within one month, and 10 out of 16 in seven days after.” Our surprise at this statement is, however, considerably lessened, when we are informed, that in this same hospital, 7 out of 10 die from amputation of the thigh. Mr. Hodgson told the Board,—“That if the books of this hospital had been well and truly kept, you might have known the amount of patients who died from amputation; but, I can say, that from amputations of the thigh, 7 out of 10 die.” This may be “Brummagem” surgery. It is unknown elsewhere. But, never mind the deaths! Let not that discourage the young surgeon! Ovariectomy is on the advance! the success attending it has been very great! We are to be accustomed to the loss of 7 patients out of 10 from amputation of the thigh. So we must not grumble if we lose 9 patients out of 10 from ovariectomy.

The Committee appointed to conduct the inquiry determined, that both the patient and her friends were fully informed of the nature and the danger of the operation; that the operation of ovariectomy is more favourably received now than formerly; that Mr. Baker performed it with skill and judgment; and that, although he did not convene a formal meeting with his colleagues for the purpose of a consultation, he did not act in contempt of their opinion.

Does the Earl of Dartmouth believe that Mr. Baker stands clear of all blame? Whatever may have been the feeling against Mr. Gutteridge's antecedents and violent attack, and against the spirit manifested in his pamphlet, was it right towards the poor, for whose benefit this hospital has been built, that a surgeon, whose opinions time and experience have hardly matured, should be pronounced worthy of all confidence and deserving of all praise, who could perform the serious operation of ovariectomy with so vague an understanding with the patient and her friends, and with statistics before him of which we can hardly suppose him ignorant, and without the positive sanction of his colleagues?

Another scene of the drama still remains. We shall recur to it next week.

WEEKLY NEWSPAPER PHYSIC.

“Now, in the name of all the gods at once,
Upon what meat doth this our Cæsar feed
That he is grown so great.”

ABLE to write on all things glibly, if not wisely, and having said his say, to stick to it; a firm believer in his own intimate acquaintance with the secrets of science, arts, and politics; with brass enough to dogmatise *ex cathedra de omnibus rebus*, regretting only that there is not “something else beside” on which to display his pragmatical powers; wise as Dogberry, clairvoyant as Okey, and humble as Lucifer; a man to whom politics is a plaything, divine mysteries, bubbles burst with a breath, and the arcana of medicine trifles which he cracks with his filberts; such a man is the type of the genus *editor* of a weekly newspaper.

“Why man, he doth bestride the narrow world
Like a Colossus, and we petty men
Walk under his huge legs, and peep about
To find ourselves dishonourable graves.”

From this type of his genus the editor of the *Spectator*

seems to differ widely; but, whether the temptation to talk *de omnibus rebus* was greater than he could resist, or whether, the times being barren of incident, he had nothing to write about which he did understand, while the *cacoethes scribendi* was strong upon him, we cannot say, but this much is clear, that he has "treated resolution," and done that which, judging from antecedents, he had vowed never to do,—he has written on a subject of which he is ignorant, he has penned a column on a matter concerning which he knows nothing. The editor of the *Spectator* has taken up the grey goose-quill in defence of the Homœopathist. The now famous Resolutions of the Edinburgh College of Physicians is the text from which he preaches. Thinking to put the Fellows of that College into what is vulgarly called a fix, the editor of the *Spectator* writes, "These gentlemen would hold it degradation to assist a fellow-being suddenly struck down by apoplexy, if a homœopathist held him in his arms." For the especial benefit of the *Spectator*, we will endeavour to place his own case clearly before him. Let the case, then, be one of apoplexy, dependent on cerebral congestion, and the patient a stout and generally robust man, in the prime of life. This man falls insensible into the arms of his ordinary medical attendant, a practitioner of homœopathy, and the President of the College of Physicians of Edinburgh is passing at the time. The editor of the *Spectator* asks, Will not the latter aid the former to save the life of the patient? We will answer for him. He would willingly, if he could; but *how* is he to do so? The learned physician to whom we have referred, in order to lessen the force of the heart's action, and relieve the over-distended vessels of the cranium, would advise the immediate abstraction of a considerable quantity of blood, and for the same and other reasons would administer powerful purgatives in large doses; the use of these remedial agents, the physician would consider to be essential for the welfare of the patient. The homœopathist,—we suppose him to agree as to the nature of the case with the physician,—would at once declare, that the measures the physician recommended could not fail to prove injurious to the patient; that by their employment the sick man's life would be periled; and, in place of blood-letting and purging, would prescribe some drug, in quantity incapable of being weighed by the finest balance. The drug he would give, he says, is one that, if administered to a person in health, would produce symptoms similar to those which exist in the comatose patient. The homœopathist then, true to his dogma, "*similia similibus curantur*," would administer to this man, insensible in consequence of the pressure exerted on his brain by distended vessels, a drug which, according to his own statement, would produce cerebral congestion in a healthy individual; while the physician would strive, by all the means at his disposal, to remove the condition the homœopathist avers that his drug is to produce.

Now, can the Editor of the *Spectator* tell the physician *how* he is "to assist a fellow-being suddenly struck down by apoplexy, if a homœopathist hold him in his arms"?

But, it may be urged, that there is one object for which the physician may meet the homœopathist,—viz., to determine, not the treatment to be pursued, but the nature of the case; they may meet, it is argued, for the purpose of making a diagnosis, although not able to consult on the question of treatment; notwithstanding their therapeutics are based on different principles, they both use, it is said, the same means of diagnosis; thus, in a case of apoplexy, the President of the College may lend his experience to the homœopathist to determine whether the patient is suffering from cerebral congestion, cerebral hæmorrhage, blood-

poisoning, or any other disease which can give rise to the symptoms called apoplexy.

The following is the ground on which it appears to us that the physician is justified in declining to assist the homœopathist—the fundamental reason which ought to influence him in declining to meet a homœopathist for the purpose of diagnosis. The physician is not a tradesman; he does not sell knowledge; that is to say, he no more sells advice than the priest sells spiritual instruction, the judge his judgments, or the soldier his blood. The physician—the truly professional man for whom alone Fellows of Colleges make laws—we repeat, does not sell advice. He makes a diagnosis that he may benefit the patient,—that he may prescribe the remedies that shall effect a cure. The sick man has determined to take the globules of the homœopathist and those only; he has determined that the physician shall not prescribe, that the physician shall not benefit him; still, believing that the physician is better acquainted with the nature of the disease than the homœopathist, he asks the former to make the diagnosis and allow the latter to prescribe what he, the physician, believes to be an impotent, and often dangerous because impotent, line of treatment; in fact, to sell his knowledge and not to benefit the sick. He asks the physician to degrade his noble calling to a level with that of the seller of wares; and because the physician will not do this, he is abused by those who take on themselves the place of public censors.

We cannot conclude without expressing our deep regret that one whose opinion we generally value so highly as that of the Editor of the *Spectator*, should have written on this subject without due deliberation. That he should have hazarded his own reputation for caution and sound sense by taking part against a cause which, had he examined ere he wrote on it, he would, we firmly believe, have striven to assist. He has said his say, but, we trust, he will not, like the type of his genus, stick to it. May he remember, that although Jupiter himself sometimes naps and nods, he does not continue to nod after he awakes, that the vulgar may believe he has not been dozing.

THE "QUARTERLY REVIEW" VERSUS THE MICROSCOPE.

Who killed Jack Keats?
I, said the Quarterly,
So savage and tartarly,
I killed Jack Keats!

It is seldom that we indulge in excursions into the realms of general literature; our time and attention are sufficiently engaged in the ample field afforded by the medical sciences; but when reviewers in journals devoted to political and historical literature, the fine arts, etc., etc., lucubrate on subjects within our domain, and attempt to throw unmerited doubt on what is esteemed among us as a valuable means of investigation, we think we are not stepping out of our proper sphere in reviewing the reviewer, and recording our view of his opinions.

In the last number of the *Quarterly*, we have a lengthy review of three publications of Sir Charles Lyell on Geology. The writer of the review is of course unknown; but, if the recent French law, requiring the publication of the name of the writer, had been in operation in England, we feel assured that either the review would not have been written, or that it would have assumed a totally different character. We at once acquit Professor Owen of any participation or previous knowledge of the review in question. It appears that Sir Charles Lyell has recently veered

from the opinion, that a successive creation of organic beings took place from the lowest to the highest forms in the world's history; that among animals, creation gradually ascended from the lowest zoophytes, through the articulata, mollusca, cephalopods, fishes, amphibia, reptiles, birds, mammalia, and, finally, man;—and that he has adopted the view, that all classes of animals inhabited the earth's surface at all periods of its history. The whole review is devoted to this question, in which the reviewer opposes the conclusions at which Sir Charles Lyell has arrived; taking at the same time the opportunity of praising Professor Owen at the expense of all other geologists. In short, there is scarcely a page out of thirty-eight occupied by the review, which does not contain an adulatory reference to the Professor, and nearly if not all his separate publications are cited with unqualified approval. Thus we have Owen's "Nature of Limbs," Owen's "Comparative Anatomy," Owen's article "Teeth," in the *Cyclopædia of Anatomy and Physiology*; Owen's "History of British Fossil Reptiles," Owen's "Fossil Mammals, and Birds of Great Britain," Owen's "Odontography;" while Sir Charles Lyell, Bowerbank, Quekett, and all those who have faith in the revelations of the microscope, are set aside as unworthy of credit in all cases where the information obtained by the assistance of that instrument clashes in any degree with the preconceived opinions of the Professor of Comparative Anatomy of the College of Surgeons. Let it be understood that we have unqualified respect for the eminent and extensive scientific acquirements, and for the numerous and gifted investigations and writings of the Professor, which have frequently enriched our columns; we are far from quarreling with him, or even with the reviewer individually, but we protest against the manifest unfairness of the review to those—we say it with confidence—possessing equal talent, and, in some special departments of science, greater experience. The attack is made directly on the microscope as a means of geological investigation, covertly on John Quekett, who is pilloried in small capitals by the reviewer, for the scorn of the votaries of science.

The reviewer is desirous of impressing "on Sir C. Lyell the same degree of caution and hesitation in regard to the microscopic characters of the osseous tissue of the oviparous animals with elliptical blood-corpuscles, that some experience with the microscope has enforced on ourselves." The reviewer has cautiously employed a word of indefinite meaning in reference to his familiarity with microscopical investigation, and, for aught we know, his microscopic impressions may be as indefinite as the word. He goes on to observe, in general terms, "that the microscope is a good and useful servant, but it has often been abused, and nothing has tended more to detract from its true value, and to place it temporarily in abeyance, than a too confident assertion of results, which subsequent and more careful observation has failed to confirm." He seems unfortunately to have forgotten, in his zeal to depreciate the most important instrument in histological inquiry, that the same argument is equally valid against the telescope and its results, and also against the use of our visual organs or any other of our senses, all of which are obnoxious to illusions. The illustration of the argument against the credibility of the microscope is highly curious. The reviewer, in lieu of citing by-gone instances of error in microscopic investigation, as is usual in such cases, treats us with what he considers to be a recent instance. "Our readers," says he, "may recollect that during the panic of the cholera in 1849, a gentleman from Bristol boldly announced his discovery, by means of the microscope, of

the actual entities that caused that fatal and previously mysterious disease. They were alleged to be a peculiar kind of fungus or microscopic mushroom, which floated in the infected atmosphere. He was unwilling to rest his statement on his own observation, and backed it 'by the opinion of so high an authority as would have great weight.' This authority is a letter dated from the 'Royal College of Surgeons,' and signed 'JOHN QUEKETT.' The more careful and skilful microscopic observations of Drs. Baly, Gull, and Busk, showed the true value of the statement and its certificate; the supposed cholera fungoid proved to be the common *Uredo fermenti*, a denizen, not of the air, but of our daily bread; and the Bristol discovery sank into the limbo of all hasty blunders." We do not envy the mental character and feelings with which the reviewer penned the foregoing passages, or the "hasty blunders" which arose from his imperfect knowledge of the subject on which he was commenting. We were not aware that the whole class of fungi might be accurately designated as mushrooms, nor can we find in any of the highest authorities on that division of the vegetable kingdom, any mention of the *Uredo fermenti*; even his own authority, the Report of the Cholera Sub-committee of the College of Physicians, refers to the plant as *Uredo segetum*, and it is much more probable, judging from the description, that the sporules were really those of *Uredo caries*. The reviewer has evidently shown great ingenuity in so constructing his account of what he terms a hasty blunder, as to insinuate that Mr. Quekett expressed the opinion, that the fungi were the entities by which cholera was produced; whereas, so far from expressing any opinion of the kind, Mr. Quekett simply stated his opinion, that the objects presented to him were successive stages of development of the same body, which he believed to be of a fungoid nature. Here is no reference to cholera, or the relation of the bodies observed by Drs. Swaine and Budd to that disease; and the reviewer is certainly not in a position to make an assertion to the contrary with regard to the nature of some of these corpuscles. But, even supposing that Mr. Quekett was on this occasion entirely in error, and that the whole of the bodies, with the exception of the sporules of the uredo, were not of a fungoid character, is one error, on an obscure subject with which few persons are at all acquainted, to be set against the beautiful observations made by him with the maligned instrument, and embodied in the Histological Catalogue of the Museum of the College of Surgeons, which we recently reviewed, and the numerous researches published by the same gentleman in the "Transactions of the Microscopical Society"? We answer emphatically, No; and we assert, without fear of contradiction, that although Mr. Quekett may be equalled, he is not surpassed by any man in England, in the use of the microscope, and the just appreciation of the structures revealed by that instrument.

The reviewer's real ground of quarrel with the microscope and its results, has, however, no reference to the connexion of the microscopic fungi and cholera, but wholly and solely to the interpretation of osseous structure; and, in this, only where the microscopic characters of bone clash with Professor Owen's preconceived ideas of the nature of the animal to which the osseous fragments had belonged. Here the opinions of Mr. Bowerbank, another eminent microscopist, as well as those of Mr. Quekett, are derided by the reviewer, and Sir Charles is called to account for the confidence with which he affirms the existence of the osseous remains of birds in the Stonesfield slate, on the authority of Messrs. Bowerbank and Quekett.

The old discussion concerning the bones from the middle

chalk strata, which Professor Owen decided to be those of a bird, but subsequent, we will not say more skilful, examination proved to be those of a species of pterodactyle, a gigantic reptile, is alluded to: in this case, however, even the reviewer has not the hardihood to call in question the correct decision of the subsequent observers; but consoles himself by drawing attention to the "easily recognisable and unequivocal characters" of the teeth of certain extinct animals displayed "in the last number (Part V. p. 237,) of his (Professor Owen's) History of British Fossil Reptiles," and follows up his eulogium on the microscopic knowledge displayed by the Professor with a long extract from that work.

Before we close this article, we must remind our readers that the microscopic discrimination of the bones appears to be equally good with other characters in the distinction of the class or order to which certain doubtful animals belong. There is one animal at least now existing, and presenting all its organs and parts to the scrutiny of the naturalist (the *Lepidosiren*) whose true position is a matter of fierce discussion; this animal being referred by Drs. Andrew Smith and Melville, and Messrs Gulliver and Quekett, to the reptiles, while Professor Owen as confidently asserts that it is a fish, of the order *Protopteri*.

We hope that our remarks will induce the reviewer to pause when inditing his next review, before going out of his way to attack others who may possibly deserve less reprehension than himself, and that he will in future restrain the expression of his opinions within the bounds of gentlemanly bearing.

THE GREAT EXHIBITION.

OBJECTS CONNECTED WITH THE THEORY AND PRACTICE OF
MEDICINE AND SURGERY.

[TWENTIETH AND CONCLUDING NOTICE.]

THE artificial nipples and catheters of flexible ivory, exhibited by Charrière, demand our approbation, from their softness and flexibility when moistened. The former resemble the ordinary ivory nipple protectors in shape; but the part representing the nipple is soaked in hydrochloric acid, until the phosphate of lime is removed, leaving only the animal tissue, which resembles horn when dry; but soon becomes soft when moisture is applied. We were informed that these nipple protectors are very durable, and that they may be in constant use for several months. The bougies are first made of a tube or cylinder of ivory, which is afterwards treated in a similar manner with hydrochloric acid, and allowed to dry. By drying, the animal tissue contracts to a very considerable extent, retaining considerable flexibility; but the greatest advantage of these instruments is, that when allowed to remain in the urethra for some time, they imbibe moisture, and increase in diameter, so as to serve as dilators of the stricture. Our instrument-makers will do well to introduce these instruments, and our surgeons to given them a trial, and ascertain their real merits.

M. Mathieu, of Paris, exhibits a smaller case of surgical instruments, in which, in addition to the ordinary amputating, trephining, lithotritic, and lithontriptic instruments, we observed the cephalotribe, of which we have already expressed our decided disapprobation, as a means of facilitating delivery. Obstetric forceps of the usual French construction, that is to say, much larger, longer, and thicker in the blades than those manufactured in England, embryotomy instruments, &c. The instruments for depression and extraction of cataract appeared to be well made; but, as we could not discover the exhibitor, we were unable to handle any of the contents of the case.

The Association des Ouvriers en Instruments de Chirurgie et Orthopédie, exhibit a number of instruments, most of them of the usual character, and well finished, but, so far as we could observe, without opening the case, none of a novel or striking character. Well-made instruments for

operations on the eye, saws of various kinds, including the bow-saw for amputations, lithotrites of various constructions; the cephalotribe, obstetric forceps, an artificial leg, and several forms of vaginal specula, attracted our attention.

M. Lüer, of Paris, exhibits a beautiful collection of instruments, in which he appears to be the chief rival of M. Charrière for novelty, ingenuity, and temper. In addition to all the ordinary instruments, our attention was particularly attracted to the following, of which a written description must necessarily convey an imperfect idea. The temper of his instruments for operations on the eye astonished us. He drew the edge of a cataract knife, which was beautifully finished, over the bone handle of a brush, and after having cut small pieces from it, the edge remained as perfect as before this severe test. We repeated the trial with the same knife with the same result. A couching needle was treated in the same manner, and even more roughly, but without injury. It has never fallen to our lot to meet with such instruments of English manufacture, although we were informed that the steel was obtained from Sheffield. Several exquisite little instruments were shown to us, the construction of which exhibited not only great ingenuity in design, but also workmanship of the first character. A pair of spring-scissors finely pointed for making artificial pupil, capable of perforating the cornea, and completing the operation by section of the imperforate iris; a pair of eye forceps of very novel construction, resembling the lithotrite in miniature, scarcely thicker than an ordinary couching needle, and pointed so as to perforate the cornea or sclerotic; the inner blade of which was pushed forward by a minute spring, on the principle of the bell-spring, and capable of grasping the capsule of the lens in membranous cataract, with sufficient firmness to tear it or a piece of the leather on which the instrument was tried; another instrument for making incision in the cornea, combined with the forceps already described, and an excellent speculum oculi, consisting of silver wire, which held the eyelids fully apart by its own elasticity, are worthy of particular especial attention. Dr. Blanche's tube for the stomach pump, to be passed through the nose in cases of mental alienation where the mouth cannot be readily opened, and the patient will not take food, with its articulated stilette, by means of which a sufficient curve is given for ready introduction into the œsophagus, is, we are of opinion, both an ingenious and useful instrument, as it enables the attendant to avoid the unpleasant necessity of forcing open the mouth by other instruments. The speculum oris, consisting of a circular hoop of silver, capable of being enlarged or contracted, according to circumstances, with a plate for depressing the tongue, and another plate bent downwards at a right angle towards the chin, must prove advantageous where operations are to be performed at the back of the mouth or in the throat. A chloroform inhaler of simple construction consists of a hollow cone, adapted to include the nares and mouth, and fit closely to the outline of the face, has two projecting tubes, the lower one to admit the air through a small piece of sponge soaked with the chloroform, and the upper to allow the exit of the expired air, each having a valve consisting of a small ball of light wood. We ascertained by trial that the respiration was perfectly unimpeded when the instrument is in use. A very narrow chain saw, of about a foot in length, consisting of very short joints, which may be bent in either direction, or at right angles to its plane, to a considerable extent, was furnished with a handle that could be adapted to any point in the entire length of the saw. A novel pair of bone-pliers, which we believe will prove of great utility in operations on necrosed bone, very much resemble a pair of tooth forceps in appearance, the blades are curved inwards and grooved, with cutting edges at their extremities, they are well adapted for removal of portions of the lower jaw, or of sequestra, or indeed any portion of deeply seated bone. Polypus forceps, adapted either for removal of nasal polypi, or for holding the tongue firmly during operations on that organ or the adjacent parts, consisting of two separate blades, with small fenestrated extremities, which may be introduced separately, and subsequently locked, are ingenious, and seem well adapted for the purposes for which they are intended. An instrument for reducing dislocations of the last phalanx of the thumb or fingers, differs from that of M. Charrière in the direction in which it grasps the last joint of the thumb. It is a pair

of forceps with powerful handles, the blades of which resemble a broad fork. Around each is fastened a band of webbing, having a layer of caoutchouc interposed. We ascertained that adequate firmness of grasp was obtained by this instrument. M. Lürer has also a tonsil guillotine, by which the part is excised by the knife movement instead of simple pressure of the blade. The instruments for tracheotomy are ingenious, and differ widely from any others we have inspected. The incision into the trachea is made by a pair of forceps curved at an angle near the points, which terminate in the shape of a lancet with a cutting edge. The curved portion being pushed into the trachea, the incision is enlarged by a knife edge near the end of the straight portion, to a sufficient extent to admit the canula, when the blades are allowed to separate, and hold the cut edges apart by their elasticity while the canula is introduced. The canula is of a conical shape, curved, and consists of two tubes, the smaller of which slides into the outer one, and is accurately adapted to it. The intention of this arrangement is, that, should the canula become clogged with blood or mucus, the inner tube may be removed, cleansed, and again introduced without disturbing the part. It is well known, that, when a powerful muscular effort of the arms is required to be made, the ribs must be fixed by strong inspiration and retention of the air by closure of the glottis. It is evident, that, with the ordinary canula, such temporary closure of the air tubes cannot be produced; but M. Lürer has invented a valve, by the assistance of which this can be effected without danger of impeding respiration. He states, that this form of canula is equally efficient in restoring the muscular efforts of horses on whom tracheotomy has been performed as a means of preserving life in cases of laryngeal disease. The inner blade of M. Lürer's lithontriptic instrument is propelled against the outer one by a lever and rackwork; but this arrangement does not preclude the employment of the hammer, should the latter be deemed necessary. An ingenious pair of forceps for removing broken portions of catheter from the bladder, consists of a straight canula, with a stilet, having at its extremity a pair of forceps, by which the broken catheter is seized, and, by the peculiar curve of the blades, is brought into a parallel line with the stem of the instrument, and easily withdrawn. Another instrument for withdrawing broken portions of elastic catheter from the urethra, consists also of a straight canula, and a stilet terminating in a conical screw. The canula is introduced down to the broken catheter, the stilet rotated until the catheter is entangled by the screw, and the whole withdrawn. Whether this instrument has been successful in practice, we were not informed. A urethral dilator of peculiar construction, the exact nature of which we are unable to describe with accuracy, is among M. Lürer's instruments; also a pair of forceps for grasping hæmorrhoids, while excision is performed, the bleeding being controlled by Vienna paste, or the actual cautery. M. Lürer's modification of Vidal's small ligature forceps for holding the cut edges of incised wounds in apposition, is made of silver wire, possessing sufficient elasticity to afford a firm grasp, and, at the same time, permitting some recession of the edges if inflammation and tumefaction should supervene. He has also an instrument for grasping the prepuce in the performance of the operation of circumcision. The portion of the prepuce to be removed is first included between the blades of the instrument, which are double; it is next cut away by a single stroke of the knife. One of the blades is then removed, the other holds the edges in apposition, while several of Vidal's ligature-forceps are applied. The instrument is afterwards removed, and the retraction of the edges of the wound prevented. We must notice an instrument for ligaturing deep seated arteries, which consists of an aneurism-needle of the ordinary character, into the eye of which a crochet-needle is projected, which, when retracted, brings with it the ligature. The instrument acts well. His porte-aguille is a pair of forceps, with a groove for receiving the needle or pin in operations where the figure-of-8 ligature is necessary, as that for hare-lip; and another pair of forceps, for applying ordinary ligatures to arteries, has the extremity of a conical shape, so that the ligature, when tightened, necessarily slips over the blades of the forceps to its proper destination.

M. Flamet and M. Leperdriel, of Paris, exhibit elastic laced stockings; MM. Carteaux and Chaillou, anatomical models in embossed leather, which we were unable to find; MM. Grossman and Wagner, bandages of caoutchouc; M. Cabriol, a large assortment of pessaries, bougies, and cathe-

ters, of gutta serena; M. Darles, sucking bottles, artificial nipples, and enema apparatus; and, to show that quackery is rampant in France as in England, an exhibitor, whose name we do not desire to record, obtrudes on our view metallic clasps of iron, copper, and brass, which he has the impudence to assert will cure a host of nervous affections, hysteria, chorea, and almost the whole class of affections peculiar to women, who are manifestly more easily deceived by absurd pretensions than the other sex.

From the new French colony, Algeria, we have crystallised salt; tous-les-mois, from the canna discolor; opium and poppy capsules, saffron, and olive oil.

The specimens from Prussia are somewhat more interesting than those of most of the Continental States, with the exception of France. Among the chemical specimens are ferrocyanide of potassium, in better crystals than others from the Continent, but still much inferior to the British productions; potato starch and sugar, and sugar from beet-root. M. Herman has some interesting specimens; the more remarkable are many ounces of potassium and sodium; a beautiful specimen of glacial phosphoric acid; good specimens of nitrate of baryta and strontia; protochloride of tin; sesquisulphate of alumina; peroxide of tin; black oxide of copper; hyposulphite of soda, the bromides of potassium, sodium, and hydrobromate of ammonia; a fine specimen of succinic acid, cyanide of potassium; acetate of lime, apparently pure, and chloroform. Pauli has a beautiful specimen of phosphorus in nearly white, waxy, semi-transparent cylinders; and near it were placed a number of bars of cadmium, and what is stated to be crystallizable creosote, in small prisms, but how prepared we were unable to ascertain. We were much disappointed at the absence of specimens of porcelain chemical apparatus from Berlin and Meissen, which is so highly prized by analytical chemists for the durability of its glaze under the influence of acids and alkalies, and the infrequency of fracture by sudden changes of heat. An English manufacturer of Worcester is now turning his attention to this kind of porcelain with great success; the only drawback is the expensive character of the vessels, although their greater durability compensates, in great measure, for their dearth.

We saw no philosophical apparatus or surgical instruments of sufficient importance to demand notice, nor are any such mentioned in the official catalogues.

Bavaria contributes specimens of the extract of quercus cerris, an astringent substance, more interesting to the dyer and tanner than to the pharmacien; plumbago crucibles, and electro-magnetic apparatus.

Saxony,—an electro-dynamometer, for measuring the intensity of galvanic currents. Luxemburg and Nassau—absolutely nothing. Greece contributes a piece of native sulphur and carbonate of magnesia. Holland, animal charcoal, and a delicate balance, by Becker, of Arnheim. Lubeck nothing. Mecklenburg, an apparatus for distillation. Mexico, nothing. New Granada, tapioca and nutmegs. Oldenburg, nothing. Persia, nothing. Rome, four blocks of native alum.

Magdeburg sends, besides some specimens of ores and minerals, oxide of zinc; the iron alum, sesquisulphate of iron and potass, ferridcyanide of potassium, some of the more common salts of potass, soda, and baryta; iodine bromine, sulphuret of carbon, salts of tin, copper, and bismuth; hydrate of potass, biniodide of mercury, metallic cadmium, glacial phosphoric acid, gallic and succinic acids, and chloroform from the Royal Prussian Chemical Manufactory; specimens of beet and grape sugar from other contributors, and some chemical pottery.

Wurtemberg exhibits only creosote, iodide of potassium, and sulphate and other salts of quinine.

Frankfort-sur-le-Maine sends creosote, what is termed "rectified cognac oil," and crystallized chinoidine and its sulphate from yellow bark.

In the collection from Hamburg we find only one specimen of any interest, a form of pessary for prolapsus uteri of old standing. The inventor, Dr. Zwanek, states, that he has employed it with complete success in the worst cases, even where the perinæum had been ruptured, and all other forms of pessary had been unsuccessfully tried. This instrument consists of two parts, crossed somewhat like the letter X, with the most prominent part of the convex sides attached by a hinge-joint, so that when the lower parts are brought together the upper portions are separated. Above the hinge the limbs are broad and fenestrated, and so curved as to form a support for the uterus, while at the apex of one of

the lower portions is a screw, by which it can be fixed to the corresponding lower portion of the opposite blade, and the upper portions retained separate. When about to be used, the upper fenestrated portions are approximated and introduced into the vagina, after which the lower portions are brought together and fixed in position by the screw.

Portugal sends chiefly its natural productions, with some chemical preparations. The latter are of the most common description, consisting of the sulphates of copper, iron, soda, zinc; nitrates of potass, baryta, strontia lead; chloride of lime; carbonates of soda and lead, and some others not worth enumerating. The natural productions are olives and olive oil, palm oils, raw, white, and red tartar, or impure bitartrate of potass, the pure salt, and some essential oils.

Madeira exhibits castor oil seeds (*ricinus communis*), arrowroot, and cochineal.

Spain is even more uninteresting than Portugal. The only objects worthy of a passing remark are barilla, or the ashes of fuci, a substance of great importance before the modern method of manufacturing carbonate of soda from common salt was discovered, but now of little value; alum, bitartrate of potass, sulphur, and nitrate of potass. There are also collections of medicinal plants, olives, liquorice-roots, sarsaparilla, squills, gentian, digitalis, belladonna, polygonum, bistorta (roots); the flowers of *arnica montana*; leaves of *arbutus uva urei*; aconite, *cetraria islandica*, and *sticta pulmonacea*, both lichens, and some others of no importance. There are also an orthopædic apparatus and artificial teeth.

Schleswig-Holstein, Sweden and Norway, and Switzerland, exhibit absolutely nothing, and Tunis only a few unimportant substances. From Tuscany we found only specimens of sulphate of quinine, santolin, and boracic acid.

The contributions from the United States are of a very meagre and uninteresting description, the chief of them being artificial teeth, which are extremely numerous, and dentists' instruments; a compound microscope of enormous size, and we should say extremely inconvenient to use; some samples of powdered drugs, a collection of dried specimens of American plants, and an ingenious artificial leg.

From Cologne we have alum, chloroform, sulphuric ether, acetic acid, ferrocyanide of potassium, hydrochlorate of ammonia, phosphorus, and a few other chemicals of no importance; potato starch, and some trusses and bandages.

Dusseldorf sends some chemical productions, among which we noticed common salt, ferro- and ferridecyanide of potassium, bromine, and several of its compounds, from the mother ley, of the salt-works, near Minden; alum, sulphate, carbonate, and caustic soda. M. Sup, of Warburg, exhibits a large thermo-electric battery, and some electro-magnetic apparatus; and M. Seel, pharmaceutical apparatus of the ordinary character.

The specimens from the Grand Duchy of Hesse are only chemical preparations, among which are the alkaloids from cinchona, pure creosote, crystallized creosote(?), hydrochlorate of ammonia, dextrine, and starch sugar.

From Sardinia we find chemical preparations only; sulphuric, nitric, and hydrochloric acids; sulphur, alum, sulphates of copper, iron, and magnesia; nitrate of baryta, carbonate of soda, sulphate and citrate of quinine, gallic acid from chestnut-wood, copaiba capsules, and some few other matters unworthy of detailed notice.

The specimens from Russia are equally uninteresting. We have, as before, a few chemicals of the most common character.

In taking leave of the Great Exhibition, we must record the intellectual gratification we have experienced in the study of the substances and inventions necessary for the production of the series of articles published in this journal. We entered on the task with considerable diffidence of our powers of description; but we hope that when our readers have taken into account the extensive range of scientific information required to embrace all the objects of medical science, they will not feel disappointed with the results of our efforts in recording the contents of this wonderful collection. In our survey we have inspected many things, especially in the chemical department, which we had never had an opportunity of examining, and a very large proportion of finer specimens of ordinary products than are to be seen in the collections of individual institutions. We sincerely hope that the exhibitors of chemical products will liberally respond to the call of the Chemical Society, and that each will contribute to the formation of a permanent Chemical Museum in London.

REVIEW.

Reasons for Embracing Homœopathy.

By CHARLES RANSFORD, M.D. Edin. Pamph. 1851.

If anything could make a homœopathist blush, it would, be the character of those by whom their ranks are recruited. Men, utterly unknown to fame, achieve a temporary notoriety by the change, and show little anxiety either for present or future reputation, provided only they can make a short-lived sensation. We take up this very silly pamphlet, not truly with any hope of deriving either instruction or amusement from its pages. We introduce its author to our readers, not as a pattern to imitate, but as an example to deter; and as his whole character and conduct seems a summary of what should be avoided, an inquiry into them may possess a negative value which it might not be easy to estimate.

In the whole public conduct of this man, we have a series of inconsistencies and contradictions. Having ingratiated himself with some of the leading men in the Profession at Edinburgh, by arts against which the best are not proof, he got admitted into various Societies, and even held situations of trust. Why was it, that with these opportunities he never made a friend?—and why was the news of his secession from the Profession received in Edinburgh with contempt rather than regret? Why was it, that, notwithstanding exertions most strenuous, he never secured any amount of practice? And how came it, that, notwithstanding this lamentable destitution, he always boasted of great success almost to the very hour when the effort was abandoned in despair?

Dr. Ransford commences his pamphlet with the following characteristic words,—“The writer of this paper having been known.” “Known!” not certainly beyond the somewhat circumscribed medical circles of Edinburgh. “Known!” not assuredly for professional acquirement or acuteness of intellect. What did he ever do for the Profession which now repudiates him? What proof of his knowledge did he ever give, what evidence of his skill has been recorded? Good faith and folly have so long been received as convertible terms, that, but for strong evidence to the contrary, we could almost suppose him sincere in his conversion. But so well known does he suppose himself to be, that “he thinks it a duty to give his reasons for thus changing his opinions and practice.” When Dr. Ransford professes to give reasons for any act, he surely must have strangely mistaken the extent of his capacity. But a sense of “duty” urges him; let us, then, be lenient, for it is evident that a reliance on his moral character has betrayed him beyond the depth of his understanding. Is he a sincere, a reluctant convert? Alas! it has come out that this is not his first tampering with quackery. He was proposed to take charge of a hydropathic establishment. Supposing that the expected vacancy had occurred, and the terms suited, would he have been equally ready with “reasons for embracing” this other heresy? Or would the same reasons have done for either? Or is the real reason, which suggested first the one and then the other, still kept back? We do not condescend to examine the gossip of the Edinburgh medical circles, which he professes to detail. If correct, it says little for the boasted science of Modern Athens; but as we have no means of judging of its truth but by the character of the witness, we are inclined to regard it as apocryphal, like many other tales from the same source.

Pass we on, then, to the facts of his alleged conversion. “These circumstances led him to the determination of secretly testing the monster, and of publishing the results of his trials.” (a) Dr. Hall advised him “to select for trial acute cases of disease.” (b) “His patients were ignorant of his proceedings, and did not suspect any deviation from ordinary practice.” (c.) Have we quoted enough to stamp the palpable dishonesty of this man's proceedings? Do our readers see how completely his moral sense is blunted? Are they willing, after such confessions as these, to consider any of his evidence as worthy of credit? Here is a man, whose moral sense will not suffer him to cover his folly by silence, but forces him to expose himself in print, treating cases which he himself informs us “are, by consent of all authorities, treated by bleeding, either general or local,” by

(a) *Reasons*, &c., p. 11.(b) *Ibid.*(c) *Ibid.*

the infinitesimal doses of homœopathy, and this "*secretly*," and keeping his "patients ignorant of his proceedings." We certainly have one excuse for him, that on looking over his cases there is not one which, in our humble opinion, required or would have justified bloodletting. We must here supply some facts in which the narrative of Dr. Ransford is deficient, and which cause his singleness of mind and disinterested character to come out in high relief. Invited by certain parties at York to transfer himself there as a homœopathic practitioner, and having rapidly convinced himself of the efficacy of the new system, (how far had he previously advanced in the belief of hydropathic?) and, therefore, of the errors and dangers of the old, and still keeping his conversion "*secret*," he actually strained every nerve to dispossess of his practice at Alnwick, and, for a consideration, to introduce to his patients there a murderous doctor of the old school.

Nor is this all, for we are informed, on undoubted authority, that, although convinced of its pernicious effects, he consulted his purse and convenience by practising the regular system up to his leaving Alnwick; and, the very next morning, coming forth a full-fledged Professor of homœopathy at York.

And this is the man for whose conversion Io Pæans swell the homœopathic camp! This is the man whom the College of Physicians of Edinburgh having first conferred on him a notoriety he would never otherwise have achieved, repudiate, but dare not expel! Has the "reasons" obtained admission to their library, or do they seek to ignore its existence? Do they endorse as true the alleged tea-table gossip which it professes to record? Or, do they feel that this man, having injured their character, insulted their understanding, contemned their indignation, and despised their authority, should, with summary justice, be hurled from the position he has usurped. Has so pregnant an example no warning voice for other corporate bodies nearer home? Is the Edinburgh College the only one which cherishes in its bosom vipers which may hereafter sting? Are Scotchmen the only men who can be brought to sacrifice their consciences for gold? Let the Royal Colleges of England look at home! Sever at once the connexion with all who have touched the unclean thing! Let them not hereafter taunt you with honours conferred which they have disgraced, or with situations of trust bestowed which they have degraded!

Examining, then, the cases which this man has published, and on which he professes to found his conversion to homœopathy, we meet with some singular results.

On the first case we have already commented, and shown, that the alternate administration of two medicines at intervals of a quarter of an hour, is against the decided rules of Hahnemann, and opposed to all his experience. The same remarks apply to the second, where we find "tinct. aconiti and bryoniæ, one drop of each, was ordered to be given alternately every half an hour." (a) The third is alleged to have begun with bronchial irritation, fever, headache, and spasmodic cough. Aconite and tinct. bryoniæ were given apparently without benefit, and in two days "hooping-cough was fully developed. Tinct. of nux vomica was now prescribed in drop doses; this had a marked effect on the character of the cough." Now, let our readers bear in mind, that, according to Professor Henderson, the homœopathic law is, "that the substance which produces in the healthy a resemblance of the disease, will cure it in the sick," (b) and, with this before them, let them refer to "Jahr's Manual." What one symptom is there recorded, under nux vomica, which resembles hooping-cough, one whit more than it does any other affection of the chest? Is it the difficult and short respiration, the asthmatic constriction and oppression? That resembles other diseases much more than it does hooping-cough. Is it that, during an asthmatic paroxysm, *this medicine* is alleged to render all tight-fitting garments insupportable over the hypochondriac? We need scarcely answer, No. The great characteristic of hooping-cough,—that which alone distinguishes it from every other disease, and which has given it its name in every country where it is known, is the peculiar stridulous cough; as yet, homœopaths have not pretended that nux vomica, taken to any extent by a healthy man, can produce any resemblance to that; and we challenge Dr. Ransford and every other homœopathist to prove that it

can. Do they believe that it does? Have they ever seen it have such an effect? Never. Why, then, do they administer it in hooping-cough? What power has it of producing in the healthy a resemblance, however faint, to *that* disease? If it does cure it, it must be in virtue of some other law than "*similia similibus curantur*." Those who think the testimony of Dr. Charles Ransford of any value, may believe that he cured hooping-cough in ten days by nux vomica. It may be true, but let him not boast of it as a homœopathic cure. Nux vomica has no power to produce a similar disease in a healthy patient.

The fourth case recorded is singularly instructive, as illustrating a cure by the old system attributed to homœopathic remedies simultaneously exhibited, and displaying, at the same time, the profound ignorance of Dr. Ransford of the science of medicine, and his inability to reason correctly on the plainest premises submitted to him.

A child thirteen months old is seized with a fit. Dr. Ransford being called in, finds the gums swollen from the presence of molar teeth; he very properly scarifies the gums, and applies cold to the head; the convulsions only return once, and the child is cured. The case thus read is nothing extraordinary, but is one of every day occurrence. But it so happened that, along with this judicious treatment on which Dr. Ransford seems to have accidentally stumbled, he gave tinct. belladonna one drop, and subsequently tinct. ignatiæ one drop, tinct. coffee one drop. It was these potent remedies, and not the scarification of the gums and the cold applications, which, according to Dr. Ransford, accomplished the cure. But this publisher of "reasons" has a reason for his strange belief, and actually wishes to deprive himself of the credit of the only example of judicious treatment which his pamphlet contains. "The teeth did not pierce the gums for several weeks afterwards, so that very little, if any, benefit could have arisen from the scarification." Indeed! most learned Examiner of the Royal College of Physicians of Edinburgh! Have you never been informed by any of the candidates who have passed before you, as to the various ways in which scarification may be useful? Your college has a library, we understand,—Did you ever hear of Dr. Marshall Hall? Consult his "*Observations in Medicine*," Chapter V., entitled, "*On the Motives for Scarification of the Gums during Dentition*;" (a) and you may perchance discover that once you accidentally saved the life of a child by appropriate treatment, and yet in your ignorance denied the efficacy of the means you unwittingly adopted!

But why need we weary our readers by dwelling longer on these absurd cases,—absurd to be recorded at all,—and doubly absurd when considered as "*Reasons for Embracing Homœopathy*." A child is seized with pain in the stomach, from "*eating early greens*." Nature *relieves* him by vomiting, but Dr. Ransford *cures* him thereafter by one drop of tinct. chamomile.

And now, having considered these "*Reasons*," and putting aside for a moment what we believe to be the *real* reason of Dr. Ransford's conversion, we ask, Is this evidence on which regular medicine is to be superseded by the mysterious jargon of homœopathy? Among all Dr. Ransford's cases, we seek in vain for one in which a single disease was cured by a remedy unequivocally possessing the power of producing a similar disease in the healthy.

Homœopathists allege, that we attach little credit to their cures; and this is not difficult to understand. For example, few non-professional persons but know something of chamomile flowers, an infusion of which is one of our simplest and mildest bitters, and one constantly employed in domestic practice. Take an honest countryman, who has frequently employed it in this way, and tell him that a great philosopher, a prodigy of genius, one Hahnemann, had discovered that it produced catalepsy and epilepsy, paralysis and tetanus, a

(a) We have only room for the following short extracts from the chapter referred to. "Dentition is obviously, then, attended with extreme suffering to the little patient; the brain is irritable, and the child is restless and cross; the gums are tumid and heated; there is fever, an affection of the general vascular system, and there are too frequently convulsions of various degrees and kinds manifested in the muscles which move the eye-ball, the thumb and finger, the toes; the larynx, the parietes of the respiratory cavities, and the limbs and frame in general. * * * Can the mere tension and irritation of the gum situated over the more prominent part of the teeth be the cause of such extensive morbid actions? I think not. * * * It is to the base of the gums, not their apex merely, that the scarification should be applied. The most marked case in which I have observed the instant good effect of scarification, was one in which all the teeth had pierced the gums. * * * Before the teeth actually reach the borders of the gums they may prove the source of much irritation."

disposition to weep, and other lamentations; with great readiness to take offence, aversion to being spoken to and interrupted, and taciturnity and repugnance for conversation,"(a) he would gape for a moment with silent wonder, and then greet your information with a loud guffaw. Dr. Ransford! do you believe that eating common salt produces palsy, continual shivering, hatred of those from whom injuries have long been received, weakness of the memory and excessive forgetfulness, falling out of the hair and beard, squinting, partial blindness, warts upon the palms of the hands? Hahnemann says it does,(b) do you believe him? You do! Then you are further sunk in folly than even we had imagined. You don't! Then, why expect us to believe you? Do you know that Hahnemann admits, that many diseases, and these the most marked in their character, cannot be treated homœopathically, and are rapidly cured by regular medicine? Perhaps you do not;—we shall try then to teach you your own science. Why is it, that, as one of your disciples confesses,(c) in asphyxia and syncope, "when the power of re-action is almost destroyed, it is necessary to have recourse to speedy stimuli,—stimuli which cannot be afforded by homœopathic medicine?" Why is it, if the homœopathic law be true, that Hahnemann observed that chronic diseases treated homœopathically, even in the best manner, re-appeared, after having been frequently seemingly cured, and each year with a perceptible increase of their intensity?(d) You say, "it would occupy too much space to give details of many chronic cases, in which I was satisfied of the superiority of the homœopathic practice."(e) How are you able to do that which your master failed to accomplish? Do you believe, with Hahnemann, that the power of all medicines increases with their dilution? Try it with gin, or coffee, or tea. Ah, we forget these were specially exempted by the great philosopher from the operation of his law. Why? Because, had he made such an assertion in regard to them, the whole world would have laughed him to scorn. Perhaps you believe with him, that the power of a remedy is vastly developed by trituration; have you considered how much of the hardest mortar must mix with it in such a process, having its latent powers developed in the same "tremendous manner"?(f) Have you consulted Jahr as to the fearful effects of silica thus mixing and administered? What incredible sufferings must not patients so treated have endured?—"swelling and inflammation of glands," "aggravation of all symptoms at full moon," "uneasiness and bad humour on the slightest provocation," "weakness of memory," "epileptic fits," "spasmodic closure of the eyelids." Pardon us, Dr. Ransford, we can no longer peruse the melancholy catalogue,—ours is not a heart that willingly can contemplate such abject misery. But perhaps you prefer the tinctures? Can you tell what the alcohol with which they are made does in the system? or, why it does not operate at least as powerfully as the drug with which it is combined? How many "succussions" do you consider best? Or, how do you prevent a fearful increase in the power of your medicines by the shaking to which they must be subjected between their first preparation and their being swallowed by the patient? Hahnemann says, that every two succussions which a medicine receives gives one development of power? Oh, be careful, we pray you. What fearful consequences may be entailed on your patients by a quick step, a sudden jump, or a hasty spring on the part of the boy who carries these powerful remedies to them! We once saw a doctor's boy play at leap-frog without putting down his basket! How thankful we are that we did not then know the momentous consequences that hung on this issue. Ponder well this pregnant advice of the old sage Hahnemann:—"There are, however, homœopathists who carry about with them on their visits to patients the homœopathic medicines in the fluid shape, and who assert that they do not become more highly potentised in the course of time; but they thereby show their want of ability to observe correctly."(g) Observe this, and then may your patients rejoice in your elastic tread, and you may rush through the streets of York with the precipitancy of a man whose minutes are of gold.

(a) Wood's Homœopathy Unmasked, p. 14. et seq.

(b) Ibid, p. 14, et seq.

(c) Black's Principles, p. 163.

(d) Ibid, p. 109.

(e) Reasons, p. 19.

(f) See this argument well put in the *Chemical Record* of July 19 and August 2.

(g) Organon, cclxx, foot note.

In conclusion, we cannot but congratulate the Profession that a man of your stamp has voluntarily withdrawn from its ranks, and severed the tie that united him to its members. You have chosen well and wisely. Each revolution develops men for various services; that of France had its Anacharsis Clootz; that of medicine has its Ransford. You may not dispute with Quin the right of being kicked by nobility, like an inflated bladder; nor with Macleod that of sitting in the bar of a fashionable hotel; but in the restoration of mediæval times and mediæval ignorance, which so many are labouring to accomplish, you may play a distinguished part; an old office may be revived, and the motley garb may again be seen, and the tinkling of cap and bells be heard, in the cloisters of old Eboracum, as the pageantry of Rome sweeps by. Meanwhile, you will reap the reward of dishonour in those golden bribes that were your strong temptation, and should some new delusion seduce the ignorant from their present idol, you are not the man to occupy the leisure that may then oppress you by vain recollections of the greatness of your fall, or useless regrets at the degradation in which you grovel.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM JOURNALS.

EPILEPSY OCCASIONED BY IRRITATION IN THE SOCKET OF A TOOTH.

By WILLIAM BALY, M.D.

THE patient, Thomas Bell, aged 45, had been employed for six years and a half as a warder in Milbank Prison. He had never been subject to headache, fits, or other nervous affection. In the month of August, 1850, he was sent, in charge of convicts, from Milbank Prison to Shorncliffe Barracks Prison, near Folkestone. On the evening of the 4th November, he requested Mr. Chatfield, the surgeon of the latter prison, to remove a tooth which had been painful for some days. But, on account of want of light, and the decayed state of the tooth, which was the second upper molar of the right side, Mr. Chatfield declined extracting it until the next day, and, at the time, merely applied strong nitric acid. The pain in the tooth ceased, and the patient thought no more of it. But, on the 6th November, he felt twitches in his right cheek, succeeded by inability to speak and to open his jaws. These spasmodic attacks recurred three or four times on the 6th, and again on the 7th, when they became more violent than before; insensibility followed, and a strong convulsive fit, which lasted half an hour. A second and a third fit occurred the same night. They had all the characters of epileptic seizures, with more marked distortion of the right than of the left side of the face. The next morning the tooth was extracted, and, with it, a piece of bone lying between the fangs, and firmly united to them. There was no renewal of the fits until the 7th of December, after the patient's return to London. On that day he felt twitches in his right cheek as before, and became aware of something projecting from the socket of the extracted tooth. With his finger he pulled out a piece of dead bone $\frac{1}{4}$ inch long, and $\frac{1}{6}$ inch broad: some "matter" escaped at the same time. The same night he had an epileptic seizure, which, after an interval, was followed by another, in which he was seen by Mr. Hunt of Tachbrook-street. Mr. Hunt noticed that the spasmodic twitches began in the right cheek, visibly extended over that side of the head and neck, and thence to the whole body; the right half of the body being more strongly convulsed than the left. On the following day, the 8th of December, when Dr. Baly first saw him, the sleep or stupor which had succeeded to the fits had passed off, and, with the exception of a sense of heaviness in the head, and a dull pain in the forehead, no symptom of cerebral or nervous disorder remained. A sixth fit occurred the same night. The next day the jaw was examined, and a large open cavity found, from which the tooth, and, subsequently, the piece of bone had been drawn. The gum around was slightly tumid, and the alveolar process was felt within the cavity bare, but apparently not dead. A slight puriform discharge from the cavity existed. From this time the opening in the gum diminished in size, and the fits did not return until the 22nd of

February, when the seventh, and last seizure took place, preceded for about ten minutes by the usual warning symptoms. On the 24th or 25th of February a particle of bone nearly detached was removed from the opening in the gum. The opening soon afterwards closed; the part has remained sound, and the patient has since enjoyed undisturbed health.

After remarking on the comparative rarity of such cases, on the certainty, that, in this instance, epilepsy, with all its essential characters, was caused by irritation of a filament of the fifth nerve, and on some questions of physiological interest, Dr. Baly directs especial attention to the complete accordance of the phenomena of reflex movement which preceded the fits with those observed in experiments on animals, or in paralysed parts of the human body, more particularly in respect of the gradual extension of the spasmodic movements. He thinks this fact may be susceptible of application in the diagnosis of the cause and treatment of some cases of epilepsy. Dr. Watson had remarked, that the observation of the seat of the first spasmodic movements, and the warning "aura" in epilepsy might sometimes lead to a knowledge of the irritating cause, and the cure of the disease. But the seat of the precursory spasms is not a certain guide to the cause, since these spasms may arise, not from the reflected influence of an irritation seated in the same part, but from an irritation in a distant part of the body, or even from a general or centric cause. In the latter cases the locality of the precursory spasms, or *aura*, seems to depend on a peculiar excitability of the particular portion of the nervous centres, which presides over the affected nerves and muscles; this excitable part of the brain, or spinal cord, being the first to re-act under the influence of any distant or general irritation. The probable pathology of this class of cases is illustrated by the analogous local spasms of frequent occurrence, such as laryngismus stridulus, and temporary wry-neck in children, of which two cases in children of one family, seen by Dr. Baly, depended on different eccentric irritations. These spasmodic affections, and those due to eccentric irritation in the affected part itself, may often be distinguished by the following characters:—First, spasms, the seat of which is determined by special excitability of the corresponding portion of the nervous centres, usually affect one or other of the parts known to be liable to spasms from various causes,—namely, the larynx, the muscles closing the jaws, the neck, the two hands, etc.; while spasms depending on an eccentric irritation in the part itself, do not, by preference, affect these localities. Secondly, spasms of the latter class, arising from immediate excito-motory action, commonly commence in parts having a normal anatomical and physiological connexion with nerves much exposed to irritation, such as those of the teeth and alveoli, or involved in wounds, cicatrices, or tumours; while the locality of spasms of the former class is of course independent of such circumstances. But it sometimes happens, that the spasms arise in a part which is liable to be so affected from various causes, eccentric, centric, and general, and is, at the same time, in the particular case, the seat of a probable or possible cause of irritation and excito-motory action. Here a third mode of distinction might be found in the characters of the precursory spasms themselves, if these were carefully investigated. In the case of the warder at Milbank Prison, it was a striking feature, that the convulsive movements, beginning in the muscles of the right cheek, extended gradually to those of the tongue and jaw, and thence to the side of the head, face, and neck generally, before they affected the whole body, and were even then stronger on the right side (the side of the irritation) than on the opposite side. In a few recorded cases of analogous nature, the same character (gradual extension) of the spasms is mentioned. And a little consideration leads to the inference, that local spasms ought generally to possess more or less of this character when they result from an eccentric irritation, acting on healthy nervous centres, and producing, in accordance with physiological laws, reflex muscular movements in the part with which the irritated nerve has normal relations. If such be the case,—if spasms arising from irritation in or near the affected part commence constantly in the same muscle, or limited group of muscles, extend gradually to other muscles, in the order of their contiguity, on the same side of the body, in consequence of the excito-motory influence conveyed to the nervous centre extending progressively to motor nerves arising from the next contiguous parts of the same lateral half of the spinal cord or brain,—this is a distinctive cha-

acter; for the more common local muscular spasms of different origin have not that character.

How far these distinctions are applicable as means of diagnosis in epilepsy, must be determined by future observations; but Dr. Baly believes that, when the history fails to indicate the cause of the disease, and when local spasms usher in the fits, the characters described will afford some aid towards determining whether the cause is to be sought in the part affected by the spasms, and relief attempted by the removal of a possible cause of irritation, seated in or near that part.—*Medical Gazette*.

VOLUNTARY ARREST OF THE PULSE.

Müller states that, by taking a very prolonged inspiration, we can, for a short time, arrest the radial pulse. Dr. Kloz observes, that, whatever effort we may make, this does not always result, and the pulse can only be arrested at any time in this way for a few beats. In a far less painful manner, however, we can arrest it in one or both arms, for as long as we like. To this end, we have only to throw the shoulders forcibly backwards and downwards. The explanation of this consists in the action of the cellulo-fibrous expansion of the cervical fascia, and of the aponeurosis of the subclavian muscle, which, attaching the vein to the posterior surface of the clavicle, stretches over the subclavian artery. By the above position this fibrous layer is rendered tense, and the artery compressed to the great diminution of its calibre. Such a position of the shoulders enables us, Dr. Kloz adds, in wounds of the arteries of the upper extremities, to temporarily arrest or diminish the hæmorrhage. By it, too, the depth of the cavity in which the artery is placed is diminished, and its compression, or tying, facilitated.—*Medicinische Zeitung*.

ON THE EMPLOYMENT OF THE RHAMNUS FRANGULA AS A MILD APERIENT.

Much attention has of late been paid in Germany to the substitution of an indigenous (here as well as there) plant as a valuable and cheap substitute for some of the aperients now in use. It is the cortex of the rhamnus frangula, or alder buckthorn. Dr. Gumprecht, of Hamburg, called attention to it several years since, and he now publishes the results of subsequent inquiries. The Bavarian Government has ordered an official investigation to be made into its properties, and the reports are very favourable; while the Faculty at Munich has adjudged a prize to Dr. Binswanger for an elaborate essay on its chemical and pharmaceutical properties, now publishing in *Buchner's Repertorium*. Dr. Gumprecht's own experience, confirmed now by that of many other practitioners, has led him to consider this bark as a most valuable laxative in that numerous class of diseases which arises from increased abdominal venosity in the hyperæmic condition of the liver and spleen, and especially in hæmorrhoids and hæmorrhoidal congestion, and the cerebral and spinal affections often dependent upon this last. In icterus, dependent upon congestion or infarction of the liver, no better remedy exists. It acts as a mild laxative, producing soft stools, so as to be almost a specific in hæmorrhoids, and much superior to sulphur; while in other abdominal affections, in which rhubarb and aloes are accustomed to be employed, it acts with less irritation. Its aperient effects may be quickened by the addition of neutral salts, and it does not produce the griping which senna gives rise to.

Binswanger, in his experiments on man and animals, found it directly influenced the secretions of the liver, especially indeed acting upon this organ and the portal system. The inner cortex has a bitterish taste and yellowish colour, which Binswanger found to depend upon the presence of a bitter, resinous, non-drastring matter and a peculiar colouring matter, which he calls *rhamno-xanthin*. It contains, also, a mild astringent, not identical with tannin. The rhamno-xanthin was found in the blood, and in the bile of animals to which frangula had been given. From the above account, and observing its effects, he regards it as a tonic resolvent, acting especially on the liver and portal system.

The fresh cortex is not to be used, as being uncertain or violent in its effects, that which has been kept at least a year being preferable. If given in infusion it sometimes causes vomiting, and the decoction has been found the best and simplest way of preparing it, although the tincture and

watery extract are very efficient preparations. The decoction may be prepared with \mathfrak{zss} to $\mathfrak{z}\text{i}$. of the cortex to $\mathfrak{z}\text{xii}$. of water, boiled down to $\mathfrak{z}\text{vj}$., the strength depending upon the condition of the patient, duration of the disease, etc. So, too, the dose of a tablespoonful may be given every two or three hours, or two or three times a day, according to the state of the bowels and system in general. To be efficacious in chronic cases, it has to be continued for a long time, and benefit may be derived by adding laxative salts or cortex aurantii to the decoction, according to circumstances; the former being indicated if a hypersthenic state of the system is present, and the latter, or more stimulating tonics under opposite circumstances. Where much flatulence is present, a little acidulated carbonate of soda should be taken two or three times a day. Diet and regimen, of course, require attention; but there is one article of diet, the carrot, which seems remarkably to assist the beneficial action of the frangula. It may be given in soups or eaten as a vegetable, or a cold concentrated infusion may be prepared, by letting a small quantity of cold water stand over finely scraped carrot (a little parsley root added much increases the palatableness) for twelve hours, and after pressing off the juice and sweetening this with sugar, employing it as a drink, with water, at intervals.—*Casper's Wochenschrift*.

DIVISION OF THE INNER AND MIDDLE COATS OF THE CAROTID IN HANGED PERSONS.

Dr. Kloz relates the case of a soldier who was found suspended, by means of a leather strap, from so low a place, that he must have kept his legs strongly bent in order to avoid touching the ground; the least movement would have, in fact, been sufficient to prevent strangulation succeeding. About half an inch below the larynx, a sugillation of two or three lines in breadth had been produced by the strap. The penis was turgescient, and had emitted semen. The inner and middle coats of the left carotid were found divided, but not so those of the right side.

Such division was first observed in hanged persons by Amussat; and Devergie found it to exist, though on but one side, in one out of thirteen cases. He believed it could only be produced when the cord cut sharply, was of a rounded form, and compressed the entire circumference of the neck. In the present case, however, the strap was three-quarters of an inch broad, and had only marked the neck on its anterior part. Dr. Kloz agrees with Brach, who, in his "Forensic Medicine," blames Devergie for drawing the conclusion from the accidental and negative results which attended certain experiments he made on the dead body, that the existence of such a division when present is a proof, that the suspension occurred during life. In point of fact, the appearance is dependent upon certain physical conditions of structure in which death induces no change.—*Medicinishe Zeitung*.

QUESTION OF PREGNANCY IN BODIES FAR GONE IN PUTREFACTION.

Dr. Casper relates an interesting case in exemplification of a point he has frequently illustrated, viz., the much longer exemption the uterus obtains from putrefaction compared to other organs. A young woman was missed, and it was suspected she was pregnant, and that her paramour possibly had made away with her. Nine months afterwards her body was found in a privy, having been macerated during that period in fæces and urine. The horrible condition it was reduced to may be imagined, and was such as to overcome the most hardened *habitués* of the dissecting-room. Many of the soft parts had fallen from the bones, and the rest were converted into a grey fatty matter, so that anything like a regular *post-mortem* examination became impossible. Still, as, from old experience, Dr. Casper expressed his conviction that if the woman had been pregnant when she died, the foetal bones would be recognisable, the abdomen was opened. Its muscles were converted into adipocire, and the various parts of the alimentary canal were not distinguishable from each other; still there was the uterus of a bright red colour, firm in texture, and of the normal form and size of a non-pregnant woman. The cavity also was normal in appearance, and quite empty. Thus, if the investigation could not ascertain the cause of death, it at least proved she was not pregnant, and removed the aspersions cast upon an innocent person.—*Casper's Wochenschrift*.

GENERAL CORRESPONDENCE.

DR. ROUTH ON HOMŒOPATHY.

[To the Editor of the Medical Times.]

SIR,—The communication of Dr. Routh "On the Fallacies of the Modern Practice of Medicine," which appeared in No. 68 of your Journal, and which you have headed "Modern Quackery," seems to invite a reply from a professed disciple of Hahnemann, as it claims to be a logical refutation of homœopathy, and as it is singularly free from those besetting sins of the anti-homœopathic controversialists,—ridicule and abuse. As you, Sir, have limited my offered observations in reply to a mere disproof of the facts adduced by Dr. Routh in support of his position, I am, of course, debarred from attempting to show the rationality and logical truth of the homœopathic system, excepting in so far as those may appear from my correction of what I believe to be the errors into which Dr. Routh has fallen. The account he gives of Hahnemann's discovery of the law, "*similia similibus*," wherever he took it from—if, indeed, he has any authority for it—is very far from correct. Hahnemann's first suspicion of this law was occasioned by finding that cinchona bark produced symptoms resembling quotidian intermittent, when taken in repeated doses to the extent of four drachms. This happened in 1790. He then commenced to make a collection of all the cases of poisoning, and the morbid phenomena recorded by authors as resulting from the ingestion of medicinal substances by healthy individuals. This confirmed his suspicion, and induced him to test a number of medicines upon himself and his friends, whereby he became more and more convinced that some diseases might be cured by medicines which had the power of producing symptoms similar to their own. Accordingly, in 1796, he published a paper in *Hufeland's Journal* to that effect, limiting, however, the use of drugs, according to the homœopathic method, to chronic diseases. In this paper, there is no talk of small doses; in fact, in the cases he details, the doses given were as large as those commonly employed. It was not until after many years passed in study and experimentation, that he announced his belief that the famous law was of universal application. This was in 1805, and the same year he gave to the world the first fruits of his trials of medicines on the healthy, in two volumes written in Latin. Thus it was not a few, but a large number of experiments and observations that led him to suspect the universality of the application of the homœopathic law, and fifteen years were spent in careful experiment, before he arrived at the conviction of its truth as a general therapeutic law. So much for Hahnemann's discovery. Now for Dr. Routh's facts. I willingly concede to him, that because ipecacuanha disseminated through the air will produce violent symptoms of catarrh, "it is not logical to conclude, that in all cases an infinitesimal dose of ipecacuanha will cure or greatly meliorate the symptoms of influenza," the fact being, that nothing like this universal anti-influenza power is claimed by homœopaths for ipecacuanha, which can only cure catarrhs presenting those symptoms which itself produces, and these are of a very well-defined character. No doubt "it is not logical to conclude, that, because a large dose has mimicked a disease in health, therefore, when that disease occurs, an infinitesimal dose will cure." The logical inference would be, I grant, supposing the homœopathic law to be true, that the large dose would cure; accordingly, until experience taught him otherwise, Hahnemann, as I have stated above, administered the large dose; but, experience showed him, that in disease, the susceptibility of the affected organ or system was much increased to its own proper stimulus, just as the inflamed eye is more susceptible to the stimulus of light,—the inflamed ear to that of sound. I am not aware that any homœopathist has "altogether discarded infinitesimal doses as forming any part of the system they practise," as Dr. Routh asserts; for though some do occasionally prescribe appreciable quantities, the cases in which they do so are the exception, not the rule of their practice. All that homœopathists say, that could be construed into anything like the above, is, that the administration of infinitesimal quantities is a question apart from, and not necessarily involved in, the law *similia similibus*.

Gallic acid is not known to homœopathists as regards its physiological action, and therefore I am unable to say if it can produce hæmorrhage, or cure it homœopathically; but, supposing it did neither, no homœopathist would think of denying that it could check a hæmorrhage as a styptic on allopathic or enantiopathic principles, just as he would not deny that an ounce of Epsom salts would purge, or a grain of opium constipate. As regards turpentine the only knowledge we have of it homœopathically in hæmorrhages is in hæmaturia, which it is said by allopathic authorities to produce.

(See Merat et Deleus, *Dict. de Mat. Med.*, and Trousseau et Pidoux, *Traité de Thérap.*) Turpentine and male fern oil undoubtedly do sometimes expel, in whole or in part, the tapeworm; but how little they are to be relied on for the cure of that disease, the constant search for new anthelmintics sufficiently proves. None of the remedies we use for tapeworm have been known to develop the parasite in the healthy, nor do any of our medicines produce the actual diseases they can cure. It suffices for the homœopathic principle, that they are capable of producing a collection of morbid phenomena resembling the disease, thereby indicating that they are capable of acting similarly on the same organs and parts as those implicated in the disease for which they are specific. If they caused the identical malady, this would be isopathy, which Dr. Routh admits we reject. As regards iodine and goitre, it is Coindet, the first who recommended the use of iodine in goitre, who noticed the preliminary swelling and induration of the bronchocele before its final softening and disappearance.

If Dr. Routh properly understood homœopathy he would not have stated that the administration of bark in otitis involving the dura mater, when that affection is accompanied by paroxysms of ague, is an exact application of the principle "*similia similibus*;" for bark has no power to produce the inflammation, and homœopathy requires the adaptation of the medicine to the whole morbid state, and not to one single symptom only. In this case, then, all Dr. Routh's brilliant argument, which he founds upon his own mistaken notion of homœopathy, falls to the ground.

I pass over Dr. Routh's hackneyed calculations respecting the length of a decillion globules, and such curiosities of arithmetic, as being quite irrelevant; and seeing that Dr. Routh shows, in the next page, that homœopaths are not agreed as to the size of their globules, it is quite premature to attempt to determine the length of a decillion all in a row; and the calculation, even should it be made ever so exactly, would not be productive of much advantage to homœopath or allopath. I may merely remark, *en passant*, that the larger sized globules, or pilules, to which Dr. Routh alludes, could never, by any possibility, be mistaken for allopathic pills; and that the size of the globule merely shows the quantity of sugar in it, but not of medicine, as a large globule may easily contain actually much less medicine than the smaller one.

As regards the insinuation, that "the infinitesimal quantities contained in globules are not detectable by the most delicate tests," I may remark, that that is apparently no longer the case,—for by the magnetoscope, recently invented by Mr. Rutter, of Brighton, the minutest portion of medicine, even a long way beyond that *Ultima Thule* of homœopathic arithmeticians, the decillionth, seems to produce exactly the same effect on the magnetic currents in the body as the same medicine in its grosser preparations. This was beautifully demonstrated by Dr. Madden before a large assemblage of members and others at the last meeting of the Hahnemann Medical Society, on the 21st instant. (*Vide Homœopathic Times* of the 25th inst.) If, therefore, these observations be confirmed, we shall not be exclusively dependent on the good faith of those who serve us. However, I believe Dr. Glover's statement, that a London homœopathic chemist was in the habit of supplying his customers with simple sugar of milk under the name of medicine, to be a pure, unmitigated fiction,—the more so as the charge has been indignantly denied by all the respectable chemists; and Dr. Glover, though repeatedly challenged to do so, has refused to name the chemist he pretended to refer to, or to give his authority for the calumny.

With respect to Dr. Routh's instances of the different effects produced by medicines, according as they are taken one way or another, I need only remind Dr. Routh, that when he reflects that medicines may act chemically and mechanically, as well as irritatingly and specifically, this will account for many of the differences he brings forward. I remember having had under my care a lady who was so sensitive to the smell of musk, that she nearly fainted if she opened a letter scented with that substance. In her case, the internal administration of musk was not attended with impunity, for a practitioner, (not homœopathic, you may be sure,) knowing her peculiarity, prescribed for her a grain of musk at one dose, which had such a violent effect on her, that she was confined to her bed for three months in consequence, and her life was at one time despaired of. Dr. Routh's instance of the malignant fever in Africa is unfortunate; for there is no evidence whatever that the black matter vomited contained any of the poisonous miasm that generates that plague.

Dr. Routh, in stating that measles is not rendered milder by inoculation, is at variance with Dr. Home, who practised it extensively; but the circumstance is not much to the point. As regards syphilis, perhaps Dr. Routh has by this time heard, that a French physician proposes inoculating with primary syphilitic matter for the

cure of fully developed syphilis, which curious procedure is, he asserts, highly successful.

Before concluding, Sir, allow me to notice a few of the statements in your leading article of last week. You say, Hahnemann commenced his career with "vulgar and common quackery;" and you mention in a note, that this consisted in his blaming the Emperor Leopold's physicians for bleeding him during his fatal illness. This may be true or not; I never heard of it before Dr. Wood stated it; but, supposing he did criticise the treatment, is the same thing not frequently done by medical men and journalists of our own days? Was not the Princess Charlotte's physician goaded to suicide by the comments made upon his treatment; and more recently, was not the treatment of the late Sir R. Peel made the subject of some very severe strictures? Surely, if these instances escaped without censure, the similar act of Hahnemann scarcely merits the appellation you bestow on it. With respect to the prophylactic for scarlet fever, the facts were these. Hahnemann believed he had found that prophylactic in belladonna; and in order to have it extensively tested, he announced that he would publish a brochure, giving an account of his discovery and revealing the name of the medicine, whenever he could get 300 subscribers, each of whom was to receive a portion of the new prophylactic. He got very few subscribers, but a great deal of abuse, for which he avenged himself by publishing the name of the prophylactic, which we know was afterwards extensively tested, and its prophylactic powers certified to by many celebrated physicians, among the rest by the sagacious Hufeland. Hahnemann no doubt thought, that by concealing the name he had a better chance of getting the drug fairly tested than had he simply announced belladonna to possess this prophylactic power. He was mistaken; the act was a little eccentric, but does not deserve the censure bestowed on it.

I shall conclude by observing, that the symptom of hepar sulphuris you take from Jahr is, like many more of the renderings of the English translation of that manual, erroneous. In place of "carcinomatous ulceration of the prepuce," the original in Hahnemann's *Chronic Diseases* is "ulcer like a chancre on the prepuce," which is rather different. With many apologies for this long letter,

I am, Sir, &c.,

82, Gloucester-place.

R. E. DUDGEON.

[We have deemed it but fair to publish this letter, and we give Dr. Dudgeon credit for a clear statement of his case. We may safely leave him in Dr. Routh's hands, for both a satisfactory and a gentlemanly refutation. We only trust that the gist of the argument will be adhered to. The question is, What is the meaning of "*similia similibus curantur*;" and what are the examples of the law? Hahnemann's definition of his dogma must be adhered to, or the argument will be lost in a maze of words.—*Ed. Med. Times.*]

M. BERNARD'S PHYSIOLOGY.

[To the Editor of the Medical Times.]

SIR,—I should like to see in your valuable Journal some notice of Bernard's observations on the circulation in the kidneys, on the production of sugar in the liver, and on the effect of wound of the fourth ventricle in causing sugar to appear in the urine. All these points are of practical interest, and I would gladly learn more about them than I have yet had an opportunity of doing. If you would devote half a column to some notice of these observations, you would oblige many Practitioners, as well as one who is really

A CONSTANT READER.

[A work by M. Bernard has been advertised for some time, but we believe it has not yet appeared. At present the observations are known only in part; and, as they are evidently not completed, and in many parts even incorrect, we have refrained hitherto from anything but a cursory notice of them from time to time. A few remarks on the points he mentions, will perhaps be sufficient at present for our Correspondent, and hereafter we will take up the subjects more in detail.

1. M. Bernard is of opinion, as far as we can understand him, that there is a provision for a peculiar circulation in the kidney during digestion; a circulation, in fact, through the veins to the kidneys. His observations have been made on the lower animals, (dogs, rabbits, and horses,) but apply, by inference, to man. He states that, during digestion, prussiate of potash introduced into the

stomach is found in the renal vein and in the urine, but not in the renal artery, although the inference would have been that it would exist in the blood of the artery, and would be absent or, at least, diminished in quantity, in the blood of the vein which had passed through the kidney, and from which, therefore, a portion of the salt must have been eliminated, as it was detected in the urine. M. Bernard believes he has accounted for this, and has discovered that the renal veins, during digestion, actually enact the parts of arteries, and carry blood from the vena cava inferior to the kidneys, while during abstinence they return to the character of efferent vessels, and act as ordinary veins to carry off the return blood. During digestion, indeed, it is assumed that a portion of the portal blood passes directly into the vena cava, and then by reflux into the renal veins. The return of blood from the lower extremities to the heart is carried on during this stagnation in the vena cava by the vena azygos. Bernard believes that he has demonstrated this communication in the horse. We know that these observations of Bernard have been received with great doubt by the physiologists of this country; and we have been informed by one of the greatest authorities living on physiology, that he discredits entirely the whole statement; and that in the horse, from which animal Bernard's great argument is derived, there are valves at the commencement of the renal veins which prevent any sort of reflux. This observation seems to us conclusive against the whole hypothesis.

2. With regard to sugar in the liver, the observation has been amply confirmed, both in the lower animals, in the foetus, and the adult.

3. The original opinions of M. Bernard on the appearance of sugar in the urine after a wound of the 4th ventricle, seem to have been somewhat changed. It appears, that irritation, not only of the 4th ventricle, but of the olivary bodies, (before and after section of pneumogastrics,) and even of the cord, will give rise to the same phenomenon. If this be the case, the speculations on the possible injury to the vagi are premature; and it is, on all accounts, better to wait for more experiments before attempting to account for this singular fact.—Ed. *Medical Times*.]

QUININE IN FEVER.

[To the Editor of the *Medical Times*.]

SIR,—My attention was drawn to a letter from Dr. Dundas, in the *Medical Times* of October 4, wherein he strongly advocates the cinchonising treatment in all stages of fever. The Profession might place great reliance upon this statement, coming from so eminent and scientific a practitioner as Dr. Dundas; and I fear, from the sanguine style in which he has written, and the success attendant upon the cases recorded, the faculty will embrace the cinchonising treatment indiscriminately. The object I have in view in forwarding this communication, is to guard practitioners against the precipitate use of quina in the latter stages of fever, and to wait until the Doctor's work, now in the press, be published. I have then no doubt but a new and more successful mode of treating typhus will generally be adopted. The Doctor observes, when the prima via is loaded, an emetic will oftentimes prove useful. I have used large doses of quina in tic douloureux and in fever for the last two years, and in both diseases I found it absolutely requisite to empty the stomach with an emetic and open the bowels (especially if the tongue be at all foul) to insure the good effects of the quina; unless this be done, the result will not be satisfactory. After the first cinchonizing, purgatives should be avoided unless it is absolutely necessary.

I do not think it desirable to give quina in large doses in the last stage of fever, especially if the tongue be red and fiery. I recollect one instance where I am disposed to think hæmorrhage from the bowels was produced, and suddenly sank the patient.

In the early stage of fever it is an invaluable remedy, where there is no gastro-enteric symptoms. I have frequently seen the tongue from being brown, dry, and furred, with sordes on the teeth, hot, dry skin, pain in the head, and all its accompaniments, removed, in a great measure, like a charm,—the tongue becoming moist, the skin moist, and the pain in the head removed, the patient

afterwards gradually, and I may say rapidly improve; though never so quickly as the cases recorded in the *Medical Times* of Oct. 4.

In neuralgic affections, particularly of the fifth pair of nerves, if proper precautions are taken, the affection will frequently be removed instantly; the *modus operandi* I do not attempt to explain. I believe with Dr. Dundas, that its action is not that of a tonic; but by regulating the equilibrium of the nervous fluid; and I also believe the pathology of pure typhus will, ere long, be re-written. The effects of large doses of quina, given until the system is affected by it, the Doctor describes as being dizziness and tinnitus aurium, I would rather say a whirling, buzzing noise in the head, with temporary deafness. I would suggest, that if the fever is not subdued by twice cinchonizing the patient at proper intervals, to trust rather to the ordinary measures, and, as Pitcairn observes, "guide the fever."

Prescot.

J. W.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

DR. MURPHY, President, in the Chair.

SPORULES OF VARIOLA.

Mr. Dendy exhibited a drawing of a small-pox crust, obtained from the Small-pox Hospital, which had been acted on by liquor potassæ, by which all the animal matter had been dissolved, and the epithelial scales reduced to a jelly. The sporules resembled those of aphthæ, and were, he believed, of a vegetable nature.(a)

PERKINS' METALLIC TRACTORS.

Mr. Clarke exhibited a pair of Perkins' Metallic Tractors, so famous, or rather so notorious, some fifty years since for the cure of disease. They were then sold at a price varying from 2*l.* 2*s.* to 5*l.* 5*s.* per pair.

Dr. Ogier Ward remarked that a friend of his at Wolverhampton was the manufacturer of these instruments, and he supplied the patentees with them at the rate of 5*½d.* per pair. (Hear hear.)

EPIDEMIC VARIOLA.

Mr. Streeter read a letter from a medical friend at Waltham Abbey, in which were detailed the facts connected with a recent outbreak of small-pox in that place. The writer (Mr. Priest) stated, that since the end of June, he had attended 105 cases of that disease, and Mr. Brown, the other medical man in the town, 62, making a total of 167, of which 102 had been vaccinated, 64 not, and one had been inoculated in 1810. The first case occurred at a baker's, whence it soon spread, and many were infected, in consequence, the writer said, of the want of proper drainage, ventilation, etc., in some parts of the town. Of the 102 vaccinated cases, 10 only had the confluent form; the others had the disease mildly. None of these cases terminated fatally. A few had slight attacks of secondary fever. Four of these patients were under five years of age, and had been vaccinated only since the commencement of the epidemic.(b) The ages of the remaining 98 varied from ten years to fifty-six. Of the 64 unprotected cases, the majority had confluent small-pox, and one the malignant or petechial variety. There were 15 deaths, or about 1 in 4; the ages varied from six weeks to fifty years. The case in which the malignant variety occurred was that of a dissipated man, aged fifty, who, at the time of his seizure, was in bad health. He died in five days from the first rigor, and on the second of the eruption, having previously had hæmorrhage from the nose, mouth, and intestines. The female who was inoculated forty years ago, had the disease slightly, but, being about three months advanced in pregnancy, it caused a miscarriage, which somewhat retarded her recovery. Mr. Priest, from these facts, drew the conclusion, that vaccination is a perfect preventive of small-pox for the first few years of life—perhaps until puberty—and that then, although it loses its preventive powers, it still retains such a hold upon the individual as to deprive one of the most fearful and fatal of all disorders of its danger and its frightful consequences. He did not consider that the cases of the four children who were vaccinated, and had small-pox shortly afterwards, could invalidate this conclusion, as they

(a) While this matter is under notice, we may state that the magnificent illustrations exhibited by Mr. Dendy at the last meeting were original drawings, and not engravings, as stated by mistake in the report.

(b) The Reporter lately had charge of a London Union Officer's district during his absence. He had several cases of small-pox under his care, and was surprised to find six cases in one house, not one of them having been vaccinated.

had probably been exposed to the contagion of small-pox during the period the vaccination was in progress, or even before it was practised. Besides, they had the disease very slightly. Whether re-vaccination will be of any permanent benefit, he cannot say, not having had as yet sufficient opportunity to try it; but he has re-vaccinated a great many successfully, (himself among the number,) during the present epidemic, and none of these have taken the disease, although some of them are living in the same house with small-pox patients. The poorer classes, however, he finds, are still greatly prejudiced against vaccination, and he thinks that nothing short of legislative interference will give that extended protection which vaccination ensures. It is not, he adds, in public institutions that the protective power of vaccination is best observed; but among the poor in their crowded and ill-ventilated dwellings, where, day by day, and night by night, the vaccinated child may be seen mixing and sleeping with those having the disease, and yet escaping from its poisonous influence. He concluded, by urging the medical societies to endeavour to obtain compulsory vaccination. His usual plan in revaccinating, is to place a piece of sponge, dipped in hot water for a minute or two, upon the arm, then to wipe it dry, and to insert immediately the lymph taken direct from the vesicle.

The following table of 167 cases (95 females, 72 males) of small-pox, closed the letter:—

Vaccinated.—98 over 10 years of age, 4 under 5 years. Total 102. 10 cases of confluent small-pox, the rest mild, little or no secondary fever. No death.

Not Vaccinated.—64, ages from 6 weeks to 50 years. 38 cases of confluent small-pox, 1 malignant, 25 mild. Total 64. 15 deaths, about 1 in 4.

Inoculated.—1 female, in 1810; aged 43; attack mild; caused miscarriage at the third month. Recovered.

Dr. Willshire inquired of Mr. Dendy how he was enabled to connect the sporule, or black spot, in the variolous crust, with the virus or source of the poison of small-pox, or to distinguish it from the vegetable cells which are always formed when animal matter is undergoing decomposition?

Mr. Dendy did not wish then to enter upon the subject mooted by Dr. Willshire, as his investigations were not at all completed. He was not confident that this black spot was a sporule, but still he thought it a fair assumption that it was so, and he had thrown out the observation, in order that some medical men, who might have peculiar advantages for such inquiries, might have their attention directed to this subject, and thus might aid him in his investigations.

Dr. Lankester referred to the statements made a year or two since respecting the cholera corpuscles, and remarked, that the result on that occasion should inculcate great caution with reference to such discoveries. He (Dr. Lankester) agreed with Dr. Willshire, that these black sporules should be regarded more as indications of decay, than as the cause of variola. Since the last meeting was held, he had seen two children, who were both vaccinated in the same day; in one of them there was only a slight eczema on the arm, but no vesicle on the proper day, although the vaccination went through its proper course with the other. The eczema got better, and on the tenth day the vesicle began to appear, and then ran its course naturally.^(a)

Mr. Streeter wished to add one fact to those already recorded. In 1839 he revaccinated a young lady, and a vesicle formed on the arm. He was last week sent for to see her, and found her suffering from a mitigated form of small-pox.

Mr. Hunt read a paper on

THE SKIN AS A DIAGNOSTIC OF THE GENERAL HEALTH.

The author commenced by observing, that the subject naturally divided itself into two parts,—viz., 1. The indications presented by the healthy skin; 2. Those presented by the skin in a state of disease. Having alluded cursorily to the former, by pointing out some of the indications presented by changes in the condition of the skin as to smoothness or roughness, moisture or dryness, temperature and colour, Mr. Hunt proceeded to discuss the constitutional indications presented by the diseased skin, confining his remarks to a single topic,—namely, the rapidity or slowness of development which characterised respectively the various orders of cutaneous diseases as arranged by Dr. Willan. To explain this point more fully and forcibly, he placed the first seven orders of

Willan in a new rotation, selecting two diseases as types of each order, by way of illustrating the subject, as follows:—

<i>Orders.</i>	<i>Types.</i>
1. Exanthemata	Urticaria.
	Erythema.
2. Bullæ	Erysipelas.
	Pompholyx.
3. Vesiculæ	Eczema.
	Herpes.
4. Pustulæ	Ecthyma.
	Impetigo.
5. Papulæ	Lichen.
	Prurigo.
6. Squamæ	Lepra.
	Pityriasis.
7. Tubercula	Acne.
	Lupus.

The first three of these orders, viz., *Exanthemata*, *Bullæ*, and *Vesiculæ* were described as comprising, for the most part, diseases of rapid evolution or development; the last three, viz., *Papulæ*, *Squamæ*, and *Tubercula*, containing diseases of slow development; the order *Pustulæ* taking an intermediate position in this respect. On this basis the author proposed to establish a theory, for the support of which he produced many curious facts relating to the artificial production of the various forms of skin disease, as well as facts connected with the development of spontaneous eruptions. The theory consisted in regarding eruptions as defensive efforts of nature, tending either to prevent the absorption of poisons, or to eliminate them when absorbed: those poisons or injurious agents which are most actively mischievous being most rapidly eliminated or repelled, exciting the blush (*Exanthema*), the blister (*Bulla*), or the vesicle (*Vesicula*); those which are less rapidly destructive, exerting a slow and feeble effort at elimination, as observable in the pimple, *papula*; the scale, *squama*; or the tubercle, *tuberculum*; while those poisons which are of intermediate intensity of action originate the pustular form of eruption. Taking seven diseases as so many types of these orders respectively, the author observed that their average duration, when unchecked by treatment, was strikingly illustrative of the truth of this theory of development. Thus: urticaria continues usually a few hours, erysipelas a few days, herpes twice as long, ecthyma a few weeks, lichen as many months, lepra as many years, and lupus for the whole life; each eruption showing the relative degree of intolerance of the poison manifested by the system, and thus becoming a signal of danger. Mr. Hunt contended, that if this theory should prove to be true, it might throw some light on the prognosis, the pathology, and the therapeutics of cutaneous disease,—assisting the prognosis by determining how long the disease might be expected to last; the pathology, by pointing out the hidden cause of the disease, and its relative activity or destructive power; the therapeutics, by suggesting long perseverance in one judicious plan of treatment in the diseases at the bottom of the list, and by indicating some error of treatment when the case of those at the opposite end of the chain does not proceed at a rate corresponding with their natural rapidity of development. These positions were illustrated by allusions to the action of external agents in the production of various eruptions, as well as internal sources of cutaneous disease: and, among other important facts, it was stated, while the diseases included in the first four or five orders were producible by external agents with a readiness diminishing from above downwards, it was impossible to establish the eruptions at the bottom of the list, (lupus, acne, lepra, psoriasis, etc.,) by any external application whatever. The author concluded by remarking, that amidst the general obscurity in which cutaneous pathology was involved, it was sometimes a relief to follow a faint and feeble light, in the hope of its leading to further discoveries; and that this was the highest character he claimed for the observations to which the fellows had so kindly listened on the present occasion.

A discussion followed, in which several members took part, but no new facts were elicited.

HARVEIAN SOCIETY.

CASE OF CHOLERA, IN WHICH CRYSTALS FORMED ON THE SURFACE OF THE BODY PREVIOUS TO DEATH.

By H. OBRE, Esq.

Mrs. G., aged sixty-five years, a tall, spare person, in the summer of 1848, after many years extreme suffering from disease of the

(a) Many years ago the reporter vaccinated a strumous child, and the vesicle did not show itself for three weeks. He was about to repeat the operation, when the usual signs of vaccination occurred, and the protecting process was safely and fully completed.

bones of the right knee, had the limb removed by Mr. Obré, from which she made a rapid recovery, and continued in good health until the night of the 18th of September, 1850, when she was attacked with cholera, and was treated by Mr. Britton, of St. John's Wood. On the 20th she was visited by Mr. Obré, who found her in a state of extreme exhaustion. The cramps, vomiting, and diarrhoea had subsided; but the voice was hoarse, pulse low, and no urine had been passed since the attack began.

On the 23rd, low fever made its appearance; the tongue became dry and brown, with red centre; the cerebral functions were impaired, pulse low and weak, voice husky; passed about three ounces of urine, being the first since the 18th. Camphor was administered.

24th.—Four ounces of urine were drawn off by the catheter; and in the afternoon, when visited, was considered to be dying,—the pulse being imperceptible, and the extremities losing their temperature. She continued in this state until about eight o'clock the following morning, when the surface of the body was observed gradually to resume its heat, and become warm with a general redness, described by her family as if in a state of fever; they observed the face become covered with small white crystals, which, when wiped off, were soon reproduced. When visited by Britton, (who, on entering the room, asked, "had the face been powdered?") he found this unusual appearance to be produced by small white crystals, which not only covered the face, but the entire body, more or less, the face and neck most. They continued to be produced until two o'clock, p.m., when she died, having been comatose for twenty-four hours. Mr. Obré visited her half an hour after death, and found the crystals beginning to deliquesce, but still very general over the face and forehead. Two days after death, on visiting the body, it was found quite damp, and the hair wet, from the deliquescence of the crystals. It was conjectured, that the perspiration had become impregnated by the salts of the suppressed urine, and crystallized when exposed on the surface. On examination, the crystals were found soluble in ether and alcohol, form a soapy substance when rubbed with alkalines; when burned, leave a slight ash; exposed to heat, melt, and become transparent. No traces of uric acid or urates. Under the microscope, they have not the appearance of salt crystals, but more the character of sterarine or fatty matter, which no doubt form their composition.

STATE OF THE PUBLIC HEALTH IN THE QUARTER ENDING SEPTEMBER 30, 1851.

THE health of different parts of the country differs widely, and the difference is greatest in summer. In the ten summer quarters of 1841-50 the mortality in 506 districts, comprising, when the Census was taken, 10,126,886 people, was at the rate of 18.15 in 1000 annually; while in 117 districts, comprising the chief towns, and 7,795,882 people, the mortality was at the rate of 25 in 1000 annually. Thus, at least 7 in every 25 deaths which occur in towns are the result of artificial causes. The mortality in the quarter ending September, 1851, was at the rate of 23 and 17.93 in 1000 in the two groupes of districts; it was a little below the average in the country, and considerably below the average in the towns. The annual rate of mortality per cent. in all England was on the average of ten summers, 2.099; in the summer quarter of 1851 it was 2.020.

Population; and Mortality per Cent. in the Summer Quarters of 11 Years, 1841-51.

	Population March 31st, 1851.	Deaths in Summer Quarters.		Annual Rate of Mortality of 10. Summer Quarters, 1841-50.	Annual Rate of Mortality in the Summer Quarter, 1851.
		1841-50.	1851.		
In 117 Districts, comprising the chief towns ...	7,795,882	452,757	46,061	2.522	2.349
In 506 Districts, comprising chiefly small towns and country parishes	10,126,886	440,407	45,539	1.815	1.793
All England ...	17,922,768	893,164	91,600	2.099	2.020

London has enjoyed a degree of health above the average in the

last summer quarter: 13,064 deaths were registered, which is a less number than was registered in the summer quarters of 1847 and 1848, and half the number (27,172) registered in the summer quarter of 1849, when cholera was epidemic. During the three months of July, August, and September, more people have passed through or resided temporarily in London, with its 2,361,640 inhabitants, than ever passed through any city before in the same time. The deaths by violence, though less than in previous summers, were 363: 10 by poison, 35 by burns and scalds, 43 by hanging or suffocation, 89 by downing, 156 by fractures and contusions, 21 by wounds, and 9 by other violence.

The number of suicides and murders registered in London was less in 1851 than in the summer quarters of 1847, 1848, and 1850.

The deaths by poison in the summer quarters of 1848-50, were 15, 20, 26; and, instead of increasing, they were only 10 in the summer of 1851. This decrease is highly gratifying, as it follows so immediately the recent legislation on the subject. Fractures and contusions were more fatal than in 1849-50, but not more fatal than in 1848. That other form of poisoning, intemperance in the use of alcoholic drinks, seems also to be declining; 16 deaths were ascribed to intemperance, 55 to delirium tremens, in the summer quarter of 1850; while 13 and 35 were referred to the same causes in the summer quarter of 1851. No person has died of hydrophobia in any summer quarter since 1843. The deaths from that cause in the 6 years 1846-51 were 3; in the 6 years 1840-5 they amounted to 15; in the year 1839 to 4; in the year 1838 to 12. The decrease of this dreadful form of disease may be fairly ascribed to improved police regulations. 34 women died of metria; 55 of the other incidents of childbirth. 1683 persons died of consumption; next to this disease in fatality, and far above all other diseases, was diarrhoea, which destroyed 1456 lives in three months. Summer cholera was more fatal than it was in the summer quarters of 1847-8; and more than twice as fatal as it was in the summer of 1850. There has been a progressive increase of diarrhoea since the summer of 1841, when only 228 persons died of the disease; 627 deaths were referred to typhus, 38 to remittent fever. Typhus was increasing at the close of the quarter.

The South-Eastern Division has been less healthy than it was last year. The mortality was above the average in the Medway district (including Rochester), the Isle of Thanet (including Margate, Ramsgate, and Broadstairs), Dover, Brighton, Worthing, Newport in the Isle of Wight, Hungerford, and Abingdon. Diarrhoea was prevalent, as well as typhus and scarlatina, in several of the districts. 3 cases of cholera were fatal at Newport in the Isle of Wight.

The South Midland Division was generally healthy. The mortality was much below the average in the counties of Hertford, Northampton, Huntingdon, Bedford, Buckingham, and Cambridge. In Oxfordshire the mortality was above the average in the districts of Thame, Headington, and Oxford. In Oxford 19 persons died of scarlatina, 16 of diarrhoea, and 3 of typhus. The health of Cambridge has, on the contrary, been unusually good. The deaths were only 105 in the quarter; whereas the deaths in the corresponding quarters of 1847-50 were 135, 137, 133, and 151. The Registrar of St. Andrew-the-Great, Cambridge, states, that "very great improvements have been made in the sanitary arrangements of the town." There was a small local outbreak of Asiatic cholera in Leighton Buzzard.

In the Eastern Division the mortality was below the average in Essex and Suffolk, above the average in Norfolk. Diarrhoea prevailed at Leyton, in West Ham, Wickford, and Rayleigh; in Rochford fever of the remitting and typhoid type prevails. Ipswich suffered from diarrhoea; Lowestoft from scarlatina and English cholera. Diarrhoea was fatal in Norwich and Yarmouth; scarlatina in Yarmouth, Flegg, Walsingham, and Docking; whooping-cough in Downham.

The South-Western Division, with the exception of Cornwall, was healthier than is usual. In Amesbury and Salisbury the mortality was high. Scarlatina was prevalent in Marlborough, Wilts; typhus in Wareham, where, in the opinion of medical men, it was aggravated by bad drainage. Scarlatina and diarrhoea prevailed in Plymouth and Stoke Damarel. Scarlatina was the chief cause of the high mortality in Cornwall. Small-pox has also been there. Dysentery is now prevailing in St. Ives. In the Penzance sub-district the deaths exceeded the births registered: and sanitary measures are so grossly neglected by the inhabitants, that 57 of their children have died of small-pox, which is still prevailing. In Bath diarrhoea was prevalent "in confined, dirty localities, where there were bad effluvia from nuisances."

In the West Midland Division the public health was as good as usual in Gloucestershire, Herefordshire, and Shropshire. A low fever and scarlatina were fatal in Stroud; dysentery prevailed in Albrighton, Shiffnal; and it is stated that the population is de-

creasing in Shiffnal "from emigration and want of employment in the agricultural districts." Small-pox has nearly disappeared from Shrewsbury; diarrhoea prevailed in Burslem, as it did also in Longton, Darlaston, and Dudley. The deaths in Birmingham were 1237; diarrhoea was rife, and several cases of cholera were registered. The high rate of mortality in this well placed town proves how much wise and timely sanitary measures are neglected. Coventry is in a still worse condition; the mortality is higher.

In the North Midland Division the mortality was high in Nottinghamshire; Leicestershire, Lincolnshire, and Derbyshire, enjoyed an average degree of health. In the towns of Leicester and Derby, however, as well as in Nottingham, the mortality was above the average. Diarrhoea and cholera prevailed in Nottingham and Chesterfield.

The North-Western Division constantly suffers more from death than the other divisions of England; the mortality of the summer has been less than usual. In Manchester the decrease of deaths is considerable. Diarrhoea prevailed in many districts. The Registrars mention 7 cases of cholera in Liverpool, 2 in Toxteth Park, 2 in Wigan, 7 in Warrington, and 3 in Little Bolton. In Hulme, Chorlton, 40 children and 8 adults died without medical assistance. The population is quitting Colne in Burnley, in search of employment; and increasing in Blackburn in consequence of the erection and enlargement of cotton mills.

In Yorkshire the mortality has been slightly above the average of ordinary summers. Diarrhoea and summer cholera prevailed, with scarlatina, and in some parts influenza. The mortality was higher than is usual in Huddersfield, Leeds, Sheffield, and York. A few cases of cholera, said to be Asiatic, occurred in Sheffield, and diarrhoea was exceedingly prevalent.

The mortality in the Northern Division was above the average. Diarrhoea prevailed in several districts; scarlatina, small-pox, measles, and dysentery are referred to. Typhus prevails in Bewcastle, High Longtown.

The mortality has been above the average in Merthyr Tydfil and Pembroke; but Wales and Monmouthshire generally have been healthy. The Registrar of Llantrisant, Cardiff, remarks:—"It is a most singular circumstance, that not one death happened within this district between the 15th of August last and the 11th of September, a space of 27 days, though the population is nearly 11,000. No movement of the population has taken place, and no sanitary arrangements have been effected."—*Registrar General.*

MEDICAL NEWS.

UNIVERSITY OF OXFORD.—It is said that the Crown intends to assert the continuance of its right to appoint the Regius Professor of Medicine to the Mastership of Ewelme Hospital, as originally annexed by James I. to the Professorship.

UNIVERSITY OF CAMBRIDGE.—The Jacksonian Professor of Botany will commence a course of twenty-six lectures on the 27th of October, at 1 p.m., at the room in the Botanic Garden.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 24th inst.:—

ELLIS, ROBERT WILLIAM, Bristol.

GABRIEL, JOHN TOM, Devonport.

HUGHES, THOMAS JOHN, Lampeter, Cardiganshire.

KEARNS, JOHN, Kilkenny.

M'KIDD, JOHN, Edinburgh.

PAYNTER, GEORGE WILLIAM, Australia.

RAINEY, WILLIAM BANES, Spilsby, Lincolnshire.

SWINHOE, GEORGE MONEY, Calcutta.

MR. QUEKETT.—This gentleman has just been appointed Corresponding Member of the Société de Biologie de Paris. The diploma conferring this honour on our esteemed microscopist is signed by the following distinguished savans:—Bernard, Robin, Lebert, Rayer, etc. Mr. Quekett commenced his course of histological demonstrations on Wednesday last, on the structure of the invertebrate skeleton.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, October 23:—

ATKIN, GEORGE, Sheffield.

HAYE, WILLIAM DAVEY, Callington, Cornwall.

NASH, THOMAS, Liverpool.

ODELL, THOMAS, Newport Pagnell.

SWEKE, EDWARD HORATIO, Bristol.

OBITUARY.—On the 12th of July, while a passenger on board the Gwalior, on his way to England, Henry Harrison Greaves, Esq., surgeon of the Madras army, aged 37. On the 23rd inst., George Hinds, M.D., at Ramfield, near Killesandra. The deceased was accidentally shot while playing with a loaded blunderbus. On the 12th inst., Henry Hawkes Fox, M.D., of Northwood, in the county of Gloucester, aged 63. On the 20th of August last, at Sierra Leone, on his way home from the Cape of Good Hope, Charles Whitefield Prideux, Esq., of Southampton, surgeon, R.N., aged 43. He had previously passed many years on the African coast. His remains were attended to the grave by the officers of the Dolphin, the officers and soldiery of the garrison, and the principal surgeons and merchants of Sierra Leone, and had the usual military honours.

NAVAL APPOINTMENTS.—Surgeon William Bateman (1846) to the Crane, 6, brig, at Devonport. Acting Assistant-Surgeon Timotheus Haran (1850) to be assistant-surgeon, and confirmed to the Harlequin, 12, sloop, on the West Coast of Africa station.

GLOUCESTER COUNTY LUNATIC ASYLUM.—The visitors of this asylum have forwarded a Memorial to the Secretary of State for the Home Department for the establishment of a Central Criminal Lunatic Asylum.

MEMORIAL TO THE LATE DR. THOMAS YOUNG.—At a late meeting of the Medical officers, the Rev. the Chaplain, and other Governors of St. George's Hospital, Dr. Wilson in the chair, it was proposed and resolved—"That a period of twenty three years having now elapsed since the death of Dr. Thomas Young, one of the Physicians to St. George's Hospital, it is the earnest wish of this meeting that a suitable memorial should be placed within the walls of the Hospital, in testimony of the grateful respect and admiration with which the vast attainments and high professional character of this illustrious physician will ever be regarded by the friends and Governors of the Institution.—That, in pursuance of the foregoing resolution, Mr. Thomas Brigstocke be commissioned, with the kind consent and approval of Hudson Gurney, Esq., to make a full-sized copy of the original portrait of Dr. Thomas Young, now at Keswick-hall, Norwich; and that such painting, when completed, be presented to the Governors of St. George's Hospital, with a request that it may find its fitting place on the walls of the Board Room.—That a Committee, consisting of Dr. Wilson, R. Keate, Esq., the Rev. the Chaplain, and Dr. Pitman, be formed, for carrying the foregoing resolution into effect. That Dr. Pitman be requested to act as Secretary and Treasurer of the Committee, and that he be empowered to receive subscriptions, not exceeding 1*l.* 1*s.* under each separate name, from the Governors and other friends of St. George's Hospital, who may be desirous of taking part in the proposed tribute to the memory of Dr. Young."

EPIDEMIOLOGICAL SOCIETY.—We understand that the several Committees of this Society, appointed to investigate specially subjects of important general and scientific interest, such as "the facts connected with small pox and vaccination;" "the condition of common lodging-houses;" "epidemic diseases occurring in hospitals," etc., are assiduously engaged in the prosecution of the inquiries respectively assigned to them. The new field of special investigation entered upon by the Epidemiological Society is rich and extensive; and, in order that a corresponding harvest of important results may be gathered in, it is only necessary that the Society should receive the countenance and support of the professional and general public.

OPORTO.—The last case of fever here occurred on the 29th of September; twenty days after which vessels from here will have free pratique, according to the regulations of the Lisbon Board of Health. The Spanish Government has withdrawn the *cordon sanitaire* from the frontiers.

THE *Giornale di Roma* states, that the grape blight has almost entirely disappeared, and that, after all, no great amount of injury has been inflicted on the vines.

By the new Law of Evidence Act, apothecaries' certificates are to be admissible as evidence in courts of law and justice, without proof of the seal, thus saving medical men a great deal of trouble and expense.

LODGING-HOUSES FOR THE POOR.—A Committee-report has been presented to the Court of Common Council in favour of erecting baths and washhouses and lodging-houses for the poor in or near the line of the proposed new street from the City boundaries in West-street to Coppice-row, in Clerkenwell. For this purpose the Committee recommend that a fund, amounting to 42,469*l.* 3*s.* Three per Cent. Reduced Annuities, accumulated under the act of the Court of the 29th May, 1845, be appropriated. After a warm discussion, the proposal was unanimously agreed to.

A POPULAR PREJUDICE.—A vagabond, named Joseph Nye, was recently taken to the Southwark police-court, charged with administering poison to a female, the said poison being a Spanish fly, and part of another, which were given concealed in a raspberry tart, by which the life of the female was greatly endangered. A popular prejudice induces uneducated, thoughtless persons to believe that cantharides acts as an aphrodisiac, and ruffians are occasionally encountered who are ready to induce any amount of misery, and to sacrifice even life itself, for the gratification of their passions by the administration of this poison to some unhappy female. The criminal reports show, that this is the case to such an extent as to make a philanthropist shudder at the depravity of human nature; meanwhile, it becomes our duty to state, that the action of the Spanish fly is exerted directly on the urinary, and not on the generative apparatus; that a large dose of that animal poison will cause irritation and inflammation of the bladder and kidneys, and that desire for sexual intercourse can only arise—if it ever does—in consequence of the violent, and perhaps fatal, inflammation set up in those parts; so that its aphrodisiac action, when it is excited, can only be induced by an influence which must eventuate in the death of the unhappy victim, and, consequently, in the commission of the crime of murder by the villain who uses it. Meanwhile we cannot think that druggist blameless who sells Spanish flies to any other than medical men or tradesmen employed in the same business as themselves, as they are not used by the public generally for any beneficial purpose. If this poison could be obtained only in the form of fly-plaster, the emplastrum lyttæ of the "Pharmacopœia," one source and means of crime would be cut off. We would urge on the editor of the *Pharmaceutical Journal* to appeal to the members of the Society and to druggists in general, not in future to sell the drug to the public in any other form than that of blistering plaster.

ROOFF'S RESPIRATOR differs from that of Mr. Jeffrey's, in having distinct passages for the ingress of air into the lungs, and for its egress from them. The method is ingenious and simple; and the effect is produced by means of different valves acting upon a great number of tubes communicating with a common chamber. One set of valves closes with the cessation of the act of inspiration, while the act of expiration opens another set, through which passes the impure air. The tubes do not touch each other. They are nearly the sixteenth of an inch apart, while they afford a metallic surface, varying from 25 to 50 inches. We wish Mr. Rooff may find his ingenuity worthily requited.

PROFESSOR GORINI.—It is reported, that this gentleman, the Professor of Natural History at the University of Lodi, has succeeded in preserving animal matter from decay to a most surprising extent, without resorting to any known process for that purpose. Specimens are in his possession of portions of the human body which have been exposed to the action of the atmosphere for six or seven years without any alteration in their natural appearance; and he states that he can, at a trifling cost, keep meat for any length of time in such a way that it can be eaten quite fresh. If the Professor can really do what he professes to do, his process will be advantageous in a scientific and a politico-economical point of view.

REGISTRATION NOTABILIA.—The total number of deaths registered in the metropolitan districts in the week ending last Saturday was 977. The average was 929. But if corrected for increase of population, it will become 1022, and last week's return will show a decrease of 45 on the estimated amount.

Epidemics.—There is a considerable increase in cases arising from epidemics; the number in this class of diseases having risen from 242 and 229, the numbers returned respectively in the two previous weeks, to 268 in the last.

Scarlatina and Typhus.—The two epidemics which attract notice in the Table are scarlatina and typhus, the fatality from both being evidently on the increase, and the former having 67 deaths assigned to it, the latter 79. At 1, Dean-street, St. Dunstan's, in West London (South), on the 24th of October, the daughter of a compositor died of dropsy consequent on scarlatina. Mr. Nason states, that "this is the third death in a family of six children, all of whom (as reported a fortnight ago) have had scarlatina." In the Town sub-district of Bethnal-green, at 18, Nelson-street, two children of a typefounder, aged 6 and 8 years, died of scarlatina maligna after 10 and 11 days' illness; and in the same house two sons of a sawyer died, one of "fits from worms (5 days)," and the other of "scarlatina maligna (5 days)." Mr. Gregory adds, that "the house in which these four children died, between the 15th and 24th October, is situated in a street which is badly drained, and which has no communication with any sewer." A family is also mentioned, who reside at 29, London-street, Ratcliff, where two children of a labourer died of the same disease. Among fatal

cases of fever is one which occurred at 17, Charlotte-street, in Whitechapel; the deceased, as stated by the Registrar, having been "a very valuable officer of the Whitechapel Union, who caught fever in discharge of his official duties."

Small pox was fatal last week to 22 persons, of whom all, with only two exceptions, were children under 10 years. In only two cases, those of a boy of 5 years and a girl of 10, it is stated, that vaccination had been previously performed. In Spitalfields, at 6, Paternoster-row, the son and two daughters of a licensed victualler died within a week, of confluent small-pox, all without vaccination. The house (Mr. Deboos reports) is close, the situation confined, and also unwholesome from bad drainage and noxious effluvia. With reference to two fatal cases which occurred, one in Britannia-row, Islington, and another in Windsor-street, both without vaccination, Mr. Butterfield observes, that he is constantly in the habit of recommending parents to have their children vaccinated; but a strong impression exists that vaccination is the means of inducing other diseases, and it is surprising how many persons object to it on this ground.

Diarrhœa exhibits a further decline, and numbers only 30 in the present return. Cholera Anglica carried off the child of a labourer, aged 3 months, after five days' illness, at 6, St. Peter-street, Walworth-common. Mr. Turner remarks, that "the street is without drainage, and on one side of it is a quantity of filthy stagnant water that smells very offensively. A child died at No. 7 in the same street, on the 9th July, of the same disease, after twenty-six hours' illness."

Other Epidemics, besides those already mentioned, present nothing of unusual character. 13 children died of measles, 11 of hooping-cough, 7 of croup, 5 of thrush, 1 of purpura, 1 of remittent fever, 1 of infantile fever. Eleven persons died of erysipelas, 3 of rheumatic fever, 2 of influenza, 4 of dysentery, 5 (of whom 3 were children) of syphilis; and 10 women died after childbirth, to half of whom the cause of death appears to have been puerperal fever.

Under **Tubercular Diseases** are enumerated 174 cases. These are distributed thus: to scrofula 9, tabes mesenterica 17, hydrocephalus 25, phthisis, or consumption, 123. The last-mentioned malady destroys more lives than any other single disease on the list, but is not more fatal than usual at present. At 6, St. George's-court, Bluegate-fields, the son of a labourer, aged 10 years, died of "phthisis (2 months) hæmoptysis." The medical certificate adds, that the disease was "brought into action by swallowing a bean, which passed into the left lung three months ago."

Old Age.—Of 177 persons, whose ages were 60 years and upwards, it appears that 86 were men and 91 were women. Of these aged persons, 59 died before they reached 70 years, 83 were 70 years and under 80, 31 between 80 and 90, and 4, all women, were 90 years and upwards.

DEATHS in the Metropolis for the week ending Saturday, October 25, 1851.

CAUSES OF DEATH.	Oct. 25.				Sum of Ten Weeks.
	0	15	30	All Ages	
ALL CAUSES	470	326	177	977	9287
SPECIFIED CAUSES	467	323	177	970	9223
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	190	64	14	268	2354
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	8	15	14	37	479
3. Tubercular Diseases. ...	65	98	11	174	1654
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses, ...	50	46	30	126	1031
5. Diseases of the Heart and Blood-vessels	3	27	13	43	294
6. Diseases of the Lungs, and of the other Organs of Respiration ...	60	22	27	109	1376
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	14	23	11	48	579
8. Diseases of the Kidneys, &c. ...	...	9	...	17	180
9. Childbirth, Diseases of the Uterus ...	...	5	...	5	118
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	5	...	6	64
11. Diseases of the Skin, Cellular Tissue, &c. ... ..	...	1	...	1	15
12. Malformations	4	...	...	4	21
13. Premature Birth and Debility ...	34	1	...	35	212
14. Atrophy	26	1	...	27	163
15. Age ... ..	...	...	43	43	182
16. Sudden	2	...	...	...	11
17. Violence, Privation, Cold, and Intemperance	10	9	6	25	200
Causes not Specified	3	...	...	7	64

TO CORRESPONDENTS.

An Envelope, with the Durham Post-mark, October 26, and addressed to our Publisher, contained an advertisement from a country paper. We do not covet such anonymous communications, and more especially in the case before us. The individual upon whom our anonymous Correspondent would fain bring down our editorial wrath, has nearly played his part on life's small stage. "*Non sum qualis eram*," he may well exclaim; for ill health and broken fortunes have reduced him from a high and palmy state to become the associate of quacks, and the advertiser for practice. It is not such game as this at which we fly our hawks.

We have received a note from Dr. Lightfoot, in reply to the remarks of Professor Simpson, of Edinburgh, in our Number of the 27th September. Dr. Lightfoot says, he "transmits us a letter from M. Velpeau, showing that he had used the uterine sound for the last fifteen years." When we receive that letter, which was not transmitted to us, we will publish both it and Dr. Lightfoot's. Meanwhile, we would briefly remark, that the principle of the intra-uterine pessary consists in wearing an instrument within the uterine cavity itself, for the purpose of rectifying its mal-position. Dr. Simpson asserts, that the uterus can and will bear such an instrument in its cavity,—that in two cases he has had the pessary in utero for upwards of two years, not only with impunity, but with the result of relieving and curing the patient. Now we are quite certain that no one published the suggestion, or even the possibility of such an instrument being worn before 1845, when Dr. Simpson brought it before the Profession; and further, we entirely doubt that M. Velpeau used fifteen years ago a pessary in the uterine cavity. Surely, if he had, the Profession would have heard of it, and we should have the fact somewhere recorded. Moreover, it strikes us very forcibly, that a year or two after Professor Simpson published on retroversion, M. Velpeau delivered a lecture, printed in one of the French journals, showing that some cases could be cured by the uterine sound alone, by occasionally turning the uterus into position. He did not dream, even then, of permanently fixing it *in situ*.

L. C., Bath.—The Lectures on the Ear alluded to by our Correspondent, were from the pen of the distinguished Dublin Surgeon—Mr. Wilde. The Numbers containing them can be obtained by application to our Publisher.

Risus.—The doleful effusion of "*Risus*" does not suit our columns.

Oxoniensis.—The differences between typhus and typhoid fevers are given at length in Dr. Jenner's papers in the "*Edinburgh Monthly Journal*." We also refer our Correspondent to the "*British and Foreign Medico-Chirurgical Review*" for July. Our Correspondent must not confuse himself with names; no sound practitioner could confound typhoid fever with a typhoid state.

[To the Editor of the Medical Times.]

SIR,—It seems that motions are to be brought forward by several of the Medical Societies, to expel certain members who either practise homœopathy themselves, or are in the habit of meeting homœopaths in consultation,—in one word, to eat up Hahnemannism. Now, would it not be advisable at the same time to propose, that all those "eminent physicians" who are in the habit of prostituting their names to the quack medicines of others, and giving them to some invented trash of their own, be likewise expelled from the fellowship of all chartered Corporations? If the Medical and Surgical Societies sanction this mode of "gulling" a credulous public on the part of the allopathists, surely they can have no objection to the innocent delusions of the homœopaths. The applicability of the following will be intelligible to all:—"Thou hypocrite, cast out first the beam out of thine own eye, and then shalt thou see clearly to pull out the mote that is in thy brother's eye." Liverpool. I am, &c., ÆSCULAPIUS.

[To the Editor of the Medical Times.]

SIR,—In the prospectus of Queen's College, Birmingham, published in your Journal, Oct. 4, I perceive the following:—"The most important and valuable privilege of receiving indentures without premium, is offered to students by Professor Sands Cox, F.R.S." Now, with due deference to Mr. Sands Cox and the authorities of Queen's College, I would ask how and where are the young gentlemen educated at this Institution to obtain a knowledge of the *business* of the Profession? Certainly I am not going to advocate a five years' drudging at pill and mixture making; but I maintain that two years, passed in the surgery of a shrewd and intelligent General Practitioner, in full practice, afford many opportunities of obtaining preliminary information, and that tact necessary to insure success in private practice; for it must be conceded, that the mode of treatment or management of private patients differs in many respects from that observed in public institutions. Great credit is due to Mr. Sands Cox for his persevering endeavours to render his establishment efficient. I do not, therefore, make these observations in a captious spirit, but from a feeling that the Collegiate system, which has many advantages, may be carried out to too great an extent. I am, &c., A SUBSCRIBER.

J. P.—We agree with you most emphatically. The homœopaths are an insidious race, but for impudence, the advertising quacks are their masters. Cannot the "*Manly Vigour*" and "*Silent Friend*" system be put down? Are there not some good, honest men in the world who are prepared to unite their influence to do away with this gross public scandal? A Society should be formed to carry on a crusade against the evil; and the members should pledge themselves not to take in or read any journal that inserts indecent advertisements.

A Surgeon, Manchester.—A member of the College can claim for medicines administered in a surgical case.

[To the Editor of the Medical Times.]

SIR,—My attention has just been directed to a report contained in your impression of the 25th inst. of an inquest at which I gave my evidence. I am there represented to have said, in reference to the administration of "*Morison's Pills*," that "they never did any good, nor much harm." I have merely to deny ever having used any such words, and to subjoin the following statement of what actually took place, with the fullest confidence that I shall carry with me the opinion of every one of my professional brethren who are aware of the analysis of these pills:—

The Coroner having put the following question, "You do not think, then, Mr. Garman, that the pills in this case could have either done good or harm?" my reply was, "Not in such doses."

When I add, that the doses had been five pills over a period of three days, and that evidence had been adduced that they had produced no purgative effect, I can only add, that I am prepared to re-affirm my opinion; and, fully sensible as I am of the pernicious consequences attendant on the lamentable prevalence of the use of quack medicines, I have yet to learn that the dignity of the Profession is to be served by descending to false or exaggerated representations of their agency. I am, &c.,

HENRY V. GARMAN.

Mr. Wm. Farrage, Rothbury.—A practitioner cannot recover upon a Scotch diploma. The Glasgow diploma confers the right to practise only in a very circumscribed area around that city.

The Rules of the Dartford Dispensary have been received. They are marked by one cardinal defect—the omission to define the class of persons eligible to the benefits of the Club. The greater number of the benefit or self-supporting societies that have broken down have been undermined by the laxity of the rules in this particular. There can be no objection in the abstract to such Societies; but it is absolutely essential to their respectability and success that the remuneration should be adequate to the services rendered, and bear a proper relation to the social condition of the parties received as members. We are of opinion, that if the Profession were true to themselves, and would combine in a proper "*esprit de corps*," Societies of this character, widely established, might be a means of destroying the devouring competition which, for some years past, has been ruining the Profession's interests. There can be no doubt, that, in the face of free dispensaries, free hospital practice, free union practice, the multitude of low-priced benefit societies and lying-in charities that cover the country,—and in face, too, of the large amount of illegal druggists' counter-practice, that opposes the practitioner at every step, some better organization of the system of medical practice is demanded for the security of the members of our Profession. The Profession have already pointed the way to such a re-organization, but it cannot be accomplished unless the majority be of one mind, and will discover that their real interests lie, not in competition, but in combination.

A Subscriber.—Refer to the "*Cottage Gardener*," a weekly magazine published by Messrs. Orr, of Paternoster-row. Mr. Quckett's second edition is not yet published.

THE Irish Lunatic Asylums next week.

THE proofs of Dr. Taylor's paper on the frequency of Pericarditis reached us too late for publication.

Mr. Cooper, of Bow, Middlesex.—Mr. Garman having himself written to us on the subject of his evidence regarding Morison's Pills, it is unnecessary to publish the letter of Mr. Cooper.

Mr. Fergusson's Clinical Lecture on Tracheotomy is in type, and will appear in our next Number.

A Student.—We will refer our Correspondent's note to Mr. Belfour, the Secretary of the College of Surgeons.

Dr. Routh's Letter reached us too late for this week's publication.

E. H., West Haddon.—Dr. Mayne's Lexicon, we have ascertained, will be published in one thick volume, price 30s.

Mr. White Cooper is the Ophthalmic Surgeon at St. Mary's. Mr. Haynes Walton is the Senior Assistant-Surgeon.

[To the Editor of the Medical Times.]

SIR,—In answer to your inquiry respecting the state of the peritoneum, in the case of "*Enteritis Phlegmonosa*," published in the last Number of your Journal, I beg to inform you, the portion covering the abdominal parietes and unaffected viscera appeared quite healthy; its cavity, however, contained about a pint and a-half of fluid, some of which escaped, pale and clear, on opening, into the abdomen; and the remainder was of a turbid brownish colour. The portion surrounding the inflamed intestines was quite free from any deposit of lymph,—smooth, shining, and admitting of their free motion. The kidneys were congested, and the bladder empty and contracted, the cavity of the pelvis being occupied by heavy coils of the inflamed ileum. I am, &c., A COUNTRY SURGEON.

COMMUNICATIONS have been received from—

C., with a sample of Coffee; Mr. LYNCH, of Liverpool; Mr. FARRAGE, of Rothbury; AN OLD SUBSCRIBER; A. B.; OXONIENSIS; A COUNTRY SURGEON; RISUS; L. C., Bath; Mr. HENRY SMITH, of Caroline-street; Mr. F. W. PAVY, of Guy's Hospital; Mr. ROBERTSON, of the New Kent-road; Dr. TRIPE, of King's-place, Commercial-road; Dr. WILLIAMS, of the Gloucester County Asylum; A SUBSCRIBER; Mr. GARMAN, of Coborn-terrace, Bow-road; Mr. COOPER, of Bow; A STUDENT; SECRETARY OF THE GEOLOGICAL SOCIETY; Mr. BEALE, of the Harrow-road; Dr. ROUTH, of Dorset-square; Mr. BARRON, of Southport; Dr. NUTTALL, of Lyston; Mr. BRANSBY COOPER, of Guy's Hospital and Spring-gardens; E. H., of West Haddon; Mr. LYNCH, of the Northern Dispensary, Liverpool; ÆSCULAPIUS; J. P.; A SURGEON, Manchester.

Just published, 8vo, cloth, 18s.,

Operative Surgery. Illustrated with Engravings on Wood.

By F. C. SKEY, F.R.S.

"Mr. Skey's work is a perfect model for the operating surgeon, who will learn from it not only when and how to operate, but some more noble and exalted lessons which cannot fail to improve him as a moral and social agent."—*Edinburgh Medical and Surgical Journal*.

London: John Churchill, Princes-street, Soho.

Just published, 8vo, cloth, 3s. 6d.,

Phthisis and the Stethoscope; a Concise Practical Guide to the Physical Diagnosis of Consumption.

By RICHARD PAYNE COTTON, M.D., Assistant Physician to the Hospital for Consumption and Diseases of the Chest.

"The Author has had extensive opportunities for observing the symptoms and progress of phthisis; and the results of his investigations are now instructively communicated to the Profession."—*London Journal of Medicine*.

"Dr. Cotton's little book is a good one."—*Medical Times*.

London: John Churchill, Princes-street, Soho.

Just published, by Renshaw, 356, Strand, Second Edition, price 1s.,

Gilbert on the Extraction of Teeth;

being a work descriptive of a new and much less painful method of Operating, by means of Gilbert's Patent Fulcrum; the jaw cannot be fractured, or the gums lacerated; there is less danger of breaking the diseased tooth, and of hæmorrhage, &c.—Mr. Gilbert invites the Profession to inspect his invention, from 11 till 4, at 5, Suffolk-street, Pall-mall; or at the Manufacturer's, W. Matthews, 10, Portugal-street, Lincoln's inn.

"We can confidently direct attention to it as a boon to the Profession and the public."—*Lancet*, Dec. 2.

"It allows of the extraction of teeth, in the most scientific and easy manner; and, in performing certain other surgical operations, the chair will prove of inestimable value to the surgeon."—*Medical Times*, Feb. 10.

The Pharmaceutical Journal (Nov. 1).

CONTENTS:—

The Pharmaceutical Meetings—Proposed Board of Examiners for Scotland—Close of the Great Exhibition—Distribution of Prizes—Destination of the Contents of the Great Exhibition—Protection of Inventors—Medicine Stamp and Licence Acts—Presence of Hydruret of Salicylic Acid in Aqua Castorei—On Cassia Fistula—Black Balsam of Peru—Manufacture of Opium (with cuts)—Hyraceum—Essence of Jargonelle Pear—Essence of Pine Apple—Artificial Essence of Bugs—Monopoly of Calisaya Bark—Pharmacy in Sweden—Ashton's Minim-Meter—Dr. James Arnott's Local Anæsthetic Agent—Warburg's Fever Tincture—Great Exhibition—Longmaid's Process for Treating Ores—Boric Acid—Artificial Ultramarine—Manufacture of Alum—Oil intended to Replace Cod-Liver Oil, &c. &c. Price 1s.

Published by John Churchill, Princes-street, Leicester-square; MacLachlan and Stewart, Edinburgh; and Fannin and Co., Dublin.

VOLUME X, may be had in boards, as well as the preceding volumes price 12s. 6d. each.

Taraxacum.—Davenport's Liquor or

FLUID EXTRACT, prepared by spontaneous evaporation. When diluted it presents the milky appearance and every characteristic of the fresh Juice. From the particular care devoted to its preparation, the properties of the Root are wholly preserved, and is found by medical experience to be most efficient where ordinary Extracts have proved inert. Dose, a teaspoonful. 6s. per pound.—J. T. Davenport, Operative Chemist to H.R.H. the Duke of Cambridge, 83, Great Russell-street, Bloomsbury.

Dr. James's Fever Powder.—The

high price at which this Medicine has hitherto been sold, and the great demand for it in consequence of the high estimation in which it has been held for more than 100 years by the most distinguished Medical Men in Great Britain, have tempted several persons to offer to the public a spurious and inferior article at a lower price. Messrs. Newbery pledge themselves that their preparation is made according to the original recipe of Dr. James, and that it differs essentially in its composition, as well as its effect, from that sold by imitators, under the name of Dr. James's; and as a proof that the medicines are not identical, sixteen grains of the true James's Powder may be given in a dose, whereas, not more than six grains are recommended to be given by the imitators. The price of the ounce bottle for dispensing, will be, in future, 9s. instead of 21s., as formerly. The genuine has the name "F. Newbery, 45, St. Paul's," engraved on the Government Stamp.

Galvanic Coil Machine, with Battery

and CONDUCTOR, Complete at 27s. 6d.

C. BAKER, 244, HIGH HOLBORN, begs to call the attention of the Profession to his very superior Galvanic Coil Machine, for the administration of Medical Electricity, complete at 27s. 6d.

Also to his very powerful ACHROMATIC MICROSCOPE, suitable for medical and general purposes. Fitted up with Mahogany Case and Apparatus, from £3 17s. 6d.

A Large Assortment of New and Second-hand Surgical, Optical, and Philosophical Instruments, always on hand, at equally low prices.

Every Description of Instrument Purchased or taken in Exchange.

The above will be sent, carefully packed, to any part of the United Kingdom, on receipt of a remittance.

Established 1765.

(Opposite Day and Martin's, High Holborn.)

Royal London Ophthalmic Hospital, Moorfields.

(Founded, 1804.)

CONSULTING PHYSICIAN.

Dr. Farre.

CONSULTING SURGEON.

J. Dalrymple, Esq., F.R.S.

PHYSICIAN—Dr. F. Farre.

SURGEONS—G. Mackmurdo, Esq., F.R.S.; J. Dixon, Esq.; G. Critchett, Esq.

ASSISTANT SURGEONS—W. Bowman, Esq., F.R.S.; A. Poland, Esq.; H. H. Mackmurdo, Esq.

Upwards of 9,000 Patients, affected

with Diseases of the Eye, are under treatment every year at this Hospital, and those whose cases require operation, or who are suffering under severe inflammation, are admitted into the wards.

Hours of attendance, daily, from Half-past Eight to Ten. Operations performed on Friday, at a Quarter before Ten.

Fee for One Year, Five Guineas.

Pupils may continue their attendance on the practice of the Hospital for a longer period, with the sanction of the Medical Officers, but no further fee is required.

Lectures will be delivered by the Medical Officers during the Summer.

Engineers', Masonic, and Universal Mutual Life Assurance Society.

Head Office, 345, Strand, London (opposite Waterloo Bridge).

Medical Referees paid by the Society.

Policies Free of Stamp Duty to the Assured.

Policies Indisputable.

Assignments and Transfers Registered Free of Charge.

All the Profits to the Assured.

Every known method of Life Assurance transacted.

Prospectuses and other information from

FREDERICK LAWRENCE, Actuary and Secretary,

345, Strand.—London, Suburban, and Provincial Agents wanted.

The New Equitable Life Assurance COMPANY.

(Incorporated by Act of Parliament, 7 and 8 Vic. c. cx.)

TRUSTEES.

Sir James Duke, Bart., Ald., M.P.

George James Guthrie, Esq., F.R.S.

James Wyld, Esq., M.P.

Sir Charles Hastings, M.D.

William Fergusson, Esq., F.R.S.

Robert Lee, M.D., F.R.S., CHAIRMAN OF DIRECTORS.

George Beaman, Esq., M.R.C.S., DEPUTY-CHAIRMAN.

BANKERS.

The Commercial Bank of London.

CONSULTING PHYSICIANS.

Marshall Hall, M.D., F.R.S.

Chas. J. B. Williams, M.D., F.R.S.

Jas. Arthur Wilson, M.D., F.R.S.

CONSULTING SURGEONS.

William Fergusson, Esq., F.R.S.

J. Ranald Martin, Esq., F.R.S.

Samuel Solly, Esq., F.R.S.

SURGEON AND MEDICAL EXAMINER.

Thomas Wakley, Esq., F.R.C.S., Guilford-street, Russell-square.

STANDING COUNSEL.

Sir Alexander Cockburn, Her Majesty's Attorney-General.

George Woodyatt Hastings, Esq., Paper-buildings, Temple.

SOLICITORS.

Messrs. Bell, Steward, and Lloyd, 59, Lincoln's-inn-fields.

SECRETARY.

H. Barber Beaumont, Esq.

CONSTITUTION AND REGULATIONS OF THE COMPANY. CAPITAL.—MUTUAL ASSURANCE.

The "NEW EQUITABLE" embraces all the advantages of a strictly Mutual Office, with the addition of an ample subscribed paid-up capital, forming a *bond fide* security for its policy-holders.

POLICIES INDISPUTABLE.

The Policies of this Company being Indisputable, they become as readily negotiable, in monetary transactions, as any other description of personal property.

SPECIAL ASSURANCES.

All the different varieties of Life Contingencies may be provided against by Assurances in the New Equitable; and every accommodation is granted to the Assured for payment of premium.

INVALID LIVES

Are assured at rates adapted to the circumstances of each case. Every circumstance affecting the health impartially considered.

DIVISION AND APPROPRIATION OF PROFITS.

After the lapse of a few years, the whole of the Profits will be Equitably divided annually amongst the holders of Policies issued on the participating scale.

MEDICAL PRACTITIONERS.

The Directors feel strongly that Medical Practitioners have not hitherto received that recognition, by Assurance Companies, which a professional knowledge, position, and valuable services entitled them to expect. They have determined, therefore, to frankly acknowledge and consult all duly qualified Medical Referees as the Medical Advisers of the Company, and uniformly transmit, with the Questions intended to be made the basis of every Official Medical Report, a Consultation Fee of Two Guineas.

ANNUITIES AND ENDOWMENTS GRANTED.

Any further information may be had on applying personally, or by letter, to the Resident Director or Secretary.

Chief Offices—WEST STRAND, CHARING-CROSS, LONDON.

ORIGINAL LECTURES.

LECTURES

ON

DIGESTION, RESPIRATION, AND
SECRETION.GIVEN AT THE ROYAL INSTITUTION,
TO THE MEMBERS, AND TO THE PUPILS OF
ST. GEORGE'S HOSPITAL.

By H. BENCE JONES, M.D., F.R.S.,

Physician to St. George's Hospital.

[Continued from page 429.]

ON THE OCCURRENCE OF OXALATE OF LIME,
AND ON THE VARIATIONS OF THE SULPHATES
IN THE URINE.

THE excretion of oxalate of lime in the urine, gentlemen, is of importance, solely because it may give rise to this species of calculus which you see before you. It has been called the oxalate of lime, or mulberry calculus. You will remember, that this calculus in my Table is represented as being altered by heat, but not destroyed by it like uric acid or urate of ammonia; that it is converted by heat from the state of oxalate into the state of carbonate. By being heated, it undergoes oxidation; and, if heated extremely, the oxalic acid is destroyed, and caustic lime alone results; if heated slightly, the carbonic acid remains combined with the oxide of calcium. I have one or two other reactions of this oxalate of lime, which are worthy of being brought before you, and with them I shall commence this lecture.

If I take some of the powder of this calculus, and mix it with carbonate of potash or of soda, in solution, and boil them for a length of time together, the oxalate of lime and the carbonate of soda react upon one another; double decomposition ensues; carbonate of lime, or chalk, is produced, and oxalate of potash remains in solution. [Experiment.] This is one of the best and easiest means of getting the oxalic acid separate from the lime—of causing it to combine with a soluble instead of an insoluble substance. That oxalate of potash is really in solution, I can show you by a very easy and simple test. I take some of the mixture after boiling, which of course is highly alkaline from the excess of carbonate of potash or soda present, and I neutralize it with pure nitric acid. Brisk effervescence ensues, from the escape of the carbonic acid, and then I have a nearly neutral solution. It requires some care to reduce the solution to the neutral, or at least to the feeblest acid point; and this I was obliged to do, therefore, before the lecture. I have here a portion of the solution accurately neutralised, and containing oxalate of soda. That oxalate of soda is really present, I can prove thus:—I take this liquid, and mix it with any lime salt; if a soluble oxalate be present, I shall immediately have oxalate of lime precipitated. For example: I take a little solution of chloride of calcium, and, on the addition of a drop or two of this lime salt, a white precipitate occurs, which is nothing else but oxalate of lime. [Experiment.] You will say, "How do you really know this to be oxalate of lime?" There is another and a more beautiful experiment which will prove that it is so. If, instead of adding a lime salt, I add a silver salt, I get oxalate of silver precipitated instead of oxalate of lime. [Experiment.] This white precipitate of oxalate of silver when it is perfectly dried, instantaneously explodes, on the application of heat. [Experiment.]

Thus much, then, gentlemen, for the tests by which you may be sure that oxalate of lime is really present. If you have a calculus which, when heated, gives carbonate of lime,—when distilled with sulphuric acid gives carbonic oxide and carbonic acid gases,—and when reduced to a powder, and long boiled with carbonate of soda, gives a solution, which, after being accurately neutralized with pure nitric acid, is precipitable by a solution of chloride of calcium and of nitrate of silver, yielding an explosive silver salt, you may be perfectly certain that the calculus consists of oxalate of lime, and of nothing else.

I pass on now to the form in which this substance actually occurs in the urine. In many specimens of urine, as in the one which you see before you, instead of its becoming quite thick and cloudy on standing, it is found that, after some

time, a very fine, delicate deposit forms, which settles down to a fine cloudy precipitate, so fine that it is hardly perceptible at any distance; but if looked at closely, and especially by transmitted light, it is very apparent to an accustomed eye. There is no appearance whatever, to the naked eye, of any crystalline structure; but yet this powder, or precipitate, if you examine it with a microscope, is seen to consist almost entirely of most beautiful microscopic crystals, which are as definite and distinct as crystals possibly can be, and which closely resemble the model octahedral crystal which I hold in my hand. If these crystals are made to roll over, by inclining the object-plate of the microscope, you will see that the octahedra are much flattened. To detect these crystals a microscope is necessary. Though a powerful microscope is necessary, it is not requisite that it should be a very large one. I have here a little microscope which was made, at my request, by Powell and Leland, and, by its means, these octahedral crystals can be seen with the very greatest ease. No care whatever is required in preparing the urine for the purpose of looking for these crystals; it is merely necessary to let the fluid stand for six, eight, or twelve hours, and then, on pouring off the upper fluid, and putting a single drop of the residue upon the object-plate, you will detect the crystals, when they are present, without the least difficulty. These crystals had been observed in the urine for some time before Dr. Golding Bird pronounced that they consisted of oxalate of lime. This is not proved, though it is highly probable. The difficulty of obtaining the crystals in sufficient quantity to allow of the collection of the carbonic acid and carbonic oxide gases is very great. But since calculi are occasionally passed at the same time as these crystals, and since they can be proved to consist undoubtedly of oxalate of lime, there is not the least doubt in my mind that Dr. Golding Bird is right in saying that the crystals consist of oxalate of lime; and, though the absolute proof is not yet obtained, yet there is quite sufficient evidence to satisfy the medical man, if not the chemist. It has been stated as an objection, that oxalate of lime does not form octahedral crystals, but an amorphous granular precipitate. I have found, however, that if I take an amorphous precipitate of oxalate of lime—and I may get it in a moment by mixing oxalate of ammonia and chloride of calcium—after filtering and washing this oxalate of lime, if I dissolve it in a little dilute hydrochloric acid, and set it aside for some hours or days to crystallise, I shall be able distinctly and decidedly to obtain crystals of oxalate of lime, which occasionally, though not always, will assume the form of octahedra. These crystals are not always octahedral, but occasionally they assume that form. What the temperature and strength of the acid must be in order to give rise to this form of crystal, I am not yet able fully to inform you.

There are other appearances in urine, other forms of crystals, which have also been stated to be oxalate of lime; but of this much less proof exists than of the composition of the octahedral crystals. A very peculiar form occurs, which has been described to be like that of a dumb-bell; but that this is oxalate of lime there is no absolute proof: it may be oxalate of lime, or it may be something else.

There is another form, that of a slightly flattened disc, which also occurs very frequently at the same time as the octahedral crystals; and it has been thought that this is a variety of oxalate of lime. It is more probable that the oxalate of lime occurs in forms derived from octohedra. I have seen cubes and dodecahedra; but whether these forms were actually oxalate of lime or not I cannot certainly inform you. At least for the chemist there is not yet sufficient proof; but there is no reason why it may not be obtained.

Having spoken thus much, gentlemen, of the forms in which the oxalate of lime occurs, I must pass on now to the source of this oxalate of lime, whence it comes, and what it indicates in the urine. It has very long been supposed, and by him who was our first and best authority it was very decidedly held, that this oxalate of lime—the oxalic acid at least—came from our vegetable food; that it was one of the results of the want of a perfect and proper digestion; and that vegetable food, more especially sugar, was the source of the oxalic acid.

If I take a portion of sugar, (and a very small portion is sufficient,) mix it with a little nitric acid, and heat it, I have decomposition of the sugar produced; and the decomposition which actually takes place is an oxidising action,—some of the nitric acid is decomposed, and furnishes oxygen to

the sugar, which is thus oxidised; and I have the results of that oxidation in the solution. On the application of heat, an intense action takes place, the liquid turns red, and rapidly evolves red fumes. (Experiment.) The result is, that I have oxalic acid produced. The change which thus takes place I have represented in my diagram.

Formation of Oxalic Acid from Sugar.



If the sugar, which may be represented as 12 carbon, 12 hydrogen, and 12 oxygen, can take 18 equivalents of oxygen from the nitric acid, the nitric acid is decomposed, and water and oxalic acid are produced. If I had oxidised the sugar still further, (by burning it with oxide of copper, for instance, in a combustion tube,) what would have been the result? The sugar, with 24 equivalents of oxygen, would have given me water and carbonic acid; thus the sugar, if perfectly oxidised, gives water and carbonic acid; if imperfectly oxidised, water and oxalic acid. To show you that oxalic acid is thus produced, all that is required is to distil off a portion of the nitric acid, to pour the residual liquid into a flat basin, and to leave it until the oxalic acid forms magnificent crystals, like these which were thus prepared. (Specimen produced.)

From hence the theory arose, that oxalic acid in the body came from vegetable food. You have seen, that out of the body imperfectly oxidised sugar will produce oxalic acid. Hence it is possible, that, in the body, imperfect oxidation might be a source, and has been taken as the source, of oxalic acid. It has even been attempted to stop the formation of this oxalic acid, by forbidding all sugar; but, if you remember, in my lecture on the saliva, I showed you how exceedingly difficult it is to prevent sugar from forming even when it is not ready formed in our food. Every particle of starch we eat passes into sugar, and thus, not only sugar must be forbidden, but all starch must be abstained from also. A very hopeless proceeding indeed, for it is by no means easy for human beings to live on animal food alone; and, though it can be done, yet to the great majority of us it is nearly impossible. Moreover, it is far from certain that the oxalic acid is derived in the body from the vegetable food, although it was long believed that vegetable food was the only source of oxalic acid; yet now, researches by Professor Liebig have established a totally different theory on the origin of oxalic acid. If I take some pure uric acid, and mix it with peroxide of lead, suspended in water, and heat them to a temperature of nearly 212° , adding the peroxide as long as I find it undergoes change, that is, until I get a black or brownish residue, I find that by thus acting upon uric acid I have certain changes produced. Such a proceeding I have actually performed here in this basin. These substances, uric acid and peroxide of lead, were mixed with water, heated to 212° , and then thrown on a filter, and the filtered liquid passed through; and in it this beautiful crystalline substance which has been formed out of the uric acid, and which is named *allantoin*, is dissolved. Not only have I allantoin in solution, but also I have urea, — a substance which, as you know, occurs in the urine, and which I shall have occasion, in a later lecture, to speak of. Here is a considerable specimen of urea, which has been obtained from the solution. But this is not all the re-action. I find that the peroxide of lead has undergone a change; it is no longer peroxide of lead, but on the filter I have, instead of oxide, oxalate of lead, a combination of oxalic acid and oxide of lead. If I suspend the mass which remains on the filter in a little water, and pass sulphuretted hydrogen through it, sulphuret of lead is produced, and oxalic acid remains in solution. I boil it, and set it aside to crystallize,—you see how highly acid the solution is. [Experiment with test paper.] In this basin you see the crystals of oxalic acid beginning to form. The decomposition of the uric acid is represented in my diagram.

The Conversion of Uric Acid into Oxalic Acid and Urea.

	C	H	O	N	Pb
1 Uric acid	10	4	6	4	—
2 Peroxide of lead	—	—	4	—	2
3 Water	—	3	3	—	—
	C ₁₀	H ₇	O ₁₃	N ₄	Pb ₂

	Become	C	H	O	N	Pb
2 Oxalic acid	4	—	6	—	—	—
2 Protoxide of lead	—	—	2	—	2	—
1 Allantoin	4	3	3	2	—	—
1 Urea	2	4	2	2	—	—

C₁₀ H₇ O₁₃ N₄ Pb₂

By adding together 2 equivalents of oxalic acid, 2 equivalents of protoxide of lead, 1 equivalent of allantoin, and 1 equivalent of urea, precisely the same numbers are obtained by adding together 1 equivalent of uric acid, 2 equivalents of peroxide of lead, and 3 equivalents of water. Thus, then, we have the basis for another theory of the formation of oxalic acid; namely, that it arises from imperfect oxidation of uric acid. When uric acid is further oxidised, as for example, when burnt with oxide of copper or chromate of lead, then carbonic acid, water, and ammonia are produced; but when it is imperfectly oxidised, then allantoin, urea, and oxalic acid are formed. We have thus a very different theory of the production of oxalic acid from that which I before mentioned. Instead of assuming it to be formed from sugar, a vegetable substance, we see that it may be formed from an animal substance,—from uric acid, a substance which never occurs in vegetables, but which always exists in the urine, and has been discovered in healthy blood. I am far from saying that oxalic acid is never formed in the body from sugar; certainly, however, there is no experimental proof that it is formed from vegetable food. On the other hand, it is certain that oxalic acid occurs in the urine when no vegetable food has been taken, and after large doses of uric acid have been taken oxalic acid is said to be found in the urine. The physician also cannot fail to observe that uric sediments and oxalate of lime occur constantly in the same kind of cases at the same time; or the deposit, at one period of the day, in the morning, perhaps, may be oxalate of lime, and a few hours earlier or later may be urate of ammonia; thus rapidly alternating, or the alternations may occur at longer periods, as may be seen in some calculi in which layers of urates and oxalates are found frequently to succeed each other many times in the same stone. Hence I have no doubt that these substances are very closely related in their origin; but whether oxalic acid does come from uric acid only, or from some substance closely related to uric acid, or whether it sometimes is formed from our vegetable food, cannot, at present, be determined. At present I consider it is by far the most probable supposition, that the oxalic acid is formed in the body from the uric acid, and not from sugar. I cannot conclude these observations on the occurrence of oxalate of lime without alluding to the influence of lime in determining the formation of oxalic acid in the body; accurate experiments here also are still wanting; but the frequent occurrence of oxalate of lime calculi, and sediments, where the water is very hard, and the advantage derived from soft water are so striking that they cannot be overlooked.

I must pass on now, for the remainder of my lecture, to a substance which never forms a calculus, but which, nevertheless, is always passing out of the body, can always be detected with the greatest ease, and the study of which will alone enable you fully to comprehend the occurrence of the phosphates in the urine, and the formation of the phosphatic calculi, which form the subject of my next lecture.

All urine contains sulphuric acid, but a calculus consisting of the sulphates is never found. I know of no calculus whatever in which more than slight traces of the sulphates have been detected. The reason of this is, that the alkaline sulphates are very soluble in the urine. The alkaline sulphates do not form concretions because they are not insoluble substances; yet they are always present in the urine, and present in large quantity. Still they do not show themselves by forming sediments or calculi. Just as urea is always present in the urine, but never forms a calculus of urea or a visible sediment, because it is highly soluble in the water of the urine.

If I take a portion of any urine whatever, and accurately fill a 1000-grain bottle, of course, by weighing that bottle, and finding how much it weighs more than when filled with water, I get the specific gravity of its contents. If I take this weighed quantity of urine, the specific gravity of which is thus determined, and add to it a salt of baryta,—muriate of baryta, for instance,—I always get a plentiful precipitate. You see how large a precipitate I obtain. [Experiment.] Now

this precipitate, for the most part, consists of sulphate of baryta. To make sure that it consists only of sulphate of baryta, I boil it with hydrochloric acid, which is added in excess; and if there be any phosphate of baryta present, which is soluble in hydrochloric acid, it is taken up immediately, and the sulphate of baryta remains by itself. The liquid is boiled also, in order to produce in the precipitate a more coarse state of aggregation, and thus to enable it to be caught by the filter. Having, then, precipitated the sulphate of baryta, and boiled it for a few moments to make sure that every trace of phosphate of baryta is dissolved, and that the precipitate can be filtered, I throw it on a small filter, and wash it until I find it is thoroughly free from all trace of chloride of barium, or until every trace of soluble matter has passed through the filter. When I am sure that the precipitate is thus thoroughly washed, the filter is burnt in a small weighed crucible, and, on re-weighing it, the quantity of sulphate of baryta which is precipitable out of the weighed quantity of urine is determined, and thence the quantity of sulphate of baryta precipitable from 1000 grains of urine can immediately be calculated. By this means I have found, that 1000 grains of urine, in a state of health, of the specific gravity of 1033·9 to 1029·3, will give from 15·23 to 9·49 grs. of sulphate of baryta, when full exercise and full diet are taken by a healthy person; this quantity of sulphate of baryta may be obtained three or four hours after the principal meal. Long after food,—that is, after the immediate effect of the last meal has passed away,—I find the quantity of sulphate of baryta in the urine is diminished; then 1000 grs. of urine, of 1027·6 to 1025·3 sp. gr., will give from 8·56 to 7·07 sulphate of baryta. It follows, from these experiments, that the food distinctly increases the sulphates in the urine. But it is of importance to determine what kind of food produces the most decided effect on the sulphates. Does animal food increase the sulphates to the same amount that vegetable food does? I endeavoured to arrive at the knowledge of the variations produced by different kinds of food by examining the urine in the way just mentioned, when animal food or vegetable food alone was taken. For three days vegetable food alone was taken, and at the end of the third day the quantity of sulphates in the urine was determined. After vegetable food the sulphates are increased,—not beyond the average, as you see in this table, but still distinctly increased:—

Effect of Vegetable and Animal Food on the quantity of Sulphates in 1000 grs. of Urine.

3rd Day Vegetable Food.	Specific Gravity.	Sulphate of Baryta.
Before . . .	1028 . . .	9·5 grs.
After . . .	1032 . . .	13·7
3rd Day Animal Food.		
Before . . .	1025 . . .	9·3
After . . .	1026 . . .	11·1
After exertion, before food	1031 . . .	11·3

So, also, after animal food was taken for three days. On the third day the numbers obtained are represented in the Table, and the sulphates are increased after food. I am unable to show you what was the effect of the water which was drunk at each meal; some increase no doubt was caused thus, but as the same water and the same quantity of it was taken, whether the diet was animal or vegetable, it does not affect the comparative results. It must not be overlooked, that on the third day, on animal diet, the specific gravity was lower than usual, which partly may account for the diminution in the sulphates, as compared with the amount when vegetable food was taken. I endeavoured to determine the effect of active exercise on the sulphates in urine. You may remember, that in the third lecture on Respiration, I spoke of the sulphates in diseases in which violent muscular exertion occurs, as in violent chorea and delirium tremens. I could not, however, obtain results sufficiently conclusive to be mentioned here. I can only point to one analysis which is given in the table above, as an example of the increase of the sulphates after strong exertion before food was taken. You see, that before food, after very violent muscular exertion, every 1000 grains of the urine gave 11 grains of sulphate of baryta; whilst, before food, when much less exercise was taken, there were only 9 grains of sulphate of baryta precipitated from every 1000 grs. of urine. Hence, it is most probable, that the influence of exertion upon the production of sulphates in healthy urine is not inconsiderable. And as the same result has been obtained by other observers, there can be little doubt as to the fact. It

must not be forgotten, that the diet has a greater effect on the sulphates than the most active exercise. In order to estimate the elimination of the sulphates, it was necessary to trace the effect of different medicines on the sulphates in the urine. In the following table

On the Influence of Sulphuric Acid, Sulphur, and Sulphates on the amount of Sulphates in the Urine.

No Sulphuric Acid	Sp. Gravity	1024	Sulphates	8·2 grs.
½ oz. dilute Acid	1024	"	11·4
Sulphur before Food	1022	"	8·7
" after "	1027	"	14·0
Sulphate of Magnesia	1024	"	22·6

some of the results are stated for the purpose of comparison. When dilute sulphuric acid of the Pharmacopœia was taken in very large quantity, no very great increase was found in the quantity of sulphates thrown out of the body. When no sulphuric acid was taken, there were 8·2 grs. of sulphate precipitated from 1000 grs. of urine specific gravity 1024; when half an ounce of sulphuric acid was taken, there were 11·4 grs. In the same quantity of urine of the same specific gravity, no very extraordinary increase, considering the quantity of dilute acid which was taken. Without doubt, it does increase the sulphates, but not in a very great degree. If, however, sulphate of magnesia is taken, (for instance, in 2 drachm doses, which is not an inordinate quantity,) I find the sulphates mount up to as much as 22·6 grs. in every 1000 grs. of urine.

I have already alluded to the effect of sulphur on the sulphates in the urine; and I find, when a continuous course of sulphur is taken, (the diagram represents the average of six days;) that the sulphates, which before the course was begun, were 8·2 grs. per 1000 grs. of urine, now amount, before food, to 8·7 grs. per 1000, and after food to 14 grs. per 1000 grs. of urine; that is, the sulphates are increased, but not so much so as to go beyond the highest limits which are found in a state of health.

It appears, then, that by far the most remarkable results are produced by the sulphates when taken as medicine. The effect of diet is the next most important cause of variation. This last may be the result of the soluble sulphates in the food. The increase of the sulphates in consequence of muscular action, is also important. In my previous lecture on respiration, I mentioned a case in which there was the effect, not only of intense muscular motion, but of the medicine also. Then the greatest increase in the sulphates was to be expected, and was accordingly found. It was a case of *delirium tremens*; in which disease, and in intense chorea, I have especially found the increase in the sulphates to take place. When the patient had taken sulphate of magnesia in two drachm doses, and thus when the disease and the sulphate of magnesia acted together, the quantity of sulphate of baryta precipitable from the urine, amounted to the greatest I have ever found,—as much as 37 grs. in every 1000 grs. of urine. In the same case, when no sulphate of magnesia was taken at all, the quantity was above that of a healthy man on full diet, and in full exercise; it then amounted to 20 grs. in every 1000 grs. of urine.

Now, I have dwelt at some length upon these variations of the sulphates in the human body, in order to show you what may be taking place in the urine, when, to the eye alone, no variation appears to occur. You can never tell, by looking at the urine, nor by taking its specific gravity, whether there is any increase or diminution of the sulphates in urine; you must apply your chemical reagents. When there was the greatest excess of sulphates, there was not the slightest trace of a precipitate in the cases I have mentioned; not the slightest microscopic appearance or form of a crystal, whence it could be conjectured that the sulphates were present in excess; yet the greatest increase may occur, or the greatest diminution may take place, whilst, by mere ocular inspection, you know nothing at all about it. The sulphates in the urine never show themselves; they require to be made to appear; chemical tests are necessary to be certain of their presence. Now, this is the important point as regards my next subject, on the occurrence of the phosphates in urine. If you will remember, that in the urine substances may exist in increased quantity, or in greatly diminished proportion, whilst the eye can see no difference and can detect no change until chemical reactions cause the variations to become apparent, then I have no doubt you will easily understand the variations of the different kinds of phosphates which form one of the most remarkable excretions from the human body.

CLINICAL LECTURE ON SURGERY,

DELIVERED

By WM. FERGUSSON, Esq., F.R.S.

AT

KING'S COLLEGE HOSPITAL.

TRACHEOTOMY.

GENTLEMEN,—As it is my day and hour to give the first of my Clinical Lectures of the newly-commenced Session, I shall take the opportunity, now you are assembled here, of calling your attention to a case of great interest, which has only just this moment passed from beneath our immediate notice. I allude to the patient who was brought into this theatre this afternoon, and upon whom I have found it necessary to perform the operation of tracheotomy. Although, of course, we cannot form any opinion as to what will be the result of this case, and it may appear somewhat premature to give a lecture upon it, still the fact, that it has only this moment been under your direct notice, and that you can all have the opportunity of watching its progress,—moreover, the very great importance of this subject,—is sufficient to induce me to draw your attention to it in a more particular way than is usual after the operations performed here. Before, however, making any remarks, I will just read a short history of the case from the dresser's book. It is as follows:—

“Richard MacGee, aged 50, a ropemaker, residing at Wisbeach, in Cambridgeshire, was admitted into the hospital on October 16. He had been a man of intemperate habits; he had suffered from syphilis about five years ago, but it was not followed by any apparent secondary symptoms. He has latterly been much exposed to wet and cold; and dates the commencement of his present illness to about four months since, when he had a very severe attack of catarrh, which has lasted, more or less severe, up to the present time. The most prominent and lasting among the symptoms were, a sore throat and slight cough, without any expectoration. He was under the care of a surgeon for a month; he had blisters applied, and used gargles, but he derived very little benefit. He lately came to London, and was seen by Mr. Fergusson, who carefully examined the patient, recognised serious disease of the larynx, and considered that it was a case in which the operation of tracheotomy would save the man; with this view he sent him into the hospital.

“When admitted, he was very weak, and restless at night; the respirations were short, difficult, and frequent, and accompanied with an unpleasant noise; pulse 108; skin somewhat of a dusky colour, and countenance anxious. He could not speak above a whisper. After he had been in the house a few days, he began to get worse, became slightly delirious at night, and now and then got out of bed unconsciously, and the breathing got somewhat more difficult. Dr. Todd examined the chest with the stethoscope, but the only abnormal sound he could discover was a roughness in the breathing. As the man was evidently getting into a more unfavourable condition, Mr. Fergusson determined to delay no longer, but to carry out his original determination of opening the trachea. Consequently, on the 23rd of October, at 2 p.m., the patient was brought into the theatre. Chloroform was cautiously administered by Dr. Snow, and while the patient was under its influence Mr. Fergusson performed the operation of tracheotomy, with immediate relief to all the symptoms.”

Well, Gentlemen, you all had the opportunity of seeing the condition this poor man was in, and of witnessing the operation which I have just thought fit to adopt for the purpose of saving his life. You see he has had chronic disease of the larynx for some three or four months, and various measures had been employed which have not benefited his disease. It appears that no cure could be effected, and his sufferings latterly had become so great that there was imminent hazard of suffocation. I first saw the patient out of the house, in conjunction with Dr. Cumming, of Cadogan-place, and, having examined the man and heard the history, I expressed my opinion that it was a case in which tracheotomy should be performed. I had him removed into the hospital a few days ago, with that intention, provided that he did not improve, but determined to wait some little time, as there was not a very urgent necessity at present; but, as you have had the opportunity of witnessing, his

breathing has become day by day more laborious, and the general bad symptoms have increased. Yesterday evening I saw him, in conjunction with Dr. Todd, who examined the man's chest, and discovered nothing there prohibitory of the proceeding which it was agreed should be adopted to-day; this you have just had the opportunity of seeing me do. In the first place, there was a feature connected with the proceeding which must have struck you, and that was the circumstance of our having given the patient chloroform. In instances of like nature, [and where the respiration is much interfered with, surgeons are afraid of giving chloroform; but our good friend, Dr. Snow, to whom we are so much indebted for valuable aid and counsel on all such occasions, was fortunately present, and he took upon himself the responsibility of giving this agent; he considered that it might be given with safety, as only a few weeks ago he had administered it with safety, and with great success, in a case where a similar operation, under circumstances of difficulty, was performed by my friend and assistant, Mr. Henry Smith. Well, you saw what took place; after the patient had fully inhaled the chloroform, the man got into just that condition in which patients are who are apparently dying from asphyxia. The face became pale, the eyes turned up, a cold sweat came over the skin, and the inspirations were drawn heavily, and at distant intervals. At this critical period I made the necessary incisions, and got down to the trachea as quickly as I could; but you must have seen what difficulties there are to be encountered in some cases of tracheotomy. The man had a short and stout neck; the trachea was very deep down, and in constant motion, in consequence of the difficulty in respiration. Moreover, there was a considerable quantity of bleeding. However, I hit the trachea just below the cricoid cartilage, and made an opening into it; but I did not penetrate it until the bleeding had ceased. In consequence of the convulsive movements in the part, the opening was not made so large as I could have wished, and I could not get the tube into it. It was therefore necessary to enlarge the opening; and as there was even yet imminent danger of suffocation, to give some relief, and admit more air, I executed the following manoeuvre. I passed the handle of the knife through the opening, at its upper part, and then turned it round; this made the incision quite patent, and it was kept so for a short time, for the purpose of allowing the patient to get some free inspirations. Now, even in executing this little manoeuvre, the patient's life might have been lost, for if, instead of keeping the handle of the knife against the upper surface of the wound, I had carried it against the lower portion, the entrance of air into the lower part of the trachea would have been prevented, and he might have been asphyxiated. With the handle of the knife in this position I was enabled to pass in a straight blunt-pointed bistoury, with which I enlarged the wound upwards; then it was easy to introduce a silver tube, through which the man breathed with great freedom. The relief was immediate and striking. You saw how rapidly the man rallied; the countenance became natural, the eye bright, and his senses returned; in fact, all the appearances suddenly presented themselves as they are generally noticed in favourable cases of this nature; that is to say, when an opening into the tube removes the immediate impediment to breathing.

It is well to call attention to one or two more striking points in connexion with the proceeding; and, in the first place, as to the effect of the chloroform in this case. Either from that agent, from the disease, or both combined, the patient was certainly brought into that condition which one is in when death from dyspnoea is impending. In fact, as you saw whilst inhalation was going on, the difficulty of breathing and other symptoms became so bad, that it looked as though the man was going to die. However, Dr. Snow himself was not afraid of any danger, and did not relax the chloroform until the patient was completely under its influence. Still, with all due deference to our good friend who has had such ample experience on this matter, and to whose decision I certainly ought to bow, I must say, that I myself was rather alarmed about the patient's condition, and, being fully influenced by the momentary danger, I made as much haste as I could to relieve it. I fear, if death had occurred upon the table, that it would have been attributed to the chloroform. My own impression is, that, if tracheotomy had not been performed, within a minute or two the patient would have been dead from dyspnoea. Still, a very different and much more fortunate result has occurred, and

therefore we have no occasion further to speculate on this matter.

You may have noticed, that, while enlarging the wound for the purpose of more readily introducing the canula, I took care to cut upwards, and not to carry the knife below. Now, the reason I did this is, that there is always much less danger in carrying your incisions upward, in this operation, than in cutting at the lower part of the wound; for, if you happen to get very low down, you might come in contact with important blood-vessels; the arteria innominata, in some cases, rises very high, and that might be wounded; but more especially might the vena innominata be in the way. At the upper part of the wound you may cut without much fear; it is true, there is the isthmus of the thyroid body in the way; but this does not matter much, so that you keep exactly in the median line. You must not misunderstand me, and fancy that I would recommend you to cut through the isthmus. You ought, if possible, in opening the trachea, to get below this process on all occasions; but it is not easy or judicious to do so in many instances. In the case under notice, the neck was very short, and I was obliged to divide the isthmus of the thyroid body. It is most important to recollect these two points in performing the operation of tracheotomy: in the first place, not to use your knife freely at the lower part of the wound; and to take especial care not to deviate from the middle line.

You must have observed that there was a good deal of bleeding when I made the first incisions; and, therefore, although the patient was in imminent danger of dying from suffocation, I was obliged to wait a moment or two before I opened the trachea. This step of the operation was by no means an easy task; for the convulsive movements of the throat were such as to prevent me from placing my finger on any one point of the tube; and you saw I was obliged to open the windpipe by a kind of jerk of the knife. When I introduced the tube, there was a little arterial blood forced out of it. This bleeding was from the mucous membrane of the trachea, while that which was noticeable before was mainly or entirely venous. You must also have noticed how very little irritation the introduction of the tube into the trachea caused. We read in books, and hear from those who have not had much experience in these cases, of the very great irritability of the mucous membrane of the trachea; but this is a mistake; the inside of the trachea is not very irritable. This irritability, which is so marked in the passage to the breathing apparatus, is confined to the upper part of the windpipe, viz., to the larynx, and vocal chords.

At present I shall say no more to you about this case, which I hope you will watch with that interest it deserves. In this case, Gentlemen, you have learned what may be some of the difficulties connected with the operation of tracheotomy, and you will see that performing it on the living body, under the exigencies of such a case as we have just had, is a far different matter from doing the same thing on the dead body, when the parts are quite clearly defined and easily distinguished. The operation is very easy under such circumstances, and after having read its description in books it appears very simple, but it only requires that you should perform it, or see it done, under trying circumstances in the living body, and you will then possibly have some idea of the difficulties which may arise.

With respect to the condition of our patient now, I must tell you that the operation which has just been done is to a certain extent meant as an auxiliary measure to other treatment which, if he survives, we may think it right to put in force. It is impossible to say what the event may be, but it is to be hoped that he will yet do well. At present I shall leave the case to your consideration, and I shall probably allude to it on some other occasion.

We are sorry to say, that, since the above lecture was delivered, the patient has died. After the operation, he was greatly relieved, slept well, and breathed through the opening in the trachea with comparative ease; took nourishment and a large quantity of stimuli (which it was found necessary to give him) with readiness, and without causing any irritation of the larynx. He continued in a pretty favourable condition, until the fifth day after the operation, when the symptoms began to show an unfavourable aspect. He had been slightly delirious again during the night; the countenance became anxious and somewhat dusky; the tube had

been taken out and cleaned, and some difficulty had been experienced in introducing it again; and the movements of the trachea appeared to displace it.

On the following day, Mr. Fergusson slightly enlarged the wound in the trachea, and ordered a larger and more suitable tube to be made, which was done. No favourable change, however, took place in the symptoms. An erysipelatous inflammation attacked the wound, and involved the skin of the neck. The man gradually got lower; the countenance became more dusky; and he sank at three p.m. on the 30th, eight days after the operation.

On November 1, a *post-mortem* examination was made; Mr. Fergusson himself carefully dissecting the parts, so as to show them *in situ* relative to the locality of the operation. In the first place, it was noticed, that all the tissues were excessively soft, and there were deposits of unhealthy pus about the wound; and the sterno-thyroid muscle of the right side was a good deal altered in its texture. The wound in the trachea was seen to have been made exactly in the median line, between the lobes of the thyroid gland, dividing the isthmus, and going through the four upper cartilages of the trachea; portions of these were bare. Just below and to the right side, not more than half an inch from the lower extremity of the incision, the arteria innominata was seen dividing into right carotid and subclavian, seated, as Mr. Fergusson had noticed before the operation higher up than usual. About one inch below the wound ran transversely the left vena innominata; and very close upon the incision a large vein, which had been avoided during the operation, joined this great vessel.

On looking into the larynx it was found that the opening into it was very much contracted, in consequence of a very great thickening and bulging inwards of the right arytaenoid cartilage. The inside of the upper portion of the larynx, limited above by the superior vocal cords, was in a state of extensive ulceration. Epiglottis was quite healthy. The mucous membrane of the trachea and bronchial tubes was very much reddened, but there was no obstruction in the bronchi; the lungs were in a healthy condition, with the exception of some amount of congestion of the posterior lobes probably from the position of the body after death. The heart was dilated, covered with a large quantity of fat, and its muscular structure very much softened and attenuated.

Mr. Fergusson made some further observations on the case. He briefly went over the history since the operation, and stated, that he attributed the death of the patient, not to any want of a due supply of air, (although there had been some difficulty in reference to the tube,) but to the irritation of the disease, and chiefly to the unhealthy nature of the inflammation, which had attacked the wound and the tissues around. The pupils had the opportunity of seeing what an unhealthy and softened condition the tissues were in, and how very far from healthy was the heart. This condition was, doubtless, in a great measure due to the man's habits of life. He had learned that he had been a great drinker; and he had therefore been rendered a bad subject to rally from any severe disease or operation.

He begged of the pupils to notice the situation of the parts about the seat of incision; it was a valuable opportunity which they were not able to see very often. Mr. Fergusson here pointed them out, and holding up the arteria innominata and vena innominata with the point of the forceps, especially called their attention to the proximity of these vessels to the lower part of the incision. "Here, Gentlemen, you will see, that the danger of wounding either of these vessels, as I have before stated, is by no means an imaginary one; and you may well believe, by looking on this subject, how necessary it is to be careful about cutting at the lower part of the trachea. If you find you must cut, then be careful to keep the back of the scalpel against the lower part of the wound, and do not carry its cutting edge there. It is particularly necessary to avoid the veins which are found in front of the trachea; and here you see that one very large vessel, opening into the vena innominata, was close on the incision; and if I had wounded this, there must have been serious hæmorrhage. The wound was, as I stated, exactly in the median line, and I had gone through the isthmus of the thyroid gland. This case teaches us, that the supposed danger of wounding the isthmus has been much exaggerated. In my student's days, the anatomist used to warn us strongly against dividing this process in tracheotomy, for fear of the great hæmorrhage which would ensue; but I do not think we have much to fear here, if care is taken to keep in the median line."

ORIGINAL COMMUNICATIONS.

ON THE

FREQUENCY OF PERICARDITIS.(a)

BY JOHN TAYLOR, M.D.,

Fellow of the Royal College of Physicians in London, and Physician to the Huddersfield Infirmary; formerly Professor of Clinical Medicine in University College, London.

IN estimating the frequency of pericarditis, it will be found convenient to consider separately those cases in which the disease exhibits considerable intensity, and affects the whole or a great portion of the surfaces of the pericardium; and those in which the extent and intensity are very inconsiderable. Among the cases last named, may be placed those which give rise to a mere trace of rubbing sound, or altogether escape notice during life, and which are found to exhibit correspondingly insignificant changes of structure after death.

Of the class of cases first referred to, or those of great and of moderate severity, I have had the opportunity of seeing about thirty-three in the course of the last ten years. Twenty-two of these I have observed in University College Hospital, and the rest in private practice or elsewhere. The cases I have enumerated comprise, 1st, all those admitted into sixty beds during a period of seven years; and, 2ndly, all those admitted into twenty beds during a subsequent period of three years.

In computing the number of cases admitted into the physicians' beds, I have been guided by the hospital register, and that for the last three years only; because I believe it has been more accurately kept during this than during the earlier portion of the period of time within which my observations have been made. According to this record, the following is the number of admissions:—

From Oct. 1, 1841, to Sept. 30, 1842	..	579
" 1842, " 1843	..	582
" 1843, " 1844	..	574

In the last of the three years, the number of admissions under each of three physicians has been counted separately, and was 184, 196, and 194.

The close agreement of the numbers for each year and for each physician renders it very probable, that none of them are wide of the truth. Taking the average annual admissions for these three years as a guide, we shall obtain as a total for the first seven years, 4048 admissions ($578\frac{1}{3} \times 7$). The sum of the admissions under all the physicians during the last year, I take to represent the total of my admissions during the last three years, viz., 574.(b)

I believe the number of admissions in the first year after the hospital was opened would be somewhat under the average annual number in the following years. During the seven years referred to, I was also absent from the hospital for several weeks annually, and once or twice for a longer time; and, as I did not record cases of any kind which occurred in my absence, I shall deduct the number of admissions for one year, to compensate for the operation of the two circumstances I have named.

With these explanations, I shall take, as a close approximation to the truth, the number of physicians' cases with which I have to compare the number of cases of pericarditis, to be—

1. For the first period of seven years	..	3470
2. " second " three "	..	574

Out of these 4044 physicians' cases, there occurred 22 cases of pericarditis, or about 1 case in every 184.

If, however, we analyse separately the cases admitted in

(a) This paper (written in November and December, 1844) originally formed the first part of the paper on the Causes of Pericarditis, which is published in the "Transactions of the Royal Medical and Chirurgical Society of London," Vol. XXVIII. It was detached from the rest of the paper to shorten the portion which was published.

(b) At the end of my course of clinical lectures for each of the years 1841-42 and 1842-3, I gave the results of a statistical review (founded on the cases recorded in my case-books) of the cases which I had treated, and I find that, from September 1st, 1841, to July 15th, 1842, (being six weeks less than a year,) they amounted to 176; and from July 15th, 1842, to July 14th, 1843, they were 197, exclusive of two cases admitted a second time. The cases distinguished as mine in the register, from October 1, 1843, to September 30, 1844, I have already stated to be 194. These figures establish the general accuracy of those given above.

the two periods of seven years, and of three years already referred to, a different result is obtained. Of 3470 physicians' cases admitted in the first seven years, thirteen were examples of pericarditis, or about one in every 267; and of 574 cases admitted under my care within three years, six were examples of pericarditis, or 1 in every 95 2-3rds. The total number of cases of pericarditis which I have received up to the present time, (Dec. 3, 1844,) being a period of three years and four months, is nine; and, taking the admissions to be 717, we find that 1 case of pericarditis occurred in about every 80 cases admitted, or in the ratio of 1.25 per cent.

The difference in the proportion of cases of pericarditis noted in these two separate periods, is too great to be wholly accidental. The only explanation of the fact which I can suggest is the following. It is probable, that in the earlier part of the first period,—although every attention was given to the heart when there was reason to believe it to be the seat of any disease, and also in cases of acute rheumatism, yet,—that organ was not so universally examined, in other kinds of cases, as it was at a later period, and, therefore, some few cases of pericarditis may at first have escaped notice.

These results represent pericarditis to be less frequent, compared with other diseases, than it is, I believe, generally supposed to be. On this point, however, it is difficult to obtain accurate data for comparison, because few authors have investigated the matter, and of these, some have stated their experience only in general terms. My impression of the prevailing opinion is warranted by the great frequency of acute rheumatism, and by the great proportion of these cases in which pericarditis is believed to supervene. Dr. Elliotson says, "pericarditis is a very common disease." (a) Dr. Graves also states, that "pericarditis and endocarditis must be ranked among common affections," and "pericarditis is a disease of quite as frequent occurrence as pleurisy." (b) I have met with no statement on this point in the other best known English authors on diseases of the heart, except such as will be quoted in another part of this paper. Bouillaud is silent on the subject. The following are the principal numerical statements with which I am acquainted: M. Hache recorded all the cases of pericarditis which occurred in the practice of M. Louis, at the Hospital of La Pitié, in Paris, in the year 1834, and found them eight in number. M. Louis admitted annually about 1200 patients, most of whom were affected with chronic diseases. M. Hache states further, that the above was about the ordinary proportion of cases of this kind met with in each year in the practice of the same physician; and that, during four separate periods of three months each, dedicated to clinical instruction, M. Louis had, in fact, collected just eight cases of pericarditis. (c) In Louis' practice, therefore, the proportion of cases of pericarditis was less, by one half, than in mine, being about 1 case among every 150. The two results, however, may appear more accordant, if we consider that, as my beds are fewer than were those of M. Louis, and as the cases are selected with an especial reference to clinical instruction, I have probably admitted a larger proportion of acute cases than he did; the greater part of his patients being affected, as M. Hache states, with chronic diseases.

M. Beau (d) had the charge of fifty-seven beds at the Salpêtrière, in Paris, (where only aged females are admitted,) and he states that between February, 1842, and October, 1843, (a period of about nineteen months,) he did not observe a single case of acute pericarditis, and only one case of endocarditis. In relation to a subsequent part of this paper, it should be added, that M. Beau remarked dropsy with albuminous urine to be a rare disease in the old women under his care. He found the urine to be albuminous four times in about twenty cases of dropsy which he observed. He speaks also of acute rheumatism as a rare disease in the same class of patients.

Professor Forget (e), of Strasburg, states, that, out of about 3500 patients admitted into the clinical wards under his charge, in the course of near eight years, he had observed 15 cases of pericarditis, 5 or 6 cases of old adhesions

(a) On the Recent Improvements in the Art of Distinguishing the Various Diseases of the Heart. Lond., 1830. P. 8.

(b) System of Clinical Medicine. Dublin, 1843. Pp. 910 and 639-40.

(c) N. Hache. Mémoire sur la Péricardite. Archiv. Gén. de Médecine. 2me Série. T. IX. 1835. P. 172.

(d) Journal de Médecine de Beau, October and December, 1843.

(e) Gaz. Méd. de Paris, Nos. 14 and 15, 1844.

of the pericardium, and upwards of 100 cases of those affections of the heart, vaguely designated by the name of aneurisms.

The following results are taken from the "Statistical Tables of the Royal Infirmary of Edinburgh." In the Tables for the year 1841, drawn up by Professor Reid, we find, that out of a total of 4768 medical cases, there were seven cases of non-rheumatic pericarditis. The Report does not inform us whether there were any cases of rheumatic pericarditis. In the corresponding Tables for the years 1842 and 1843, drawn up by Dr. T. B. Peacock, we find:—

1st. 2290 medical cases, among which there occurred only 1 case of pericarditis.

2nd. 2121 medical cases, among which there occurred only 4 cases of pericarditis.

No distinction is made in these Reports between rheumatic and non-rheumatic pericarditis.

In the Reports of the Committee of the Statistical Society of London on Hospital Statistics, we find a statement of the number of patients in various London hospitals on a given day, and also an account of the diseases under which they were suffering. In the first Report (a), there are enumerated 2563 patients. No distinction is made between medical and surgical cases, beyond that which is furnished by the names of the diseases. I have deducted the cases usually assigned to the surgeons of hospitals, which I compute at 446, and those which remain amount to 2117. (b) Of all the patients enumerated, two only had pericarditis.

In the second Report (c) of the same Committee, there are enumerated 2582 cases, in which the names of the diseases were specified. Deducting 1461 surgical cases, there remain 1121 medical cases. Among all the cases, there were fourteen examples of pericarditis.

I shall now examine the same question from another point of view, viz., by a reference to the result of *post-mortem* inspections.

During the period of seven years, already referred to, I was accustomed to note down in my private case-books the *post-mortem* appearances in a certain number of the bodies which were opened; and, after the first year or two, I did the same for all the *post-mortem* inspections occurring in the practice of the physicians, and for a few of those in the practice of the surgeons. Since 1841, I have kept a similar private record of the morbid appearances in the bodies of all patients dying under my own care and which were examined. To these I have added a few occurring in private practice, and the total number of inspections so recorded amounts, at this time, (Nov. 8, 1844,) to 411. This explanation will not be thought irrelevant, when it is remembered that it shows that a very large proportion of the cases recorded have been collected indiscriminately, and that they do not consist of selected cases only.

1. Frequency of the Signs of Pericarditis in Post-mortem Inspections.

Among the *post-mortem* examinations referred to, I have found signs of recent pericarditis, (as distinguished from those of formerly existing inflammation,) of great or of moderate intensity, in 14 instances; and signs of somewhat doubtful import in 2 more instances: counting both these, we shall find that pericarditis was present in about 1 in 25½ of all the physicians' fatal cases.

Some of the earlier inspections, however, were both made and recorded with less care than the rest. Hence I find that in 53 it is not stated whether the heart was examined or not, while in 3 more it is stated that the heart was not examined. If we deduct these 56 cases from the 411, we shall thereby increase the proportion of cases of pericarditis to about 1 in every 22⅔ of all the fatal cases.

These facts prove what we should expect to find, that pericarditis is much more frequent among the physicians' fatal cases than among all the cases admitted indiscriminately, the numbers being, in the two kinds of cases respectively, in the proportion of about four to one.

Of 443 bodies taken indiscriminately and examined by Louis, (d), 7 only appear to have exhibited signs of recent

pericarditis. This is in the proportion of about 1 in 66, or three times smaller than occurred in my cases.

In the bodies of 50 insane patients examined by Dr. Thore, and in which the state of the heart was noticed, there was not found one example of pericarditis. (a)

I am not able to compare these results with those obtained by any other observers with which I am acquainted, because none of them have distinguished the cases of recent from those of previously existing pericarditis.

2. Frequency of Old Adhesions of the Pericardium to the Heart.

Among my 411 inspections, I found old adhesions of the pericardium, more or less extensive, in 22, i.e., in very nearly 1 case out of 19; or, deducting the 56 cases in which the heart was not examined or not named, the proportion will be increased to about 1 in 16.

Louis (b) has collected, from the works of various authors, 1200 inspections in which the state of the heart was mentioned, and among these he found 70 cases of adhesion of the pericardium to the heart, or about 1 in 18—a proportion very nearly identical with mine. Among the 443 cases examined by Louis himself, there were 11 examples of adhesion of the pericardium, or 1 in 44.

Of the 50 bodies examined by Dr. Thore, six had old adhesions of the pericardium, i.e., about 1 in 8½ (c)

3. Frequency of the Signs of Recent Pericarditis and of Old Adhesions of the Pericardium, taken together.

I have added together the cases of old and of recent pericarditis, for the purpose of being enabled to compare my own results with those of some other observers.

Among my cases I found 37 (d) examples of recent pericarditis, or of old adhesions, i.e., about 1 in 11, or, deducting the 56 as before, about 1 in 9½.

In the 1260 cases above referred to in Louis' Memoir, the proportion was 1 in 12, which he believes to be above the truth, partly on the ground that some of the cases were selected ones. The cases he collected from the medical journals, he thinks are less open to the objection just stated, and among 263 of these he found 13 examples of the appearances under consideration, or 1 in 20. The 443 cases belonging to Louis himself, furnish nearly the same proportion, viz., 1 in 24.

In 403 *post-mortem* inspections, occurring in the public practice of M. Chomel, (e) there were found in 16 unequivocal signs of recent or old pericarditis, i.e., 1 in 25.

In the bodies of insane persons examined by Calmeil, 1 out of every 15 exhibited redness or false membranes in the interior of the pericardium. The appearances in these cases, Calmeil states, indicated that the pericarditis was very old. (f)

In a paper published in a recent volume of the Transactions of the Royal Medical and Chirurgical Society, (g) Mr. Paget states, that in 110 bodies examined by him at St. Bartholomew's Hospital, there were 9 examples of severe pericarditis with complete adhesion, or with abundant recent effusion. These numbers are in the proportion of about 1 to 12. Mr. Paget's results, therefore, agree very closely with mine; and, by comparing those only of his cases which agree more exactly in character with my own, (h) the proportions in our cases, and also in Dr. Thore's, turn out to be almost identical, viz., in Mr. Paget's and Dr. Thore's, 1 in 8½; and in mine, 1 in 9½.

It is certainly remarkable, that the proportion of cases of pericarditis found by MM. Louis and Chomel respectively, in their own *post-mortem* inspections, and deduced from a large and nearly equal number of cases, is very nearly iden-

(a) Annales Medico-Psychologiques, Sept., 1844.

(b) Mémoire, p. 289.

(c) Op. Cit.

(d) 16 cases of recent pericarditis and 22 cases of adhesion. Deduct one case belonging to both classes.

(e) Dictionnaire de Médecine. 1re Edition. Paris. 1826. Art. Pericardite.

(f) Dictionnaire de Médecine. 2me Edition. Paris. 1833. Art. Aliénés (Maladies des.)

(g) On White Spots on the Surface of the Heart, Vol. XXIII.

(h) This comparison is made from figures given in Mr. Paget's paper, in the following manner:—There were 59 cases of pericarditis, old or recent; 49 of these were slight cases, i.e., had white spots, and adhesion or effusion of small quantities of lymph. Deduct from these 49, 45 which had white spots only; and add to the 4 which remain the 9 examples of complete adhesion, or abundant recent effusion. We thus obtain 13 cases of adhesion, or of recent inflammation. Now $110 \div 13 = 8\frac{1}{2}$.

(a) Journal of the Statistical Society of London. Vol. V., p. 168.

(b) Ibid. Vol. VII. P. 215.

(c) The proportion of surgical to medical cases here assigned must be below the truth. I have, however, no means of separating the two classes more accurately, and the general result may approximate to the truth as far as respects the object of my inquiries.

(d) Mémoire sur la Pericardite, p. 290.

tical, and is at the same time only about one-half as high as the proportion found by Mr. Paget and myself. I know of no mode of accounting for this difference, except by the supposition, that pericarditis may be less common in Paris than in London; or (which I think is much more probable) that, as the observations of the two eminent French physicians were made many years ago, when less attention was paid to diseases of the heart than within the last few years, and as they were not made with a special reference to diseases of the heart, as my own have been, these gentlemen have omitted to notice the less severe consequences of previous attacks of pericarditis in the record of the examinations which they made: (a)

4. Frequency of White Spots or Patches on the Pericardium.

I think it better to consider these appearances apart from adhesions of the pericardium, because, although I fully believe the former to be the products of inflammation as well as the latter, all writers have not taken the same view of their nature.

Among my 411 inspections, I found the white spots which have been described by various authors in 83 cases, i.e., in about 1 out of every 5; or, deducting the 56 examinations in which the heart has not been named, the numbers are 1 in 4.

M. Bizot(b) found these white spots in 45 out of 156 bodies, or in about 1 in $3\frac{1}{2}$; and Mr. Paget in 45 out of 110 bodies, or in 1 in $2\frac{1}{2}$. The numbers of M. Bizot and myself correspond very closely, and, in respect to distinct white patches, will be found, I think, not far from the truth. Mr. Paget found the spots in a larger proportion of cases; but, from the description he has given of them(c), he has apparently included in his enumeration spots of smaller size than were counted by myself or, probably, by M. Bizot.

5. Frequency of still Slighter Degrees of Pericarditis.

In estimating the frequency of pericarditis, I have already adverted to the necessity of considering separately the slighter and more severe cases; and we have already seen that the white spots, or the effects of slight pericarditis, are found much more frequently than adhesions, which, taken collectively, (d) imply the previous existence of a more severe form of inflammation.

Examples of pericarditis of a still milder form, have been described by Mr. Sibson, (e) and, in his experience, appear to have been met with even more frequently than the white spots described by preceding writers. Mr. Sibson states, that "tendinous patches in the coronary vessels," which he considers, and probably correctly, to be the results of pericarditis, "are observable on almost every heart, except when taken from the very young." In almost every heart showing these patches, "a beautiful margin of looped tendinous lines fringes the auricular appendices. He adds, that in many, almost a moiety, of the autopsies made by him, during the preceding twelve months, of the bodies of those who had died from lingering disease of the chest, or from extensive injuries, as external burns, he observed traces of slight recent pericarditis; such as two or three drachms of turbid serum and soft lymph about the appendix of the right auricle, and between the vena cava and aorta, and the adjoining pericardium. Mr. Sibson infers from these observations, "that pericarditis, in a mild but active form, at some time or other, exists during the life of almost every person."

I have frequently met with the appearances described by Mr. Sibson, but I have not counted in what proportion of cases, because I am not certain that I have always recorded their presence. My impression is, that they have been less commonly seen in my autopsies than in those of Mr. Sibson; possibly, however, because they may have been less carefully sought for. In relation to the objects of my inquiry

such appearances may, perhaps, be regarded as matters of curiosity rather than as of much practical importance. I believe that traces either of recent or of previous inflammation may be found after death in most organs in a very great proportion of all bodies examined. It is, in part, for the same reasons that, in my enumeration of the cases of pericarditis which I have observed during life, I have not included a small number of examples of the disease which were revealed only by a slight trace of rubbing sound, whether that sound were unequivocal in its characters, or, as frequently happens in such cases, liable to be confounded with an equally trifling valvular murmur.

THE PSEUDO-SCIENCES.

By JAMES J. ROBERTSON, Esq., Surgeon.

(Concluded from page 279.)

Now what says the homœopath? If the homœopath have a specific for cholera, let him now declare what it is. Let us hear what Jahr, that oracle in homœopathy, can have to say. For blueness of the nose, says Jahr, there is, in homœopathy, one specific; for blueness of the lips, there is another; for blueness of the feet, another; for blueness of the face there are two; for blueness of the arms, two; for blueness of the extremities, two; for blueness of the hands, two; and for blueness of the skin, one; etc., etc., etc. We have one for redness of one cheek with paleness of the other; one for clammy perspiration of the cheeks; we have four for paleness and one for redness of the face; two for perspiration of the face; three for clammy perspiration of the face; two for cold perspiration of the face; one for leaden hue of the face; one for clucking like a hen; two for longing to get out of bed; one for wishing to cry; two for singing (in the ears); five for borborygmi; one for high-coloured urine; one for fear of death (arsenic); (a) one for sense of excoriation in the abdomen when laughing. But as we cannot be expected to listen while Jahr repeats the whole of his volume—since we are not writing a work for homœopathic reference—we must content ourselves with adding what this homœopath, towards the end of his book, has said: that the memory itself cannot contain "all the symptoms of the drugs" indicated in cholera, and that for that reason this painstaking homœopath had reduced them, for greater convenience, to a tabular form, which fills up with its nugaceous inanity no less a portion of his book than twenty-four pages! What now says the homœopath to the axiom, that anything wrong in the mind will be the most wrong where it comes the nearest to its ultimate practical effect? But has the homœopath no specific? Yes! With such pretensions to so many infallible means, he is glad covertly to sail under false colours, and feloniously use an "allopathic" remedy of long and tried efficacy—one that has been so considered for ages. "The Spanish physicians," says Dr. Cleghorne, (a) "have often assured me, that nothing is more efficacious in deplorable, hopeless cases of cholera, than drinking of cold water." This is the homœopath's sheet-anchor, ἀπιστον μὲν

(a) When the homœopath speaks of "the rudeness and ignorance of the times of Hippocrates," we may safely suppose he would extend the same comprehensive condemnation to the times of Juvenal; for this "manly and vigorous author" was rude and ignorant enough to write,—

"Fortem posce animum, et mortis timore carentem."

Who that believes in homœopathy will now prescribe for himself, from day to day, an arduous moral discipline, when he can accomplish the same end by helping himself, at any time, to the decillionth part of a grain of arsenic!! Every phase of mental disease, including many phases of moral aberration, have, in homœopathy, their boasted specifics; so that Hahnemann trode more closely on the heels of Ralpho than the homœopaths are probably aware of, and certainly much more closely than they would wish the world to know.

"He'd extract numbers out of matter,
And keep them in a glass like water,
Of sovereign power to make men wise."—Hudibras.

Between Ralpho's extracted numbers and Hahnemann's power without matter, the homœopath has, doubtless, made a happy choice—a choice that comes in proof of the exuberant sagacity of his mind. The homœopath, moreover, will also find cogent reason for confirming his ignorant judgment of the father of medicine, when he becomes aware of the fact, that Hippocrates considered certain mental endowments, including an untiring love of labour, to be indispensable requisites in those who would study and practise medicine; without which, everything in the way of instruction, he supposed, would be to no good purpose; *φυσίως γὰρ ἀντιπαρρουσίης, χενεία πάντα*: an aphorism which many will think well illustrated by sturdy examples to be found within the pale of homœopathy.

(b) Diseases of Minors. We are sorry to be obliged to quote from memory, from a book which we have not for many years seen. We believe, however, our quotation is all but literally correct.

(a) On reflecting, that if MM. Louis and Chomel had committed any error, it was probably from some cause common to both of them, since their error was of precisely equal amount, I was led to recollect that Louis' observations were collected in the wards of Chomel at La Charité, and were published in a French periodical in 1824, while Chomel's essay was published in 1826. These facts render it very probable, that in examining his cases, M. Chomel may have counted a considerable part, if not the greater number, of those previously used for the same purpose by Louis.

(b) *Mémoires de la Société Médicale d'Observation de Paris*. T. I., p. 356.

(c) *Op. cit.*, p. 30.

(d) I do not here include the very trifling adhesions described by Mr. Paget as occurring at the root of the great vessels chiefly.

(e) "Transactions of the Provincial Medical and Surgical Association," Vol. XII, p. 523-4.

ὑδωρ; and was not a modification of this the sheet-anchor of that Broussais who boasted that, in the cholera of 1832, he had snatched so many patients from the jaws of death?

After these samples of homœopathic theory and practice, can any reader wish that we should adduce a single additional example? We believe not. On the contrary, we suppose most readers are ready to cry out with Lucian's cobbler, "Enough, enough, dear cock! it gives me an ague to hear it." We shall not then pursue the homœopath from one imagined fastness to another; but remark, that when driven in succession from them all, he appeals at last, and with many words, to his "personal experience." And this is another quagmire in which he founders. For, ignorant of the natural history of disease, *la marche naturelle de la maladie*, (a) denying, as we have heard the homœopath deny, that diseases ever terminate favourably, or disappear without the use of remedies (b), he ascribes to his specifics results which they are as little capable of producing, as the itch-insect we have spoken of could be supposed capable of eating up, at one glutton-meal, the great wall of China. How can the homœopath, who makes this assertion, account for that standing axiom in legitimate medicine, *Optimum est aliquando medicamentum nullo uti medicamento*? Or, need we, for his consideration, quote from among many such, the well-known remark of Feijod? *Muchas veces, que los enfermos convalecen de sus dolencias, solo à la naturaleza deben la mejoría*. Does not the homœopath see in this the grand secret of the tardy success he may sometimes meet with, when he confines himself strictly to the use of homœopathic dilutions? When, in one city, of no great dimensions, forty thousand persons were, in one night, seized with epidemic catarrh, of a character so severe, that scarcely one soldier, out of many, was left able to mount guard, how many persons were left fit to visit and prescribe for the sick? Yet the mortality, in this, as in many other instances, seems to have been but inconsiderable. When, again, towards the decline of the plague of Moscow, the infected suffered so little that they might be seen in the streets, as related by De Mertens, (c) *cum bubonibus ambulantes*, how much of that comparative immunity was owing to medical treatment? But why should we crowd our limited space with examples? A host may be found by any one who will take the trouble to wade through a hundredth part of the medical records of the last two or three centuries—sealed books, we believe, in every sense, to the homœopath. (d) Has it never occurred to the homœopath, that, were his argument true, it would be a perfect refutation, out of his own mouth, of all the objections he has been able to bring against the various systems of medicine that have prevailed hitherto, and the highest encomium he could bestow on those who have practised medicine in accordance with their precepts; (e) since the countless millions of sick who have recovered under treatment that could have had no sort of affinity with homœopathy, must, if the homœopath's argument be true, have owed their recovery to what he calls allopathic treatment. How can he avoid being transfixed by one or other horn of this dilemma? Impalement is clearly unavoidable. The mole-eyed experience of any class of men who disregard everything that

(a) This universal error of superficial observers was long ago pointed out by Broussais (amongst others).—*Œuvres*, tom. i. p. 390. Edition par Richerand.

(b) "Time," says Doctor —, a homœopathic partizan, "is just as likely to bring about progress as retrocession (retrogression) of the disease." There is in Hippocrates some such expression as *νοσων φύσις ἡττοί*. It is nature that cures the disease, a homœopathic commentary on which may be found in Pliny;—one that might have been written expressly for the homœopathic pathogenist. *Omnis morbus lethalis aut curabilis: in vitam desinit, aut in mortem. Utrouque igitur modo, medicina inutilis: si lethalis, curare non potest: si curabilis, non requirit medicinam—natura expellet.*

(c) "Observationes Medicæ." We recommend the history of this epidemic to the especial consideration of all non-contagionists.

(d) We may wonder whether the homœopath has ever heard of the patient sent to consult Professor Robinson, of Inverness; or of the West Indian—mentioned, we think, by Fuller—who, in a state of health so deplorable, that, on his journey from London to Bath, he had to be carried by short stages in a sedan chair; but, aided no doubt by daily attempts to walk—attempts at first far less successful, it may be supposed, than those of the gradient automaton—got rid of all his ailments before reaching his place of destination. The author of "Ver Herculaneum" says of himself, that, when a youth, he was seized, in or near Naples, with plague, was delirious, "cum bubonibus," etc.; and, though abandoned, seemingly by all, yet recovered without the use of medicines, and lived, too, to write one of the most delightful books in any language.

(e) "The various pathological schools have differed more in name than in reality; the same therapeutical precept was acted upon, the same medicines were administered."—Dr. F. Black.

does not lend countenance to their own delusion—of what value is it to them? Has not experience of this kind been always censured? Is it not of such experience that Baglivi speaks: "Fallax quoque non raro experientia, si rationis ductu fuerit destituta?" What doctrine could we not prove were such experience to be regarded as irrefragable proof? We could adduce cases more remarkable than any to be found in the whole annals of Hahnemannism, where the ostensible agents were a few bits of parchment. Were the homœopath's mole-eyed experience conclusive, so would be that of Perkins. Has the homœopath never heard of Perkins? never heard of "the efficacy of Perkins's Patent Metallic Tractors, in topical diseases, on the human body and animals, exemplified by 250 cases from the first literary characters in Europe and America," with an epigraph about as modest as that of Gall and the *Zoist*, "This is truth, though opposed to the theories of ages"—a language which Truth, could she be heard for the din of pretenders, would disdain to make use of. Did the listening ear ever hear such words from the lips of a Newton, a Davy, or a Sydenham? Such experience is not a blind, but a suborned guide; and he who is led thereby will no doubt find, in the end, that, having passed unheeded the "Cave, Cave Canem," he has at last, in place of his faithless leader, taken a dog by the ears, and, instead of the Temple of Truth, he has but groped his way into a dog-kennel.

If we have now carried our view so far as to see the very mind and heart of homœopathy,—such a mind and heart as Hahnemann could give it, for it has plainly no other,—and having seen the inmost recesses of the empty "thing," we may now turn for a moment to a subject which cannot fail to add lustre to that which we have already considered.

As the professional acquirements of many persons who practise homœopathy can scarcely be supposed to exceed the limits of a domestic manual, it may be worth while—as there is some diversity of opinion on the subject—to take an inventory of the few requirements that are really essential to the practitioner of homœopathy. And first in order, then, comes

Anatomy.—The laborious application which the student of legitimate medicine devotes for years to the acquisition of an intimate and familiar knowledge of anatomy, in order that this knowledge may become the solid basis of a superstructure to be raised, through succeeding years, by his own untiring labours, is, in homœopathy, gracefully dispensed with; and he that knows a hand from a foot, a little finger from a big toe, a nipple from the umbilicus, will soon be in a fair way of obtaining all the anatomical knowledge either necessary or desirable in the practice of homœopathy: for, the amount requisite for the prover, is the exact measure of that necessary for the practitioner; and the prover may be your butler or baker, your cook or shoeboy. To this modicum, the homœopath may add what else he pleases; but all beyond this may not only be dispensed with, as it would neither serve for ornament nor use; but being really so much dead stock, might possibly, at some future period, emit a zymotic influence that might discompose or induce some new arrangement in his notions of the "similia similibus." Anatomy, therefore, becomes one of the things that may safely be placed in the homœopath's Index Expurgatorius.

Pathology.—If anatomy be so little necessary to the homœopath, it may be safely concluded that pathology is, if possible, still less so. We know it is the standing object of his declamation; and in this the disciple, parrot-like, but repeats the words of his master. We suspect, it is also the object of his perpetual dread; for, while one stone of this noble edifice (pathology) remains upon another, so long must homœopathy continue to be another "bestia senza pace."

Chemistry.—Since this delightful science becomes, when confronted with homœopathy, so rudely petulant, as on all such occasions to give her the lie direct, she comes in, consequently, for a proportionate share of disfavour from all the worshippers of homœopathy, and is, therefore, rigorously excluded from the greater and lesser mysteries of the "similia similibus."

Botany.—There is a special reason why the homœopath thinks he should not be altogether ignorant of botany. "We should be able," says Dr. Gray, "to go to the fields, the woods, or the morass, and lay our hand upon the specific." His commentator adds, "We fully coincide with Dr. Gray, that every homœopathic practitioner should prepare his own

remedies, and not depend upon others in this respect. There are but few among those who sell homœopathic drogues that are to be depended upon. They have neither the talent to prepare homœopathic medicines as exactly as it is required, nor can we vouch for the genuineness of the medicinal article. The well-known author in homœopathic literature, Dr. Wilhelm Gross, recommends but one homœopathic apothecary, Mr. Peters, in Dessau, in Prussia, as a conscientious and able pharmacopoliſt.

"As the miscreant Fickle has published two books of fictitious provings, so there are many bad-intentioned men who sell homœopathic medicines, for the genuineness of which I would not vouch."

To this elegant eulogy may be added what Dr. Gray himself says: "Since I [have] practised homœopathy, I have met with many so-styled homœopathic doctors, pseudo-homœopaths I would say, who consider Jahr's Manuel [Manual] with some kind of repertory, a 'receipt-book,' as it were, all-sufficient to cure 'all the ills that flesh is heir to.' Many of these gentlemen have received but a superficial medical education, if any. Some carry in their pocket a box of little pills, bound in one with the repertory. The Germans call this 'Eine Esel's Brücke,' (an ass's bridge,)"—a bridge, Dr. Gray might have added, that has carried over more than one into a field of clover.(a)

Physiology.—We should never have supposed that physiology could have anything to do with the practice of homœopathy, had not Dr. Gray said, that "In regard to sufferings, the phenomena of disease can never be conferred upon any person ignorant of physiology.(b)

If homœopathy dispenses with such varied knowledge, and with so many pre-requisites, she dispenses also, in favour of her votary, and on all occasions, with any painful exercise of judgment. Who ever heard that much of that could be required to enable a man to repeat the multiplication-table? In homœopathy, indeed, there are two tables,—the "drug-symptoms," and the symptoms of the disease. But with a tolerable knowledge of the drug-symptoms,—an affair of memory,—the homœopath can never be at a loss when brought to the bed-side; for there he finds his other table displayed before him. When a patient, for example, complains that his "mind feels clumsy and rigid;" that he "says plums instead of pears;" that he suffers from "difficulty of animal heat;" from "headache in the nape of the neck;" "rooting in the nose," (a symptom that seems to come often in the way of the homœopath;) "grumbling pain in the teeth;" "great apprehensiveness in the pit of the stomach;" "improper manners and constipation,"—he has simply to recollect "a drug that will cover" (c) those symptoms, and his task is done. And so in all other cases.

The tendency of homœopathy to exclusiveness,—to exclusive ignorance,—we think, independent of all other considerations, a matter of grave moment. Science is progressive; homœopathy is not. On the contrary, it is plainly retrogressive; for, as it spreads, so spread ignorance and empiricism. The practitioner of legitimate medicine, *oculi*

in summo, should know intimately, not everything only that is known, or that can be known, in every science having relation, near or remote, to his own art,(a) but he ought also to possess, as something of even greater importance, a sure judgment and infallible discrimination, without which the former would often be of little practical value. But the homœopath—the homœopath need only know his two tables, or, as he himself says, "his two rows of symptoms." And even this slender amount of knowledge reduces itself to one "row;" the other, we have already seen, he finds at the bed-side. If he really know thus much, he knows all that homœopathy can demand of him. Independent of all reasoning from the nature of "the thing," the testimony, voluntarily given, of Dr. Gray and Dr. Rosenstein,—themselves professed homœopaths,—to say nothing of that of others, nor yet of individual histories, sufficiently justifies us in comparing homœopathy as practised by a great number—if not the greater number—to the gross empiricism practised a century ago in the capital of a country not very famous hitherto for its enlightened encouragement of the arts and sciences, allowance being made in the comparison for the relative states of education. We do not say that there are not names of better note among the homœopaths; but they are plainly the solitary exceptions to the rule. "Any common servant to a physician of tolerable reputation, after a few years' service (in homœopathy, a few months) thinks himself sufficiently skilled in the medical art to stand on his own bottom. I have known a Greek of great eminence and practice much favoured by a vizier, yet this doctor could not write.(b) The Armenians, with seeming ponderous stupidity in their countenance and make, are yet, as to all animal wants, as subtle and designing a people as the Greeks. They are reckoned the best grooms in Turkey, and by the care they take of a horse, &c. One of them who had served many years in that capacity, advanced his station by being admitted as a menial household servant to a private gentleman; his master fell into a languor, and though long attended by an able physician, died. After his death, the Armenian disdaining servitude, set up for a physician. He was observed one day going to a Turk of great distinction, attended by several servants, and treated with uncommon respect. The question being asked, "Who he was," it was answered, "An eminent Armenian physician." Some time after, one who knew him, expostulated with him on his insolence and temerity; and asked him where, and by what means he could fancy he had learned physic? How he dared expose his own life, which would be forfeited, the first Turk his ignorance should kill? He answered, he had sufficiently learned that from the physician who formerly attended his master; and who, he was certain, administered medicines with great caution; that as he had observed his master, in most disorders, occasioned by colds, had made use of warm punch, he had, for that reason, conceived a high opinion of it, had tried it on himself with success; and, therefore, he limited his prescription to that medicine only; and as it was exceedingly agreeable and palatable to the great men who employed him, and generally successful, he was amply rewarded for it.

(a) *Apropos.* When the wild ass of the desert comes to a turbid stream, he passes on in search of a pure and limpid fountain where he may sate his thirst. When some modern Jean Jacques writes a lay sermon for those of his own community who go upon all fours, we shall recommend the above text to his especial notice. We are afraid we need not prefer the same recommendation to Dr. Gray for the benefit of those of his community—procul est ab ejus simplicitate subtilis urbanitas. Are these the men, (e altri di minor gido,) are these the men, or a sample of the men, who would throw a stone at an Abercrombie, a Sydenham, a Louis?—We have found one solitary exception in Kallenbach, who allows that Abercrombie may have some merit; for he says, that "in his admirable researches on the diseases of the intestinal canal" he has "quoted striking examples of the lower belly!" As it is many years since we read the excellent volume referred to, our memory may be at fault; but we do not recollect anything of the remarkable cases spoken of, nor do we remember a single allusion in the whole volume to Sir John Falstaff or to Henry VIII. The reader will possibly think, that had the translator of Kallenbach lived in the reign of the latter, he would have been, and not without reason, a little more circumspect in his language.

(b) Dr. Gray, who seems thoroughly initiated in the peculiar language or jargon of homœopathy, could no doubt explain to us the following sentence in the work of a brother homœopath: "In order, therefore, to avoid the admission of accidental symptoms, none should be adopted unless they have been found to be present themselves in several of the provers;" as well as the following:—"He calls it inflammation 'diagnosis,' and revulsives, as bloodletting and purging therapia (therapeia), he considers the appropriate remedies." Dr. Gray may have heard of some people who have not been able to prolong life for "sixty days" on homœopathic soup maigre; but what are we to understand when his brother homœopath speaks of some unfortunate patient who "died on vomiting and hiccup?"

(c) "The homœopathist," says Dr. Gray, "wishes to know which of the sufferings of his patient it is necessary to cover with the greatest exactitude by his pathogenetic calendar." Do not the ears of every reader tingle?

(a) Ghenerley studien behooren ons vreemd te sijn: wy moeten de gantsche oudheid met te saemen 't outallicke getal der historischen vertellinge, op unser daym hebben.—Fr. Junius.

(b) We have now before us various works on homœopathy, but not in one of them do we find the common word *therapeia* correctly spelled; but we are led to suspect that the number would have been much greater but for the timely assistance of the compositor. But this feature of the thing cannot enter into our present consideration. Nor shall we say a word regarding the *lusso erudito*, the *sapore squisito*, the *νοῦς ἀγαθὸς καὶ γλῶσσα* of homœopathists. We may merely remark, that were it desirable and possible to break an unoffending language on the wheel, there are no men to whom we should so confidently commend the Queen's English, as to the men from whose writings we have made some quotations. And we think, after various specimens which we have seen, we must be fairly entitled to ask those who talk with such petulant ignorance of "the schools" and "the old school," whether they have ever had among them such a respectable person as the schoolmaster? If so, the *suchtruthe* (rod of correction) must have been in his hand but a useless weapon, and his *ὦ παῖ σιωπά*, if ever heard by them, must have been strangely disregarded. Our remarks are not confined to the homœopaths of this country. We have often thought, that in the works of German homœopaths, we had encountered the very off-scourings of the German language. Nor is this all. Notwithstanding the exclamations of affected surprise which the homœopath utters when told of the obscenities of Hahnemann, we shall certainly not be contradicted by any uninterested person when we say, that if there be anything in language deserving the name of obscenity, the curious in such matters, if such there can be, may look for it in Hahnemann; he will not be disappointed. The very biographer of this man cannot leave untouched the *reticenda matrimonii*, but pushes forward Madame Hahnemann on the stage, that she may, after the death of her husband, give to the world her disgusting "testimony."

"The city of Constantinople," adds the writer, "actually swarms with such wretches." (a) The reader may compare this with what we have already seen doctor Gray advance.

"The adherents of homœopathy," says one of its advocates, *δωρίζων πλατρία γὰρ καλοῦσι πάντα οἱ δωρίεις* "the adherents of homœopathy have much reason to complain of the want of interest in the subject displayed by the heads of the Profession." *Mi homo, minimè deliras.* Their indifference must be very provoking. But you are now acquainted with some of the reasons. You know, too, their goodly task is not yet finished: *multum restat operis*; and, however willing they might be, like the primitive inhabitants of Arcadia, to pursue the sun (of homœopathy) from mountain to mountain, yet you know they would only thereby outrun their proper object. For is not every person in these days aware that the giant strides of science are still too often but the giant strides of mine uncle Perez? "Representez vous un petit homme, haut de trois pieds et demi, extraordinairement gros, avec la tête enfoncée entre les deux épaules; voilà mon oncle." And though we would fain hope that this *ἀνάλαγον* *τι* of science has now no gouty toe, yet still you cannot but fancy him *agrè membra trahentem*, and too staid to run with some who, rather mountebank-like, have flirted over his head at the very outset, and at one bound have spurned the utmost limit of his domains. And while the heads of the Profession continue to have any affection for the represented of mine uncle Perez, is it to be supposed they should leave their fat things, their corn, their wine, and oil, and abandon themselves with shut eyes (winking hard) to infinitesimal courses of Hahnemannic *soup maigre*? We are greatly disposed to assert for the heads of the Profession, for all at least with whom we have the happiness of being acquainted, that their hale understandings have derived their nutriment from a more generous source; that the noble lineaments and finely-developed features of the intellectual man have not been, with them, the result of such a discipline. For, have they not been reared—have they not daily feasted—where Science, "with native honour clad, in native majesty," stands "god-like, erect"? Such men can scarcely be supposed desirous of undertaking a journey, *molli vestigio cedente arena*, through the great barren waste of Hahnemannism,—of having their ears, their eyes, and mouths, day after day, for weeks and months, filled with arid sand; not lighting all the while on a bud, a green leaf, or finding a refreshing drop of water; with the consciousness, from first to last, of being rewarded for so much gratuitous labour with picking up, at the end of their journey, an empty nut-shell? Or, is it to be supposed that such men should run with a crowd of old women and children, and listen with open mouths to some of the babblers who daily hold forth in the language of Hahnemann, "Good people, who have so long been ignorantly immersing yourselves in the grossest darkness,—who, 'till my time, have never seen the sun, never known what it means,—come now, at length; and be happy,—come and be happy in the light of Hahnemann's farthing candle." The heads of the Profession, *mi homo!* Long may they persevere in their present honourable career! Long may they continue—and, we prophecy, *ἔξ ἀγαθῶν ἀγαθοί*, long will they continue to be the noble, the benevolent, the devoted, and high-minded men we have yet found them,—the contemners and despisers of all unrighteous pretension.

We have but a word more. "When," according to another indefatigable dreamer, "the inhabitants of Jupiter lie in bed, they turn their faces forward." When the inventor of homœopathy set out on his journey, there is much reason to think he must have turned his face backward; and having, with undeviating assiduity, continued his course, he arrived in due time, safe and sound, in that paradise of the half-witted, which, "since his time," the *δωρίζωντες* call ho-my-hop-o-thigh. What, now, is this newly-discovered territory,—this ho-my-hop-o-thigh? We have given some—and but some (b)—of the reasons which make us suppose that

this very ho-my-hop-o-thigh—this half-witted man's paradise—may possibly be the antipodes—the very antipodes—of science. "In philosophy," said Lyra, (b) truth is discovered by reducing things to their first and self-evident principles. In homœopathy, not only are there no self-evident principles; not only are its assumed principles—and that too in every particular—at variance with fact, and totally discountenanced and derided by analogy; but when the remaining parts of the wall of mud and rubbish which has hitherto given them a name and habitation, have been removed, they will be left without one prop on which to stand, without a stay against which to lean their "idiot backs," save the "*stet pro ratione voluntas*" of Hahnemann—of that Hahnemann who, more than any other man, laboriously persisted in teaching the ignorant to despise knowledge—of that Hahnemann who, with inestimable treasures of science within his reach, contented himself with grubbing up and carrying off, as a missile for offence, the very refuse of things forgotten or despised; in one respect only resembling him who, with the wealth of one of the most opulent cities in the world at his disposal, gladly abandoned the whole for the putrid remains of a buried monk. (a) Had we never heard the proverb, *un loco hace ciento*,—one fool makes a hundred more,—our astonishment at the credulity of some men would have been unbounded; and we are tempted to ask them questions that would seem more suitable for a people dwelling near the extremity of another continent, but whom, for fear of offence, we must not name. Are there among you men who have learned to read? Are there among you any who know that in England there ever lived such a man as Bacon? Is there among you one who can form the faintest idea of what is meant by induction? And if there be among you men possessing reason and intelligence, let such a one tell us what reason he can bring why mankind should not do for the first promulgator of homœopathy what Redi did for another personage, about whom, for the present, we must leave the homœopath, however, to raise his own conjectures.

"E per onta, e per ischernò
In eterno
Coronato sia di Bietola;
E sul destrier del vecchierel Sileno
Cavalcando a ritroso, ed a bisdosso,
Da un insolente Satiretto osceno
Con infame flagel venga percosso
E poscia avvinto in vergognoso loco
Ai fanciulli plebei serva per gioco."

The advocates of homœopathy, like an admiring crowd of a former era, may eagerly point to their "rent hoof," and, like them, assure us they see it divided like the human foot. But all who look more closely than the crowd will not fail to perceive that, notwithstanding so much clamour and pretended demonstration, the rent hoof which they would have us believe to be "divine," is nothing more nor less, after all, than the cloven foot of the beast.

Should the honest homœopath, who may read these remarks, think that, in noticing his foibles, *multa cum libertate*, we have in aught offended—though foible is a softer term than we think we can be justified in using—we beg to lay before him the following words of Malebranche, which, after due consideration, we hope he will, in reference to ourselves, adopt as his own; and for the latter part of which, at least, we can freely proffer our guarantee:—"Vous me raillez d'une manière si délicate et si honnête, que je sens bien que vous ne voulez pas m'offenser."

3, Union-place, New Kent-road.

PLACENTA PRÆVIA.

By H. NUTTALL, M.D., &c. &c.

ELIZABETH TOPLEY, mother of twelve children, aged 36 years, of nervous temperament, thin and spare, lax condition of body, has had one miscarriage, two years since, attended with very considerable hæmorrhage, sent for me to see her on Sunday, October 20, 1850. I attended immediately

(a) See "Observations on the Religion, Law, Government, and Manners of the Turks." London, 1768. Vol. II., p. 128., *et seq.*

(b) Should we ever have reluctantly to return to this barren and unprofitable subject, we do not say that we shall not pay more deference than we have done here to the example of the good-natured curé, Messire Jean Chouart,—

"Monsieur le mort, laissez-vous faire,
On vous en donnera de toutes les façons,"

for, unlike the homœopath, we have still something to show, and shall, if need be, bring it forth with as much alacrity as did mine host in "Gil Blas," when greeted with the exclamation, "Apportez-nous votre truite!" But, for the present, *Bastame la orilla del mar para labarme.*

(a) As quoted by Tillotson, in his admirable work, "The Rule of Faith."

(b) The homœopath is fond of comparing Hahnemann to the wise Ulysses, suppressing, however, the only essential points of the comparison, *ὅς μάλα πολλὰ πλάγχθη ἔσχατος ἀνδρῶν* qui valde multum erravit. . . . ultimus hominum. We are also told that he was a greater man than Hippocrates; the principle being assumed, in this judgment, that a living ass is better than a dead lion.

(the distance is nearly two miles), and found her sitting by the fire, starved, shivering, and faint from loss of blood. I was informed that she became pregnant about the middle of April, and that nearly a pot-de-chambreful of blood, partly coagulated, partly fluid, had escaped per vaginam. There was slight oozing of blood, which was increased by introduction of the finger into the vagina and os uteri. The opening of the os uteri was about the size of a shilling—contractile, squeezing slightly the finger, and entirely embracing it. The neck of the uterus was soft and cushiony, resilient to the touch, and the lips unusually large and flabby. When introduced through the os uteri, the finger immediately came in contact with a soft, resilient surface; and, on moving the point of the finger within the neck of the uterus, its range was immediately limited by the adhesion between the uterus and the placenta, except at one point, which was more pulpy, from coagula; the border of the placenta could not be felt.

I ordered recumbent posture, perfect quietude, cold drinks, beef-tea, etc.; cold to the vulva, and an acidulated astringent mixture.

October 21.—Composed, but faint; yawning, and indisposition to take any nourishment; hæmorrhage quite stopped; blanched countenance; conjunctivæ white and glazed.

25th.—Has been improving each day, was down stairs yesterday and to-day; the faintness much relieved; pulse more regular, slower, and fuller.

On the 23rd, Mr. Paget, the eminent surgeon and accoucheur, of Leicester, met me in consultation. I mentioned to him the above facts. He counselled immediate interference. My partner (Mr. Dalley) and myself visited our patient in the evening of the 25th. We found her sitting by the fire down stairs. On stating to her the necessity for active and instant interference, and, finding her willing and anxious that she should be delivered per vim, we dilated the os uteri, ruptured the presenting placenta and the membranes, turned the child, and delivered, leaving the placenta, which shortly afterwards was extracted without difficulty. Not more than six or eight ounces of blood escaped during the whole manipulation.

The child gasped a few times, and died.

The patient made a tolerably speedy and complete recovery.

Syston, near Leicester.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

GUY'S HOSPITAL.

By F. W. PAVY, Esq.,
Clinical Clerk.

LITHOTRITY BY MR. HILTON.

THE following is a case of calculi in the bladder, which was admitted into the hospital, under Mr. Hilton's care, in April last. It is a case offering no peculiarity as regards its nature, or in point of rarity of occurrence; but one illustrating a treatment which is becoming every day more general, and which has been happily introduced into practice in the place of one of the most formidable operations in surgery—lithotomy. I think I may remark, that cases of stone are of comparative rarity in our hospitals, to what they were even a few years back; and this may, perhaps, be attributable to the circumstance of their being now more frequently treated by means of lithotritry in the hands of the general practitioner. Before proceeding with the report, I must acknowledge myself indebted to Mr. E. R. Butler, for some of the particulars of the case.

T. B., aged 55, received into Luke Ward, April 2nd, 1851. Is a short, spare-framed man, with an aged appearance, and care-worn expression; was formerly engaged as an agricultural labourer in Rutlandshire, but has recently been residing in London; is of regular and temperate habits, and, previous to his present complaint, has always enjoyed good health. About two years ago, became affected with pain and difficulty in voiding his urine, accompanied with great irritation about the region of the bladder. These symptoms steadily persisted till six months ago, since when his sufferings have been much increased by the frequent desire he has to pass water, and the sudden stoppage of the stream while doing so; signs which almost unequivocally denote

the nature of his malady. On his admission, the existence of a calculus or calculi was rendered certain by the additional evidence of the sound. He was able to retain several ounces of fluid in his bladder with no great inconvenience; and his urethra was of sufficient capacity to admit the passage of an ordinary-sized lithotrite; altogether, in fact, circumstances appeared favourable for the operation of lithotritry.

April 3rd.—Preparatory to the operation, he was ordered to take Mist. magnesiæ cum magnesiæ sulphate omni, mane.

To have a large sized catheter passed every day, and his bladder injected with water at a temperature of 98°.

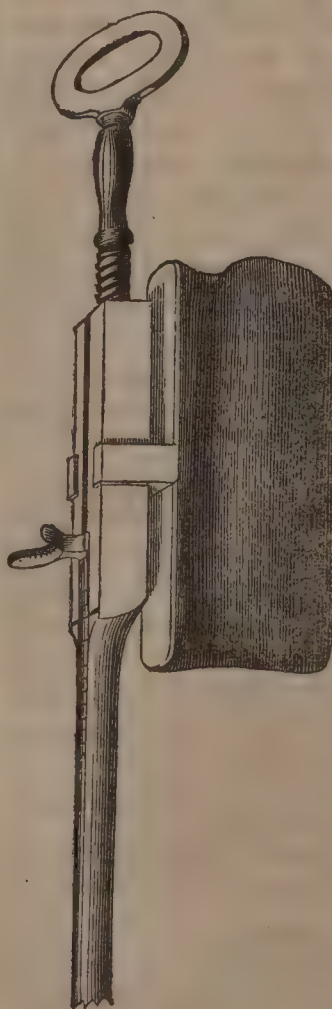
April 11th.—Is able to retain nearly double the quantity of water to what he could on admission. Mr. Hilton having injected nearly a pint of water, at the temperature of 98°, into his bladder, introduced his lithotrite, and, with great facility, seizing the stone between its blades, crushed it six or seven different times. Afterwards, passing a catheter which he has had constructed for the purpose of removing the detritus, and, making the man assume the erect position, several large fragments of stone were heard rattling against the sides of the pot, being washed through the instrument by the contents of the bladder. More water was injected, and brought away another, though smaller quantity, of detritus. A few ounces of water were then injected, and allowed to remain; and the patient, being placed in bed between blankets, was directed to take—

Tinct. opii. mxxx. ex. julepo ammoniæ statim.

The patient complained of no pain during the operation; but the introduction of the bulbous extremity of the lithotrite through the glans required a considerable amount of force, from his having an unusually contracted urethral orifice. Once past the glans, there was no further impediment to its ready introduction into the bladder. An analysis of the fragments obtained, showed them to consist of uric acid.

The lithotrite and catheter for removing the detritus, used by Mr. Hilton, have some peculiarities, and I think improvements, about them. They were constructed for him at Mr. Bigg's, the instrument maker to the hospital; and it is with Mr. Hilton's consent that I have had the following engravings executed. Figs. 2, 3, and 4 of which are from drawings by Mr. Tupper.

Fig. 1.

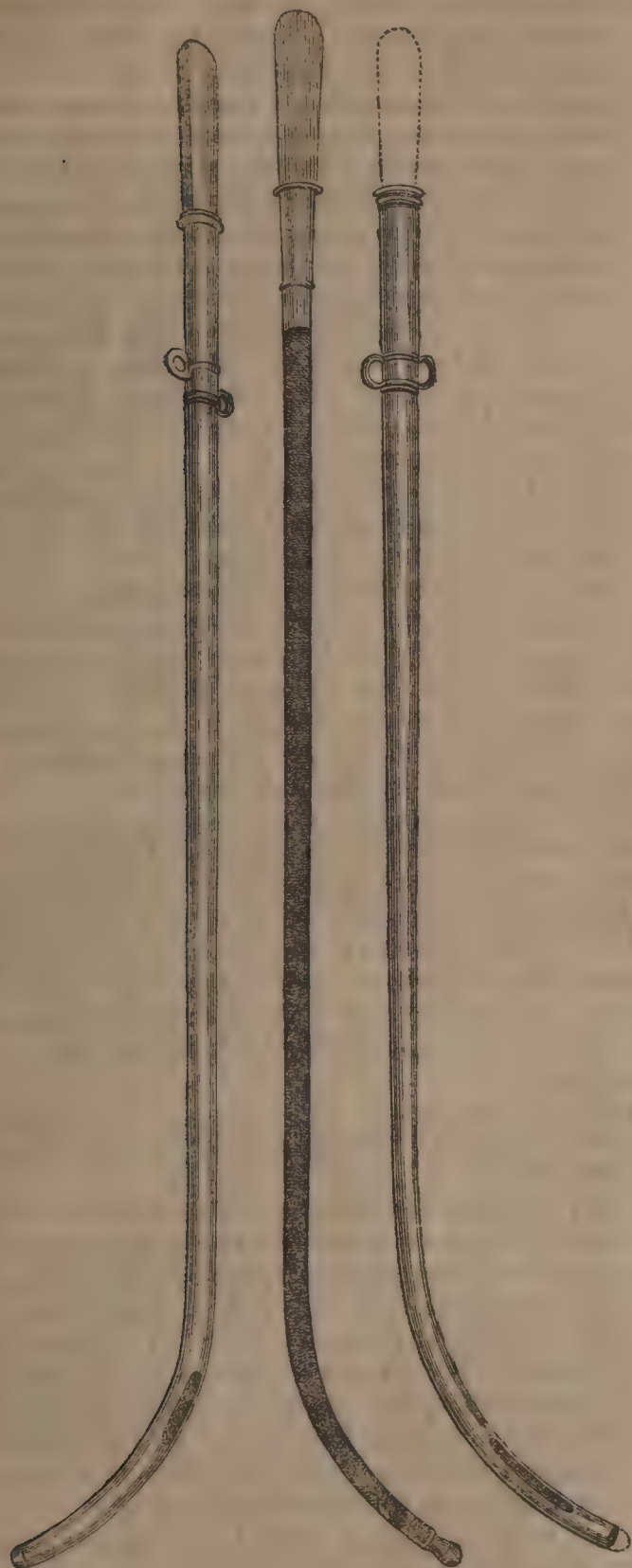


The lithotrite itself does not differ from those ordinarily in use; but the handle will be observed to differ greatly. It is made of ebony, has grooves cut for the fingers on one side, and one for the thumb on the other; and is of such a size, as completely to fill the hand, thus giving, according to Mr. Hilton's opinion, a degree of steadiness and security, by allowing a given grasp, which he has not experienced with any other instrument he has used. It is furnished with a concealed screw and triangular key, so that it may be removed; but when applied and screwed tight, it is as firmly fixed to the instrument as though it were a solid portion of it.

The catheter for removing the detritus, (two views of which are represented by figs. 2 and 4) according to Mr. Bigg's description of it, is of No. 12 size, and made of very thin silver; having the extremity open, and two large eyes, one on the concavity, the other on the convexity of the curve,—the former within half, the latter one and a half inches of the end of the instrument. The stilette, of which fig. 3 is a sketch, is of gum elastic, and armed at its extremity with a silver bulb, which, when passed through the open end of the catheter,

fills up the opening, and forms an even rounded point for introduction.

Fig. 2. Fig. 3. Fig. 4.



April 12th.—He has passed a good night, and expresses himself about as usual this morning. His pulse is quiet, his tongue clean, and his urine natural; but he complains of pain and tenderness about the orifice of his urethra, arising from the difficulty encountered during the operation in passing the end of the lithotrite through the glans penis.

April 15th.—Has passed several small fragments of stone since the operation, and is progressing favourably.

April 19th.—Has been passing stone, and doing well until to-day, when he complains of pain and swelling in his left testicle, and has accompanying it a considerable amount of constitutional disturbance. Ordered:—

Balneum tepidum statim.

R Pulv. ant. pot. tart., gr. $\frac{1}{2}$; vini. colchici mxx. ex.; mist. magn. cum. magn. sulph. Tertiis horis.

R Lot. plumbi. diacet. Testi. appl.

April 25th.—The orchitis has entirely subsided, and he is able to get about again as usual.

May 5th.—Has not passed any fragments of stone for some days past. The sound still giving evidence of the presence of calculous matter, Mr. Hilton again lithotritized him, crushed several pieces of stone, and, as before, a large quantity of detritus was washed out through the catheter. Ordered to take:—

Tinct. opii. mxxx., statim, and to keep at rest in bed for a few days.

May 9th.—Did not manifest any untoward symptoms from the operation; but expresses himself as in great pain now, from having just got rid of the largest piece of stone he has passed, and which he says was in his urethra eight hours.

To have balneum tepidum statim.

May 15th.—Is frequently passing portions of stone, and doing well; but has great restlessness and want of sleep at night. Ordered:—

Pulv. doveri, gr. x. Omni. nocte.

June 12th.—Was again lithotritized, and, as on previous occasions, a considerable quantity of stone was obtained.

Tinct. opii. mxl. Post operationem.

June 18th.—Progressing favourably. Still continues to pass fragments of stone. His urine contains more mucus than it has done hitherto, and he is evidently labouring under a slight increase of vesical irritation.

Ordered to have his bladder daily washed out with water at the temperature of 98°.

June 27th.—Having recovered to his ordinary state of health, and the existence of stone being still indicated by the sound, he was again operated on, with the same results as before.

July 1st.—Still continues to pass fragments of calculous matter; sometimes several pieces during the day.

July 5th.—Lithotrity again performed by Mr. Hilton, and again a large quantity of stone was procured.

July 10th.—Has passed but little stone since the last operation. Complains of a great deal of irritation about his bladder, and a more frequent desire to void his urine, which greatly disturbs his rest. Ordered:—

R Acidi nitrici, mij.; tinct. hyosc., mxx. ex.; decocti. pareiræ, ʒj. Ter die.

July 20th.—Is much improved. Has ceased for some days to pass any stone, and Mr. Hilton, on sounding him, could happily detect nothing in his bladder. After remaining in the hospital a few days longer, during which time he continued improving, he was presented.

The whole of the detritus passed after the various operations being collected, was found to weigh, in all, about 205 grains. The largest fragment weighs 4½ grains. Most of the pieces appear of a shell-like character; in fact, are portions of the concentric layers of which urinary calculi are observed to consist. On attentively examining the whole of the fragments, however, eleven pieces can be picked out, round like a pea, and evidently nuclei. From this it would appear, that our patient must have had no less than eleven stones in his bladder; and the almost inexhaustible supply of calculous matter which he at one time seemed to possess, is thus accounted for.

It is interesting to observe, what a small amount of constitutional after-disturbance the various operations that were performed produced; in fact, after neither operation was there even a shadow of a symptom of importance arising directly from the operation itself. Mr. Hilton attributes this, in a great measure, to the care that was taken to maintain the temperature of the water used for injection at 98°, combined with the means which were adopted after the operation; namely, administering immediately a large dose of opium, and placing the patient in bed between blankets—the greatest resources at our disposal for preventing shivering, a symptom which is always looked upon by the surgeon with suspicion, and too often followed by the most serious results. In cases where these means have been assiduously attended to, Mr. Hilton has never seen shivering or any bad consequences accrue from the operation. On the other hand, where the temperature of the water is not determined by the thermometer, but by that vague instrument, the sensation of the hand, lithotrity is often attended with serious and even dangerous results.

Since the above report was completed, the patient has been again received into the hospital by Mr. Hilton, with symptoms of the old complaint. Having been sounded, and calculous matter detected, it has been determined, that he should again be submitted to the operation of lithotrity.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Nov. 8.—MEDICAL SOCIETY OF LONDON. Subject:—Mr. Gay, "On a New Method of Treating Diseases of the Joints." Eight o'Clock.

Monday, November 10.—GOVERNMENT SCHOOL OF MINES AND OF SCIENCE APPLIED TO THE ARTS. Lecture by Edward Forbes, Esq. Subject: "Natural History." One o'Clock.

Tuesday, November 11.—GOVERNMENT SCHOOL OF MINES AND OF SCIENCE APPLIED TO THE ARTS. Lecture by ROBERT HUNT, Esq. Subject: "Mechanical Science." Eleven o'Clock.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY
Half-past Eight o'Clock.

Saturday, November 15.—MEDICAL SOCIETY OF LONDON. Subject:—Mr. RICHARDSON, "On the Fibrinous Element of Disease in Relation to Disease." Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, NOVEMBER 8.

INVESTIGATION AT THE GENERAL HOSPITAL, BIRMINGHAM.

WE now proceed to the substance of the second charge against Mr. Alfred Baker.

An unfortunate old man, aged 66, consulted Mr. James Percival, of Birmingham, for a pulsating tumour at the root of the neck, which was supposed to be aneurism of the arteria innominata. Mr. Percival handed over his patient to Mr. Baker, expecting that the distal operation, or that of tying the vessel of the aneurismal tumour at a point distant from the heart, would be performed. "The operation," according to Mr. Percival's evidence, "is one sanctioned by eminent authorities," and he had no objection that it should be performed upon this poor old man, who had nearly approached his term of threescore years and ten, although he had never seen it before, and knew nothing whatever about the matter.

Mr. Baker, having the patient under his care, announced to Mr. Wood, the senior surgeon, his intention, without previous consultation, of tying the carotid and the subclavian arteries beyond the tumour. He tied the carotid, and the patient died.

The conclusion of the drama shall be told in the words of Mr. Elin, the house-surgeon.

"How long did the patient live after the operation?—Mr. Elin: Three days. After death it was found that there was no true aneurism."

In a few words, Mr. Baker performed upon an aged man, for a supposed disease, without proper consultation with his colleagues, an operation which has often killed, and perhaps never cured; his patient dies; the mistake is discovered by *post-mortem* examination,—there was no aneurism at all. The true character of the disease having been previously conjectured by Mr. Wood, the Earl of Dartmouth and the Committee, nevertheless, pronounce Mr. Baker still deserving of all confidence and praise.

He who boldly undertakes an operation against the advice, or even without the sanction, of his colleagues, claims for himself all the merit of success; and it is but fair that he should receive, when the patient dies under circumstances like the present, all the discredit of failure. Should he succeed, the character of his colleagues must suffer; he must not, therefore, be surprised that they refuse him their countenance in his mortification.

We will not enter upon the merits of the operation. Let

it suffice to say, that there are some operations which, successful only in certain hands, do not bear the publicity of an hospital. Putting a ligature upon the distal end of the artery in aneurism, seems to be one of these. As regards the diagnosis, we grant the difficulty, even with the aid of the stethoscope. But that very uncertainty, coupled with the knowledge of the fact, that the morbid state of the arterial coats, in such cases, extends beyond the immediate seat of disease, should make a surgeon slow in undertaking, upon an aged man, an operation generally fatal in its results.

The point upon which we insist is, that no surgeon should undertake cases which his colleagues would reject, unless he feel himself their master in information, experience, and surgical skill. Such a man stands upon an eminence liable to be assailed, and safe only in the consciousness of his own innate powers. A man of inferior capacity may attempt to swell his little hide, but, like the frog in the fable, he will probably burst in the attempt.

We do not consider that in either of the cases before us there was sufficient deliberation. Disapproving as we do, with the majority of the Profession, *in toto*, of both the operations, we should yet have withheld all remark had proper respect been shown by Mr. Baker to the opinions of his colleagues. He chose to pursue the opposite course, and must therefore take upon his own shoulders the discredit which attaches to these proceedings.

But of the Earl of Dartmouth we demand why he and the other gentlemen forming the Committee, give themselves the trouble of going through the prolonged farce of an investigation which, we presume, would have terminated in an equally complimentary way to Mr. Baker, had he, instead of tying the carotid, cut off his patient's head, without consultation? But there is some excuse for the result. Mr. Hodgson, the Birmingham surgical luminary, of whom, we understand, Mr. Alfred Baker was formerly a pupil, left London that he might lift up his voice in the defence.

"Mr. Baker read his own written statement of the case, on which Mr. Hodgson said "*the operation of tying the artery was fully justifiable!!!*"

Can Mr. Hodgson be serious? or rather, is there not some mistake in the Report? Would Mr. Hodgson perform upon an old man, for a doubtful disease, two operations, either of which would most probably kill, and, in the most favourable point of view, of doubtful value? We cannot believe in such surgery. For the sake of Mr. Hodgson's own character, his reputation, and standing in the Profession,—not to mention his position as President of the Royal Medical and Chirurgical Society,—we trust he will publicly give an indignant denial to the truth of the charge.

So much for the operations. But there is another point of view in this sad business; and it is but fair to Mr. Baker that it should be stated, that the whole blame of the non-consultation of his colleagues should not rest upon him. We have reason to believe, that, for many years, there has been nothing like a proper consultation on any case in this hospital; and that, when they do occur, they are always of the loosest and most slovenly description. Whether this arises from total indifference to the subject, or secret quarrellings, bickerings, and jealousies among the members of the hospital staff, it is not for us to inquire. The Medical officers are the servants of a charitable institution, and should seek the public good rather than the gratification of their own personal feelings. Mr. Baker should never perform another operation in that hospital without forcing a consultation with his colleagues and registering the opinions

given, lest the *memories* of any of those gentlemen fail them in the event of the operation not proving successful. Nor should Mr. Baker allow them to perform an operation without consulting him.

But let these gentlemen take care. They have, in their treatment of Mr. Baker, established a precedent which, sooner or later, may be visited upon themselves. He has been mercilessly left, with one exception, without a single friend upon the staff with which he is connected, to fight a battle where no such battle should have been fought. Which of these gentlemen's turn will come next? What! has it come to this? that a non-medical Board shall summons before themselves, at the instigation of one of their members, (let it be said with shame, himself a surgeon,) a medical man, upon whose skill they are to pronounce judgment? Who are they, and what do they know of medicine? Could they, in the very nature of things, be considered qualified for judging of the merits or demerits of these cases? and even supposing they were,—should not the fact, that the party whence the charges originated was eminently notorious in his antecedents, have made them very cautious about entertaining such charges? But why need we care about these matters; if these gentlemen are satisfied with them, we have personally no reason to be otherwise. We merely give them the caution; and, perhaps, when each one of them has had the same harassing experience as Mr. Baker in these matters, they may alter their conduct to one another.

REPORT ON THE LUNATIC ASYLUMS OF IRELAND.

THE Fifth General Report of the Inspectors of Lunatic Asylums in Ireland, made to His Excellency the Lord-Lieutenant, is now before us. We congratulate our Profession—we congratulate the Inspectors, Drs. White and Nugent—we, with perhaps some pardonable vanity, congratulate ourselves on the appearance of that important document.

We congratulate our Profession, because a great change—in fact, a revolution—has been commenced in the superintendence of the District Asylums of that country, by the substitution (slowly, it is true, but we hope surely) of medical men of education, character, and ability, as superintendents, instead of the old plan of nominating ex-tax-collectors, ex-valets, and exempts of any and every kind, for the management of a class of hospitals that, above all others, demands, in the language of, perhaps, the highest authority known and acknowledged on the subject, “medical officers as resident directors, subject, of course, to the strictest inspection and control, to guide and regulate every branch of their internal economy.”

We congratulate the inspectors, because they have, at length, honestly and like true men, stood forward in their Parliamentary Blue-book, to claim for the patients, the Profession, and the public, the services of the only persons qualified, in the judgment of the 19th century, to fulfil most important and most laborious duties; and have thus placed it beyond the power of crotchety or retrograde officials to revive, in Ireland, any part of a system which the law renders impossible in Great Britain;—inasmuch as no asylum in the latter part of the empire, containing fifty patients, can for one month be kept open, unless under the charge of a resident medical governor, or at least having a competent medical officer residing within its walls.

Our difference with Dr. White, one of these gentlemen, is now, we rejoice to say, at an end. On public grounds

alone did that difference arise; inasmuch as in private, probably within the entire range of the public service, there is not a more amiable, more excellent, or more upright man; and we render him our hearty thanks for having gracefully and frankly abandoned a position which we are satisfied he only assumed under a pressure which few men at the time would, or more properly speaking could, bear up against.

We congratulate ourselves, because it is fresh in the memory of our old and valued supporters, that in season and out of season, we never ceased to hold up to public reprobation the existence of large public asylums, containing from 150 to 400 patients, having but *one* visiting medical officer attached to each, possessing of course an extensive private practice, whose desultory nature rendered the public duties liable to neglect, or at least to an attendance uncertain as to *time*, and, therefore, open to the gravest objection, since no person could be officially responsible for the discharge of his duty; nor, in a word, competent to supply his place in cases of accident or emergency.

We undertook the reform of this most anomalous condition of the Irish Asylums. We did so, we may add, *alone*. Since the only Irish periodical representing any portion of the Medical Profession in that country, with a violence almost, if not altogether, that of a partisan, opposed any, even the smallest innovation, on the non-resident medical system. The Editor to whom we allude is Dr. Jacob, whose brother was and is the visiting physician to a district asylum, where the change in this respect met the sternest and most uncompromising hostility.

We are glad, however, to find that Lord Clarendon's appointment of Dr. Barton as resident physician to the Maryboro Asylum, upon the death of the civil officer who had theretofore governed the institution, has met with Dr. Jacob's approbation; and we trust that, henceforward, Drs. Arthur and John Jacob will in justice, not only to their own high and eminent characters, but to their Profession, warmly and honestly sustain the wisdom and policy of a change, not only in accordance with the law in great Britain, but with that spirit of progress and justice for which the present age is so remarkable.

ASYLUM SUPERINTENDENTS.

A contest has been going on for some time in Lancashire, respecting the licensing of Haydock-lodge Asylum. It appears that Mr. Sutton, the late master of the Manchester Workhouse, applied last week at the Kirkdale sessions for a licence for this asylum, over the heads of the parties at present in occupation, upon the ground of his being in negotiation for the leases of the premises, which appear to have been mortgaged to a money-lending Building Society in Manchester. The magistrates, after a stormy discussion, refused to grant Mr. Sutton a licence, and allowed the present Superintendent, Mr. Lawrence, to the 1st of January next to remove the patients; upon which, Mr. Lawrence pledged himself to find another place by that time. We know not how these things are managed in the North, or what qualifications are expected to be possessed by the licensee of a lunatic asylum; but this much strikes us as obvious, that the master of a workhouse, or the governor of a gaol, may be very respectable and efficient functionaries in their way, and yet not the most eligible persons to be entrusted with the management of a lunatic asylum. Surely, professional qualifications, and those of the highest order, ought to be required of persons seeking licences to carry on this sadly-abused department of our Profession.

REVIEWS.

A History of Epidemic Pestilences, from the Earliest Ages, 1495 Years before the Birth of Our Saviour, to 1848, with Researches into their Nature, Causes, and Prophylaxis.
By EDWARD BASCOMB, M.D. Pp. 250. London. 1851.

If asked, Why in our own country especially, with all its practical talent and its great advance in civilization, so little progress has hitherto been made in investigating the nature, causes, and prevention of epidemic diseases, we should not hesitate to adduce as one special reason,—ignorant religious fanaticism. A great pestilence having once fallen on the beasts, they held a congress to deliberate on its cause. The lion, the tiger, and other animals, strong in might, and delighting in blood and carrion, stood upon their strength, and maintained that they could have nothing to do with it. Sorely were they perplexed; but, having at length discovered that an unfortunate ass had eaten a thistle on the Sabbath, they forthwith came to the unanimous opinion that the ass must have been the animal that called down the vengeance of Heaven, and therefore sacrificed him to appease Almighty vengeance.

Even so have mankind ever been ready to attribute the cause of our maladies to anything with which they themselves could be disconnected. Those who had vested interests in our places of sepulture, crowded, reeking, and noxious, would attribute cholera to a special Providence—His will the only cause; and would, in mock reverence, pray the destroying angel to stay his hand, sooner than refuse the interment of another blackened corpse, the fees on which would pass into their exchequer. Commissioners of Sewers have thought it well to take no action as to surface drainage, cesspools, and choked up sewers, lest, by the bare mention, they "should deteriorate the property of the district." And religious fanatics, who weekly revel in Divine mysteries—the mystery of mysteries to them—profess that in them is vested a knowledge of all causes of all evils, and that, even while they themselves hold forth from rostrums underneath which lay a mass of putrid corruption, or deliver themselves to their ever patient congregations of hundreds in unventilated and steaming conventicles, yet that to the Sabbath nibbling of the thistle was to be attributed all the ills that flesh is heir to.

Thank God, there have been some who, undeterred by the cry of "Presumption!" "Blasphemy!" and so forth, have ventured on the path of scientific inquiry—anxious to look on effects and their causes, as a duty alike demanded of them by the Ruler of the Universe, and necessary for the care and protection of his creatures. Among these, we are glad to welcome the author of the volume now before us. There are many from whom we should sooner have expected a book of this kind. Devoted as Dr. Bascombe is to the care and management of one of the direst diseases that afflict humanity, and that in one of our principal and best conducted private establishments, it is refreshing to us to find that he could yet, with all his valuable experience, derived "from a sojourn of a quarter of a century in climes not the most hospitable," devote his researches to a subject so important to all at the present juncture, and produce a volume so replete as this is with valuable information and suggestion.

To attempt even an analysis of the work would lead us far beyond our limits. Chapters I. to VIII. are occupied with the History of Epidemic Pestilences, commencing B.C. 1495, when a deadly pestilence prevailed in Egypt, and swept away millions from the face of nature, to the epidemic of influenza in our own country, in 1847. When we say that every page of this history teems with facts, not theory, and facts so put together as that the reader may see at once the probable cause of a particular effect, in every circumstance mentioned, and this through a period of no less than 3342 years, the labour which has been expended on such a history, whatever may be the reader's opinion of Dr. Bascombe's conclusions, may be well imagined, is at once highly commendatory of his work, and stamps it as a monument of patient industry.

Chapters IX. and X. are devoted to an inquiry into the Nature and Causes of Epidemic Pestilences. The author believes that the doctrine of the existence of any new disease in our day is untenable; and that such a doctrine is due to our inability to trace diseases under the same names and precise characteristic symptoms described by our predecessors in the study of nature; "in fact, the comparative

modern origin of some diseases may be said to rest on the absence or deficiency of distinct and express notice of them in the writings of the ancients; since they classed all pestilential epidemic distempers under one general head or term, viz., *pestilence, plague, or fever*; under the head of consumption, they noted all chronic diseases; and boils, scabs, pustules, blotches, carbuncles, etc., were included under that of skin diseases. * * * I repeat, that the perusal of ancient writings * * * displays the perpetual uniformity of Providence in the entire operation of Nature's works."

The *Causes* of epidemic pestilences enumerated by the Author in Chapter X., are—Comotions of the physical world, the peculiar functions and various idiosyncracies of the living system modifying the effects of such causes. The Author here cites from the Classics, showing that Homer, Ovid, Thucydides, Lucretius, Galen, Hippocrates, Eusebius, and Tacitus, were fully alive to the connexion of atmospheric causes with disease and pestilence, and, in further illustration, quotes Tasso's beautiful description of the sufferings of the Christian army under the walls of Jerusalem. He closes this Chapter with a reference to the condition of London at the time of the Plague—"ill-built, ill-drained, and ill-supplied with water," conditions which, nearly two centuries later, still exist.

The subject of contagion is dealt with in Chapter XI., and on various considerations, some of them certainly of much weight, the Author declares for the non-contagiousness of epidemic pestilences. He concludes this Chapter with the following summary:—

"I take leave to reiterate my opinion,—an opinion founded on a careful review of the foregoing history of epidemics,—that all epidemic pestilences or diseases are to be accounted for on the principle of natural causes, viz., That atmospheric disturbance, consisting of variations of temperature, hygrometric influence, atmospheric pressure, electrical tension, etc., are the exciting causes; while, on the other hand, want of light, impure air, especially from defective ventilation, in which are included malaria and all other noxious vapours, from whatever source arising; scanty diet, and habits induced by the irregular, artificial life of many, are the predisposing causes which, by enervating and otherwise spoiling the system, render it more susceptible of external atmospheric impressions in the production of epidemic pestilence or disease."

On the Prophylaxis of disease (Chapter XII.), Dr. Bascombe lays great stress on light, air, and water, as the three grand essentials for vitality; and under these heads enlarges on the various ways by which man becomes deprived of these necessities, or in which they become polluted and absolutely noxious. The Author then alludes, with well-merited severity, to the barbarous and pestiferous custom of intramural burial, as subversive of every Christian feeling, demoralizing in the extreme, and poisonous to the public. He shows that in this respect we are far behind the ancient heathen, who would "neither burn nor bury within the city;" and he mentions several instances of modern date where the custom has been followed by the most dreadful consequences.

Such is but a meagre representation of Dr. Bascombe's book. We feel convinced that it will be read with gratification and with advantage by all those who would make such subjects their study; and that humanity will be benefited by so much as works of this class are made the text-books of philanthropists and professional men.

Having said this much, we must notice one omission in the work before us. It is hardly to be borne, that, in a book dealing so largely with a variety of facts and incidents, and entering into so many topics, there should not be a line of either "Contents" or "Index." If a second edition should be called for, of which we have little doubt, we are sure Dr. Bascombe will see, that the value of the volume as a book of reference would be much enhanced by attention to this point; and we sincerely trust that his forthcoming work on "Yellow Fever and Cholera Morbus" will be free, at its birth, from this defect.

Memorials of James Mackness, M.D. By the Author of "Brampton Rectory." London. 1851.

Those of our readers connected with the Provincial Association, who attended the late *réunion* at Brighton, had an opportunity of hearing an eloquent and a feeling mention made of the late Dr. Mackness—a tribute of respect rightfully due and freely accorded by the assembled members.

The principles on which that numerous Society were founded had long since received his firm adhesion, and were in a peculiar degree congenial to his private sentiments, harmonising with his opinions as to what should form the foundation of professional intercourse. The benevolent Author of the "Moral Aspects of Medical Life," gives a key to his entire character therein. All those nice relations especially pertaining to the career of a medical man are finely touched, and the trying positions in which he is not unfrequently placed, receive that forethought and consideration for which the Author was in a high degree fitted, as well from the essential bent of his moral nature as from the painful and trying experience of his former life.

The late Dr. Mackness possessed, in addition to a well-stored memory and great energy, that nice discrimination so essential to success in practice, coupled with the deepest interest in his patients, and untiring exertions to put in force every feasible plan likely to bring about their restoration to health.

From his entering into the professional arena almost to the close, his life was one continuous struggle with difficulties, impediments, and prostration from physical suffering, which might be expected to appal the stoutest resolution; but he was supported by ennobling motives and springs of action, feeling conscious that he owed those faculties he was endowed with to his professional associates and his patients. He set before him the sacred duty of being useful "in his day and generation," and never swerved from what he conceived his duty, however painful were the steps he had to take in its accomplishment. The public are, notwithstanding the occasional vagaries of a few weak members of the community, not slow to discern and appreciate a genuine interest in their welfare, and a skilful adaptation of remedies in treating their maladies. The respected subject of these "Memoirs" mainly attributed his success, to his close and watchful care, which embraced every circumstance, how minute soever, bearing upon their welfare.

Herein lay the secret of his success, coupled with close assiduity and untiring research in the acquirement of knowledge. Superadded, were systematic habits, which latterly alone enabled him to fulfil his numerous engagements, and get through his many occupations.

His hopeful, inspiring manner and mild deportment, united with firmness when required, won for him the esteem and confidence of his patients, and endeared him to all classes. His charitable disposition was only bounded and limited by his ability to relieve distress. To the poor he was a kind friend and adviser, as well as a gratuitous professional attendant, courteous alike to the sick and indigent.

Dr. Mackness's convictions on the subject of religion were truly catholic, and well befitting an accomplished Professor of medical science. He was highly respected by his fellow-townsmen of all denominations alike. His was not the obtrusive cant so distasteful to earnest minds, but partook of that sterling character which is best evinced in deeds,—the indubitable language of action.

His intellectual powers were more adapted for analysing and unravelling intricate subjects of research, or cases of disease, than for originating bold or novel views in pathology or therapeutics. His was the genius of contrivance and adaptation, rather than of an abstract metaphysical cast. His mission was that of beneficence, and partook of the useful character which links the exalted to the humble follower of the healing art; his reward being the consciousness of well-doing, and his aim "peace and good-will on earth." His interest for young professional aspirants was most conspicuous. Did they shrink aghast from the steep and rugged path leading to success in practice?—his feeling disposition was ever ready to pour in words of hope, and led him to instil fortitude under every trial. Were they in need of those little aids, intrinsically small, yet in the aggregate often turning the scale in their favour?—his assistance was promptly and fully tendered. Let the influence of long established and self-complacent authority be brought to bear in crushing youthful rivalry,—his was the arm to stay the ungenerous and unequal collision.

Such is a very brief allusion to some of the distinguishing qualities of the worthy individual whose Memoirs head this notice. The work bears the impress of talent directed towards a meritorious object, and well illustrates the points here cursorily referred to. We hope it may prove as successful as its scope and aim entitle it to attain. While serving purposes of utility and incitement to the youthful

and mature members of the Profession to "go and do likewise," these gleanings well deservedly perpetuate the memory of one whose untimely removal from the sphere of his labours, will long leave a blank in the reminiscence of sorrowing friends and associates.

The style is agreeable throughout, and in some parts exalted, the volume itself being neatly printed and well got up.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM JOURNALS.

THE PATHOLOGICAL ANATOMY OF BRONCHITIS.

DR. GAIRDNER has concluded an admirable series of papers on the Morbid Anatomy of Bronchitis, of which we present an abstract:—

1. *The Primary Results of Bronchitis.*

(a) Obstruction of the bronchi from swelling of mucous membrane and from secretion. The anatomical condition consequent on such obstruction, when long continued, as in the case of inspissated secretion, is collapse of those portions of the lung to which the affected tubes are distributed. The collapsed condition is often termed "carnification," and is identical with the infantile atelectasis; it is denoted by condensation and want of air, without appreciable exudation, comparative increase of weight, an unusually dark colour, the consistence unaltered. This collapse may be diffused, or limited and lobular; the latter being a form which has been so often described as "lobular pneumonia." It is, however, destitute of the minute granular aspect of true lobular pneumonia; under the microscope, scrapings from its surface show only blood corpuscles, epithelium, and a few pus cells from the bronchi, instead of the abundant granular elements and cell-forms which are obtained from lungs in which exudation has occurred; and, in the majority of cases, the condensation is removed by inflation.

The general result of Dr. Gairdner's inquiries in this direction is expressed in the following propositions:—

"1. That in all cases of collapse of the lung not caused by external pressure, the bronchi have presented unequivocal appearances of obstruction.

"2. That in most, if not all, the instances of severe and fatal bronchitis, especially if the secretions had become ropy or inspissated, more or less collapse of the pulmonary texture has also been present."

The mechanism of this bronchitic collapse is thus explained: it is argued and shown to be probable, from all the facts that can be brought to bear on the subject, that obstruction in a bronchial tube, even if it be incomplete, leads to diminution in the quantity of air contained in the tubes beyond the obstruction. To account for this, it has even been supposed that the air is absorbed into the vessels; but Dr. Gairdner justly puts aside this hypothesis, and believes that the comparative greater power of the expiratory over the inspiratory act (as 3 to 2) may account for the diminution of the air. The peculiar nature of the obstruction will also aid the expiratory act, as it is pointed out, that the bronchi, being a series of tapering and dichotomizing tubes, a tough pellet of mucus will fall towards the smaller end, and, during inspiration, will of course pass onwards still deeper into the narrowing tube, and perfectly block it up; while, in expiration, if it can be moved at all, it is forced into the wider portion of the tube, and allows the air to pass. And, in addition to this, if the plug be insufficient to close the main tube, it may be carried against one of the openings of the next bronchial division, and completely block it up. Besides these causes, anything which tends to produce insufficiency of the inspiratory act will aid this.

(b) *Bronchial Abscess.*—In the centre of a lobule collapsed from bronchial obstruction, a small collection of pus can sometimes be found, varying in size from a hemp-seed to two or three times that size; the pus is sometimes surrounded by a "villous" membrane, at other times lies in contact with the pulmonary tissue; the tubes leading to such abscess are found much inflamed. This lesion is most common in children, but is found in adults, and has often been described as tubercle. The origin of these abscesses appears to be,—first, the collection of pus in the central

bronchi of a collapsed lobule; secondly, the retention of this by changes in the bronchus higher up; and, finally, softening, and ulceration of the coats of the central bronchi and escape of the pus among the adjoining parts.

2. The Secondary Results of Bronchitis.

Dr. Gairdner remarks, that, notwithstanding the apparently grave nature of bronchitic collapse, many cases get well. In inquiring into the mechanism of recovery, he takes occasion to point out, that the great function of the muscular fibres in the bronchial tubes may be a deobstruent one; that these fibres, which are certainly passive in the respiratory act, may be constantly undergoing a kind of peristaltic action even in health, which tends to force on the secretions in the tubes. Consequently, in collapse, these fibres may succeed in dislodging the thickened mucus, and in rendering the tube again free to the passage of air. He then goes on to remark on the production of

(a) *Emphysema*.—From an analysis of forty cases of emphysema, it is shown, that 67 per cent of all cases of emphysema are connected with pulmonary collapse of other portions of lung; that 10 per cent. are connected with hepatization; and 20 per cent. with tubercle. (a) There is, therefore, evidently some intimate connexion between the first-named lesion and emphysema. The most common anatomical seat of emphysema is at the anterior borders of the lungs; while that of bronchial collapse is in their posterior and depending parts; and the way in which the former is produced by the latter is by a disturbance of the mechanism of respiration, that is to say, the collapse of some portions of the lungs permits the over distension of other and previously sound portions. The anatomical postulate, if we may so term it, of emphysema of one portion, is diminution of bulk of another part; and this diminution is most commonly from the pulmonary collapse of bronchitis; but it may be from the cicatrization of cavities, or other causes leading to atrophy of a portion of lung.

(b) *Permanent Atrophy of Lung*.—Another secondary result of bronchitis is chronic collapse passing into actual atrophy, in which the tissue becomes impermeable to air from actual obliteration of the air-cells. Here the result is the same as after long-continued compression from pleuritic effusion. In such cases of atrophy, the affected parts are reduced to a lax fibrous or areolar texture, enclosing the remains of bronchi and vessels, perfectly flaccid, free from all induration or abnormal exudation.

(c) *Bronchial dilatations* are ascribed in part to the expansive forces of inspiration acting upon the bronchi of atrophied lung; but it is also argued, that they are "the result of ulcerative excavations of the lung communicating with the bronchi." These excavations then become lined with a false membrane, which is smooth, glistening, and not very vascular, and which is continuous with the lining membrane of the undestroyed bronchial tubes.

(d) *Pulmonary Concretions and Cicatrices*.—Both concretions and cicatrices have been referred to obsolete and cured tubercle, and no doubt this view is, in a great number of cases, the correct one. But as excavations occur not only from softened tubercle, but also (as it appears) from ulcerative processes following simple bronchitis, broncho-pneumonia, syphilis, gangrene, isolated and multiple abscess, &c., so also such cavities may heal, and give rise to cicatrices, which can only be distinguished from healed tuberculous cavities by collateral evidence. So also concretions, though so often of tuberculous origin, may yet be derived from any other form of pulmonary ulceration or abscess.

Such is a short, and necessarily an imperfect abstract of a very interesting series of papers, the facts of which have to be tested by the observations of others before they can be definitively admitted by practitioners, but which have certainly been collected with great care and industry, and which, as far as we can see, bear on them the impress of truth.—*Edinburgh Monthly Journal*.

(a) Dr. Gairdner observes, that the dogma of the antagonism of tubercle and emphysema, or rather of venosity and tubercles, derives no support from the results of his cases.

HOSPITAL FOR CONSUMPTION, BROMPTON.—The daily papers announce a legacy of 2000*l.* bequeathed to this Institution during the last week, and 100*l.* from another source. The Committee are actively engaged in completing the building by adding another wing, which will enable them to raise the number of admissions from 90 to 220.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

ELECTRO-PHYSIOLOGY.

However the idea may have been ridiculed as a vain chimera, it is certain that the progress of human knowledge tends to make us conclude, that the cause of the various phenomena which present themselves in the organic, as well as in the inorganic world, is a single grand principle. Light and heat have now been demonstrated to be the same. There is a strange analogy between the colours of the spectrum and the vibrations of a musical chord; and as the number of substances considered simple has daily diminished before the progress of analytical chemistry, so every step in natural knowledge increases the domain of electricity, tending to reduce all other causes within the sphere of this single principle.

Hitherto the laws which govern the living body seemed to be totally independent of the principle now alluded to; but within the last few years many experiments have been made, many observations recorded, which have opened a new prospect, and seem to justify the hope that the grand secret of vitality is not altogether impenetrable.

Many years ago M. Matteucci demonstrated the existence of electrical currents, propagated along muscles, from the interior to the exterior. He even made a true battery with the flesh of pigeons and frogs. The experiments of M. Donné and others, likewise show, that in the human body electrical currents are established from surfaces whose secretions are alkaline towards surfaces whose secretions are acid. It is also well known that electric currents exist in certain fruits, &c., varying according to the species. Thus, in apples and pears for example, the current passes from the stem upwards; but in peaches and apricots, from the fruit to the stem.

These latter phenomena may, possibly, depend on certain chemical changes; but on the other hand, it is now well ascertained that certain acts take place in the living body and develop electric currents, without being accompanied at the same time by any appreciable chemical action.

The discovery of this fact, or rather its perfect demonstration, is due to M. du Bois-Raymond, of Berlin, whose labours have been recently the subject of a remarkable report from the Institut, before a Committee of which body, composed of Majendie, Becquerel, Despretz, Royer, and Pouillet, M. Raymond repeated all his experiments.

Whenever a muscle contracts, under the influence of volition, an electrical current is developed, and the intensity of the current appears to be in proportion to the intensity of the contraction. Any one may test the fact with a galvanometer. The fingers are placed in two basins of salt water, which communicate with two delicate galvanometers. The muscles of the forearm are now made to contract by volition, and immediately the needle deviates on the side towards which the contractions are most powerful.

The fact, then, is undoubted; but how are we to explain it? Does the electrical current so developed arise merely by being disengaged from the contracted muscle; or is it the result of some chemical action connected with the contraction; and, if so, is the chemical action external or internal? These are questions which immediately present themselves.

The cause of electricity developed in the living body, in other words, of organic currents, has been matter of discussion since the days of Volta. The simple contraction of the frog's foot was attributed by Galvani to a peculiar current, and by Volta to the heterogeneous nature of the elements placed in contact generating an electromotor force. Since then, however, and especially since the discovery of electro-magnetism, we have learned the existence of a new force, capable of producing electric currents, and that force is—chemical action. The force of this powerful agent soon displaced the other, and the electromotor force, as admitted by Volta, disappeared almost completely.

Still, we know that electric currents do not always depend on chemical action. Leaving aside ordinary electricity, as developed by friction, we have two grand classes of phenomena, which are evidently independent of chemical action; and these are the phenomena of thermo-electricity, and those presented by crystals analogous to tourmaline.

There are, then, several sources of electrical currents; and it is not only difficult to trace certain effects to their causes, but impossible to say whether other causes may not be discovered or placed in a totally new light.

The "proper current" of the galvanic frog, first carefully observed by Nobili, was attributed by him to thermo-electricity; but he was quite unable to demonstrate the fact. Others attributed it to chemical action, equally without proof; and here the learned reporter, M. Pouillet, alludes to a distinction of the very first importance. If the current result from chemical action, it is necessary to determine whether that action be external or internal, that is to say, whether the current is produced by external bodies acting on the organic substance, or by simple re-actions between the constituent organic elements themselves, without the intervention of any extrinsic agent. In the former case, the galvanic frog, or the organic body, would merely resemble the zinc and copper plates, which are incapable of developing electricity, unless placed in contact with an acid. In the latter case, the organic body would possess the power of generating electric currents. This, in fact, is the old question between Galvani and Volta, though under a different form,—are organic currents derived from an external or an internal cause? The Committee of the Institut think it is highly probable—though not positively demonstrated—that they do not depend on external chemical causes. But, supposing it proved, that the causes are internal, we have yet to learn, whether in such case these causes are merely chemical, or whether they are of a peculiar nature. This question remains to be decided, and with it two important phenomena to be explained, viz., the intermittent diminutions of the muscular current during contraction of the muscle, and the modification of the nervous current during excitement of the nerve.

To these points the future experiments of M. Raymond will probably be directed; above all, to the essential one of "determining the cause of the current which accompanies muscular contraction;" for the Committee of the Institut are of opinion that this cause has not yet been satisfactorily made out. Still, a new path has been opened,—the voluntary development of electricity has been proved,—and no one can say to what discoveries such a fact may not lead an observer like M. du Bois-Raymond.

IRELAND.

THE appointment of Medical Commissioner, under the Medical Charities (Ireland) Bill, has been conferred on Dr. John M'Donnell, who now takes a seat on the Poor-law Commission, which body, since the recent changes consequent on the introduction of the above Bill, is at present constituted by the Chief Commissioner, Mr. Alfred Power, the Medical Commissioner, Dr. John M'Donnell, and a third Commissioner, Mr. John Ball, who has been elevated to this office from his former post of Assistant-Commissioner, now abolished. In addition to the officers just named, the Chief and Under Secretaries to the Lord-Lieutenant of Ireland for the time being are, as heretofore, *ex-officio* members of the Commission.

By Dr. M'Donnell's appointment as Medical Commissioner, a vacancy will be created in the staff of surgeons of the Richmond Hospital. The nomination is vested in the hands of the Lord-Lieutenant, and several gentlemen of ability are already spoken of as likely to obtain this important surgical post. The Royal College of Surgeons of Ireland likewise becomes deprived of Dr. M'Donnell's services. He has for some years filled the office of Lecturer on Surgical and Descriptive Anatomy in this Institution; but his immediate resignation may be anticipated, as the Bill distinctly provides against the Commissioner performing any professional duties. We believe no steps have as yet been taken by the Commissioners towards the appointment of inspectors or the formation of the dispensary districts.

KING AND QUEEN'S COLLEGE OF PHYSICIANS.

At a meeting of this body, held on St. Luke's Day, the office of President was, after a very closely-contested election, conferred on Dr. W. F. Montgomery, the distinguished author of "Signs and Symptoms of Pregnancy." The other candidate was also a practitioner in midwifery of considerable

eminence, and favourably known to the Profession by his writings,—Dr. Evory Kennedy. The Fellows of the College, in whom the election is vested, were equally divided, when the out-going President, Dr. Wm. Stokes, gave his casting vote in favour of Dr. Montgomery.

The remaining officers for the ensuing year are,—Vice-President, Dr. Aquila Smith; Censors, Drs. A. Smith, Henry Kennedy, R. Travers, and John Kingland; Treasurer, Dr. John Mollan; Librarian, Dr. G. A. Kennedy; Inspectors of Apothecaries Shops, the Censors, who are also charged with the examination of candidates for the licence of the College. At a previous meeting the College conferred the distinction of honorary fellowship on the following eminent foreign physicians and pathologists:—MM. Andral, Louis, Chomel, Cruveilhier, Dubois, Kilian, Müller, Skoda, Rokitsanski, Mott, and Gerhard.

GENERAL CORRESPONDENCE.

DR. ROUTH ON HOMŒOPATHY.

[To the Editor of the Medical Times.]

SIR,—In answer to your correspondent, and my well-wisher, I have only to say, that I am in no way disposed to favour homœopathic dogmas, and believed I was only stating what was generally admitted; and I have only to regret now that I did not speak more precisely, and dwell more at length on this point. I do not wish to enter into the controversy, but I must correct your correspondent's misapprehension of my meaning. The expression "*similia similibus curantur*," which I stated might be occasionally true, does not, I imagine, mean that medicines which will cure a certain disease in an affected person will produce the same disease in a healthy individual, but a disease like unto it. Similar triangles are not necessarily identical. If other interpretation is given, I must entirely deny its truth.

But, first, your correspondent will see that Majendie's view of the action of tartar emetic justifies my conclusions. I quote from Dr. Pereira (1st Ed. p. 413.) Majendie ascribes to emetic tartar a specific power of causing engorgement or inflammation of the lungs; for he found, on opening the bodies of animals killed by it, that the lungs were of an orange red or violet colour, incapable of crepitating, gorged with blood, and here and there hepatized. Moreover, it has been assumed, that the same effects are produced in the human pulmonary organs; and in support of this opinion, a case noticed by Jules Cloquet (*Orfila, Tox. Gen.*) has been referred to. It is that of a man who died of apoplexy, but who, within five days of his death, had taken forty grains of tartar emetic. "In the lungs were observed blackish spots, very irregular, which extended more or less deep in the parenchyma of this organ," etc. It is true this opinion is combated by Dr. Pereira; but then that gentleman premises the article by stating (p. 410), that an extended examination of the effects of emetic tartar on the different classes of animals is still a desideratum.

2. Arsenic, it is true, is more generally known as efficacious in scaly diseases, but its beneficial influence is by no means restricted to this class of cutaneous affections. Rayer speaks of its advantages in cases of eczema, especially of the scrotum, margin of anus, labia, etc., and modern experience has fully proved its value in many cases of eczema, impetigo, and perhaps even porrigo.

Lastly, I have used the term *allopathy* by way of distinction, and for brevity's sake. I am ready to admit, the paper in question is imperfect. The greatest men have their weaknesses, and few are able to convey their ideas in the language most suitable to the meaning of the writer. This defect, resting partly on the imperfection of all languages as the media of thought, is felt by all; and it is not surprising that so humble an individual as myself should partake of this defect.

I am, &c.

19, Dorset-square.

C. H. F. ROUTH.

INQUEST AT HARDINGSTONE, AND DR. ROBERTSON'S EVIDENCE.

[To the Editor of the Medical Times.]

SIR,—No one I am sure can dissent from your Editorial remarks on the opinion enunciated by Dr. Robertson, at an inquest lately held at Northampton. I myself am the more surprised that such an opinion, although entertained by a man of Dr. Robertson's experience, should have been assented to by another of almost

equal age and standing. Surely, such broad assertions, for whatever purpose they are uttered, should not be allowed to pass by unheeded. It is a serious matter for an elderly, experienced man to be so dogmatical and confident; as it might lead a younger and less experienced practitioner to attempt, perhaps to the grave injury of his patient, what he would find an utter impossibility to effect.

Fortunately, as you observe, cases occur very rarely in which it might be justifiable to refrain from persevering efforts to remove the whole of the afterbirth; yet, that such cases do occur, is unquestionable. Two instances are vividly impressed on my mind, which, if not precisely of the same character and results, nevertheless bear a near relationship. These happened in the same patient, and in consecutive labours. After the birth of the child, and waiting an ordinary length of time, the placenta was found to be adherent; and on the introduction of the hand, the attachment was found to exist at the fundus uteri. The hæmorrhage was not profuse at first, but during the attempt at detachment came on much more abundantly. Yet such was the adhesion, the placenta and uterus seemed so intimately incorporated, that it was utterly impossible to separate them, and a large portion of the former was left behind. Precisely the same thing occurred the next confinement; and although I used more forcible means than I should feel inclined to repeat, they were unavailing. Beyond a slight aperient, with careful diet, the woman required nothing to forward convalescence, which soon took place, without evidencing any symptoms beyond what the most ordinary confinement produces. Of course, (which I need scarcely add,) the woman was watched with the utmost care and anxiety.

Now, no one, I presume, would deem it any more prudent to leave a portion of the placenta behind, if judicious efforts could effect its removal, than he would to trust to nature to effect spontaneous expulsion, (a most interesting case of which I have recently seen, and which taught a very practical lesson,) in a case of arm presentation; yet I consider a knowledge of what nature has done and can do, is of the most valuable practical importance, inasmuch as we thus know that, after all human efforts have failed, there is yet another, though less consoling, chance, left the poor sufferer.

Statistics have done much in advancing knowledge, as they afford data whereby we can arrive at certain laws and phenomena; and I cannot avoid thinking that a statistical record as to the result of these sometimes melancholy cases—melancholy in their termination—would be very acceptable to the Profession. So far as I am aware, the subject has not been thus treated by any of the authors on midwifery; a record of this description would, I venture to affirm, point out the error Dr. Robertson is guilty of, and show that so many patients are not doomed to so certain destruction as he imagines.

I am, Sir, &c.

Southport.

G. B. BARRON.

[If any of our readers would undertake to prepare a Statistical Table, as suggested by Mr. Barron, he would be doing an immense service to science, and to the Profession. A record of facts in respect to this subject in particular, is greatly needed.—*Ed. Med. Times.*]

PARTIAL REMOVAL OF THE PLACENTA.

[To the Editor of the Medical Times.]

SIR,—The case of Mr. Fitzpatrick (in your Number for October 25) will, I hope, be sufficient apology for this intrusion. In a lady, on whom craniotomy was performed, the placenta presented the following obstacles to its removal.

First, it was adherent to the uterus to such an extent, that, after a trial of some minutes with my hand in utero, I found it impossible to bring it away but in fragments. Second, the patient was becoming exhausted from excessive hæmorrhage, which had become alarming: nearly three-fourths of a pint of brandy was given (by table-spoonfuls) before symptoms of re-action were visible. My partner and I therefore agreed to leave the remainder of the placenta, which was rather more than half, in the uterus. The uterus fell into a complete state of atony. Dashing of cold water over the abdomen, secale cornutum in half dram doses, weak brandy and water, and beef-tea were given during the night. Finding that a compress and bandage did not control the flooding, I compressed the uterus with my hand applied to the abdominal walls, from 11 at night till past 4 a.m.; this held the bleeding in command. I syringed the uterus with water slightly warmed daily, and, on the second day, the remainder of the placenta came away; the syringing was continued for ten days after; no fever, beyond the one indicative of re-action, followed. This makes the

third case in which I have thought fit to leave the placenta in part; and, in one case, (a seven months') it was not removed at all, a few shreds only escaping; very little irritative fever followed, but the patient was troubled with profuse fetid sweats. In the above-mentioned cases, the life of the patients would have been sacrificed by any further attempts to remove the placenta.

I am, &c.

JOHN S. BEALE.

Harrow-road.

CASE OF EXTRA-UTERINE PREGNANCY.

[To the Editor of the Medical Times.]

SIR,—I have sent for your insertion, should you deem it proper, an account of a rather singular case of extra-uterine pregnancy.

On the morning of the 1st July I was sent for to attend Mrs. Burns, aged thirty, who thought herself advanced to the full period of pregnancy. She was the mother of three children, and apparently in good health. I found that the pains, though sharp and painful, were of a very imperfect nature. The external aspect of abdomen presented the usual appearance; but, on examination per vaginam, I could not reach the os uteri, which I thought might be accounted for from anteversion, or some slight displacement of the uterus. She said she had not felt any motion of the child for a day or two previously, and, on applying my ear, I could detect none of the usual stethoscopic signs of foetal circulation.

The pains continued of the same nature for two or three days, without in the least altering the position of the uterus, and at last ceased entirely, apparently from the use of opium and other sedatives.

For three weeks more the patient complained very little of pain, though her general health was sensibly impaired, when she was seized with frequent and severe rigors, and a large tumour or abscess formed, and gradually enlarged, exactly over the umbilicus, which ruptured in about eight days after, and an immense quantity of thin purulent matter, of a disagreeable and offensive odour, escaped.

I may mention that she suffered little or no pain during the progress and maturation of the tumour. The relative position of the uterus still continued the same; the os uteri still could not be reached, and no discharge escaped per vaginam.

It was evident now that the foetus had died, and that the opening existing in the walls of the abdomen at the umbilicus, had connexion with the uterus; an inflammatory adhesion, from misplacement, having apparently formed between them.

Through this opening a large quantity of matter was daily discharging. The size of the abdomen now visibly decreased; the general health of the patient gave way more rapidly, though she could still take a good deal of nourishment; and her bowels, though generally costive, could easily be moved by laxative medicines.

About the end of July, when at stool, she passed a great deal of the same kind of matter as issued per abdominal opening. This continued ever afterwards; and about a fortnight before her death, which took place on the 25th September, she passed by the rectum a large decayed-looking substance, which evidently was the placenta.

The vital powers now rapidly sank; the patient complained of severe pain all over the abdomen. She could obtain no alvine evacuation; general anasarca of the lower extremities supervened, and she died, as above mentioned, on the 25th September.

At the *post-mortem* examination, on cutting through the parietes of the abdomen, and through a sac, a full-grown foetus was discovered, so much decayed as to allow the bones to be easily separated.

The walls of the sac, though not uniform, were about one-quarter inch thick; an adhesion had formed between it and the sigmoid flexure of the colon, and there was an opening about the size of a crown-piece, thus explaining how the matter had escaped by the rectum. The adhesion and communication with the walls of the abdomen could likewise be traced. The uterus was no larger than in the unimpregnated state, and the os uteri presented the usual appearance it has in women who have borne children; but, from its connexion with the sac, had evidently been drawn forward so as to prevent it being reached by the finger. The colon and other parts of the large intestines were filled and much distended with hardened pieces of fæces.

There can be little doubt, that in this case the ovum, instead of reaching the cavity of the uterus, had remained in one of the Fallopian tubes, had there developed, and, by means of its own proper membrane, and the expanded coats of the Fallopian tube, formed the sac, thus giving rise to the many complicated symptoms of a case fortunately of very rare occurrence.

I am, &c.

Dalsorf, Lanarkshire.

W. WEBB, M.D.

POISONING BY CHLORIDE OF ZINC.

[To the Editor of the Medical Times.]

SIR,—Having observed in the *Medical Times*, that there have been only five cases of poisoning by chloride of zinc hitherto recorded, I venture to send you the following, as it presents a few novel symptoms.

I am, &c. T. OGIER WARD.

Kensington.

Mrs. Collins, aged 40, while attending as a nurse at a house in Kensington, Jan., 1849, took some solution of chloride of zinc for vinegar to wash her mouth, and swallowed about a mouthful that was left in the bottle. The first intimation of her mistake was a burning heat in the stomach, followed immediately by giddiness and rush of blood to the head, as though she had taken some strong spirit. She then lost her sight, and, feeling that her bowels were going to act, rushed down to the water-closet, where she was found soon after vomiting and purging, in a state of collapse closely resembling that of cholera. Some sod. sesq. carb. having been procured, she took a large quantity dissolved in water, and after that some magnesia, and the stomach was well washed out by the stomach-pump; after which she was carried home, a distance of nearly a mile. Though apparently quite conscious of what was done to her, she had no recollection of any circumstance that occurred, from her going down stairs till she found herself at home. The vomiting continued more or less for a week, and all food was rejected for three weeks, so that she became extremely reduced. Her tongue and pharynx were coated with a thick yellow fur, and she had pain in her stomach, and vomited whenever she took any other food than boiled milk, for two months after the accident. She also lost her voice, but gradually recovered it after five weeks, when the stomach began to improve.

The treatment consisted of leeches to the stomach after the collapse had passed off; and then she continued to take small doses of opium with hydrocyanic acid till her recovery.

The peculiarities of this case that distinguish it from the others are, the effects of the poison on the nervous system producing a state closely resembling that of extreme drunkenness, with the addition of temporary blindness and diarrhoea, both of them reflex actions, as they appeared much too soon after the poison was swallowed to be occasioned by its direct action, or by its absorption. The loss of recollection of everything that occurred after the first symptoms of poisoning—though apparently she never lost her consciousness—is a remarkable circumstance, and should probably be referred to the nervous depression and state of collapse. It has, however, its parallel in some cases of concussion of the brain from falls from horses, etc., in which the patient very frequently loses all remembrance of every circumstance prior to, but connected with the accident, only recollecting to have mounted his horse, but none of the causes that led to his fall.

There being no evidence of irritation of the larynx, the loss of voice on taking the poison must be reckoned among the reflex nervous affections; though its permanence for five weeks, and its gradual recovery, as the stomach improved in tone and the vomiting subsided, would indicate an affection of the larynx from "contiguous," rather than from nervous "sympathy" with the inflamed stomach.

This explanation of the continued aphonia, by a communication of the inflammation of the tongue, pharynx, and stomach to the larynx, may be supported by a case of perforation of the stomach, attended with peritonitis, fatal in eighteen hours, I met with two years ago, in which I found marks of recent and severe inflammation in the left pleura, as well as on that side of the abdomen on which the patient had lain up to the period of her death, though no communication existed between the two cavities.

With regard to the treatment, milk was selected as the blandest and most nutritious kind of food; but even this would not have been retained but for the use of opium and other sedatives.

This case is another instance of the carelessness of chemists in sending out poisonous substances without labels indicating their nature or strength; for, besides this accident from the mistake of drinking a solution of chloride of zinc for vinegar, the strength of the liquid was such as to burn the hands and corrode the linen on which it was sprinkled.

FEES TO MEDICAL REFEREES.

[To the Editor of the Medical Times.]

SIR,—The remarks relating to the Clerical, Medical, and General Life Assurance Society, appended by you to Mr. J. Clarke's communication in your Paper of the 25th inst., having, no doubt,

originated in misconception, I imagine you will be ready to admit an explanation of the facts.

I was not aware, until I read Mr. Clarke's statement in the *Medical Times*, that any fee had ever been paid to him in the case referred to; and I conclude it was done by the persons desirous of assuring, as no fee has ever been charged by the agent or made known to the office. The directors of this Society never deviate from a fixed rule through importunity.

If the plan of paying a fee to the medical attendant of persons desirous of assuring should, in course of time, be adopted by the generality of offices of high repute and long standing, this Society will, no doubt, concur in such an arrangement; but it is evident that the rule which has hitherto been in operation, viz., that of employing and paying a medical examiner in every town, tends more to the pecuniary advantage of the Medical Profession than the new system, inasmuch as persons proposing frequently pay their medical advisers, and the office always pays its examiner; so that by the old plan two medical men are frequently paid for the same proposal, while by the new only one is remunerated; as those Societies who pay the medical attendant of the life to be assured very seldom employ any medical examiners in the provincial towns.

I am, &c.

G. H. PINCKARD, Secretary.

99, Great Russell-street.

[We do not think that Dr. Pinckard has succeeded in justifying his office. As to the question of fact, he simply asserts that the fee has not been paid by the office to Mr. Clarke, and the wrong remains unredressed.]

Whatever convenience the Society may find in their plan of employing a regular medical examiner in every town, it is clearly unjust towards the medical attendant of the life to be assured, as in each case his opinion is required for the security of the office. The Society may experience some advantage in their plan as a means of extending a knowledge of the institution; but it is not a practical melioration of the grievance of which the Profession has so long and justly complained. It is very rare indeed that the patient fees his medical attendant for his opinion; and, as the opinion is required by the office for its own benefit, the office should pay the fee.—*Ed. Med. Times.*]

DR. LIGHTFOOT IN REPLY TO DR. SIMPSON.

[To the Editor of the Medical Times.]

SIR,—Your Number of the 27th instant contains a letter from Dr. J. Y. Simpson, of Edinburgh, accusing me of having ascribed to M. Velpeau the merit (?) of having first adapted a uterine segment to the ordinary pessary. The merit of so doing is certainly small; but, be the amount what it may, it belongs to M. Velpeau, and I transmit you a letter herewith from the distinguished French surgeon, showing that he has been in the habit of using a pessary with a uterine segment (for this is the real question) for the last fifteen years, or, in other words, before the illustrious Scotch accoucheur commenced practice. The English surgeons follow a course precisely the reverse of that pursued by Dr. Simpson, who, be it said *en passant*, is no surgeon,—we practise first and theorise afterwards; he theorises first, and lets practice follow.

I have neither the wish nor the time to enter into a controversy with Dr. Simpson, but shall not shrink from it if again assailed.

To your readers I have only this further remark to make: read over the discussions which took place in the National Academy of France some three or four years since. All the leading medical men of Paris took a part. The subject under discussion was the essence or cause of the formidable symptoms which some traced to malposition of the uterus, others to disease of the cervix uteri merely, others again to a disordered condition of the uterine and vaginal mucous membranes, and not a few to mere constitutional ailment. The discussion terminated by an admirable report by M. Dubois.

Now, during the whole of these public discussions, in which every view, every mode of treatment, and every instrument having a reference to the disease in question, were carefully examined, and their importance ascertained, the name of this great discoverer was never once mentioned.

With these remarks, Sir, I leave the matter in your readers' hands.

I am, &c.,

THOS. LIGHTFOOT.

Great Ormond-street.

M. VELPEAU'S LETTER.

"Mon cher Monsieur,—Le pessaire qui vous avez fait dessiner

diffère du mien par sa branche extérieure et sa courroie; mais il est le même pour le fond. La brochure qui je vous envoie et qui reproduit en partie ce qui j'ai dit à l'Académie de Médecine en 1849, vous mettra d'ailleurs à mesure d'en juger vous-même. J'ai souvent décrit et montré cet instrument à ma clinique depuis 19 ans; mais il ne m'a pas complètement satisfait, et je ne sais pas quelle est la date de celui de M. Simpson.

"Votre bien dévoué,

"VELPEAU.

"Paris, 21, Rue-de-Verneuil."

MEDICAL ETHICS.

[To the Editor of the Medical Times.]

SIR,—I regret exceedingly being under the necessity of entering into the details of a transaction which had much better have been consigned to oblivion; but Mr. Garrett's note, in your journal of the 18th inst., compels me to resuscitate it in self-defence.

The facts of the case are as follow:—An inquest was held on the body of a man who died suddenly in Grove-street, and was adjourned to obtain medical evidence as to the cause of death. Soon after the jury broke up, the foreman called on me, in, as I considered, his *ex-officio* capacity, and desired that I would proceed to the house and make an examination of the body. In accordance with his wish, I went there, and, to my great astonishment and no little annoyance, I found Mr. Garrett standing by the bed-side smoking, while a young lad of about 14 was sowing up the lower part of the abdomen. I said, "What! you here, Mr. Garrett? I have been requested by the foreman of the jury to examine the body and give evidence." He replied, in a jeering tone, "You're a day too late for the fair, my boy." I replied rather warmly, being much annoyed at the reply. I then asked what the man had died of; when Dr. Ryegate (who was in the room) replied, from ulceration and perforation of the stomach; to which Mr. Garrett added, "that he had got the stomach safe at home." I felt much surprise at this, (which was heard by my brother as well as by myself,) but made no reply. I then walked to the body and saw the stomach more than half buried in the intestines, and took it out; on which Mr. Garrett said I had better have stayed at home and not have dirtied my hands, (or words to that effect,) and that "my conduct was dirtier than my hands." It now seemed very evident to me that Mr. Garrett was determined to prevent me from giving evidence, and I therefore angrily said, that I would contest his right, as I considered myself alone to be entitled to give evidence, as under the circumstances I believed the jury had the power of appointing whoever they preferred; and I also said I would examine the body when he had finished. The person of the house, who was also present, stated that I should not do so, nor come into the house again; and Mr. Garrett talked about "kicking backsides down stairs, or throwing out of the window." Under these circumstances I determined to ascertain the condition of the other organs of the body, and took the opportunity of the lad's cessation in sewing (I did not interrupt him, as stated), to remove the heart from the thorax, and to look at the lungs. As before stated, I considered that I alone had the right to give evidence and to examine the body, and that if I did not take the opportunity which then offered I should not have another, but be prevented from so doing, either by the person of the house or by Mr. Garrett.

On my removing the heart from the thorax, Mr. Garrett walked round the bed; but before he reached I had finished, so that his statement, that he compelled me to desist, is incorrect. After Mr. Garrett had finished the sewing, he applied a number of opprobrious names to me, and gave me a violent push; and, on my brother remonstrating with him on his violent and most ungentlemanly conduct, he was answered by "Get out of that, will you!" uttered in a very coarse tone, and accompanied by a switch across the face and eyes with the remnant of the string used in sewing up the body. This was acknowledged, as it deserved to be, by a blow, which was not returned. My brother took no other part in the transaction than this.

On the subsequent day, Mr. Garrett gave his evidence, after which, on his leaving, I beckoned to him to state that I had ascertained myself to have been in the wrong, and much regretted the error which, with his jeer, etc., had led me to act so discourteously towards him; but he said he would see me another time. As I failed in speaking to him, I wrote the following note on the same evening.

"7, Commercial-road, Oct. 15, 1851.

"Dear Sir,—When I met you this afternoon in the jury-room, I wished to express the regret I feel for my part in our altercation

last evening, although I cannot but say, that if you had met me in any other way than you did, viz., with a jeer, I should not have done as I did. I need scarcely reiterate, that in so doing, I merely performed what I then considered to be a duty, I admit in a somewhat discourteous manner, but which I was induced to do by your statement, that 'you had the stomach safe at home,' when it really was in the body; showing, as I inferred, a disposition to prevent me from giving evidence on the morrow, if I alone had, as I then considered, the sole right to do so. Having been informed of my error, I did not make an application to the coroner as threatened, and now offer the best reparation in my power, in the hope that our professional intercourse may suffer no interruption from the past, and again expressing my deep regret at the occurrence.

"I remain, obediently yours,

"M. B. Garrett, Esq."

"JOHN W. TRIPE."

To this I received the following reply:—

"3, New Road, St. George's East, Oct. 1851.

"Dear Sir,—I received your ample apology last evening, and must be excused for not writing before. The occurrence produced such an effect on me, that I directly dispatched to the Medical Journal setting forth the particulars. I shall beg of them to keep it out. I never wish to experience any such a scene again.

"I remain, dear Sir, yours,

"Dr. Tripe."

"M. B. GARRETT."

The above note was received on the 17th, and I wrote the following answer:—

"7, Commercial-road, Oct. 17, 1851.

"Sir,—I was much surprised, on receiving yours of yesterday, to notice, that although you consider the apology for my part of the transaction sufficiently ample, you have omitted to make any apology for your part. I must remind you, that you not only applied the epithet "poltroon" to me, and otherwise abused me, but that you also gave me a push. Awaiting your reply,

"I remain, obediently yours,

"M. B. Garrett, Esq."

"JOHN W. TRIPE."

My last note has terminated the correspondence, Mr. Garrett not having sent any answer, nor having made any verbal apology, which I consider most ungentlemanly, in fact a breach of ordinary courtesy. It will also be perceived, that he has not denied any of the charges brought against him in my first communication, but is content to remain under the stigma of having behaved in an unprofessional, discourteous, and ungentlemanly way.

I have to apologise for occupying so much of your time with this long statement; but I could not have done justice, either to myself or to Mr. Garrett, had I written one word less.

I am, Sir, &c.,

JOHN W. TRIPE, M.D., M.R.C.S.E., &c.

7, King's-place, Commercial-road, Oct. 27, 1851.

[The mode in which Dr. Tripe was summoned to examine the body was exceedingly irregular, and appears to have originated the misunderstanding between himself and Mr. Garrett. Medical men should never act in such cases, unless they have previously received a coroner's summons. If, however, a gentleman should be induced to attend under the circumstances detailed by Dr. Tripe, he should feel at once that he could not be justified in interfering with the duties of the regular practitioner. Mr. Garrett's indignation is palliated by the undoubted impropriety of the attempt to supersede him, without due authority, in the examination of the body.

But rude language, abuse, and blows, by whomsoever used, admit of no excuse. They are discreditable to every man whose mind is so undisciplined as to suffer him to resort to such weapons. The altercation is deeply to be regretted, as it is a wound to the honour of the Profession.

Dr. Tripe appears to have been ignorant of the law relating to Coroners' Courts; and, as he subsequently apologised for his indiscretion, he must be held absolved from further blame. This miserable quarrel will be a lesson to both parties to behave with more forbearance for the future, and to observe more strictly the usages of cultivated society. It exemplifies, too, the urgent necessity of a Court of Honour, before which such questions might be decided. The Colleges should take steps to organise such a Board. Public opinion would, undoubtedly, support the attempt. The character of the Profession cries aloud for the organisation of some means of maintaining it unsullied by the jealousies and passions

evoked by the competition carried on between its members. A Court of Honour might adopt a Code of Etiquette for the general observance of the Profession.

This correspondence must now cease.—*Ed. Medical Times.*]

MILITARY SURGEONS.—MILITARY PRISONS.

[To the Editor of the Medical Times.]

SIR,—It is lamentable to see how ready we are to find fault with others when we are "imposed" upon, as we term it, without at all thinking how far we ourselves have disposed others to treat us with inconsiderateness and even contempt. What else could be expected, when we see a medical officer in the service pandering to the most perverted appetites of military gaolers, by at one time prostituting the science in proposing so meagre a diet for military prisoners that its effects, according to their own Reports to Parliament, are squalid emaciation and double the number of cases of sickness than exists in troops at large, to say nothing of the degeneration of organism and low standard of vitality, although there may not always be overt local disease, and exclusive of men on extra and animal diet, and others released from hard labour on account of physical incapacity and debility, and consequently not subject to the whole of the prison discipline, which is null and void as far as regards them? At another time, this same medical officer aids and abets these exclusive "military prison" authorities in persevering in the barbarous exercise of lifting and lowering, for several hours a-day, heavy round-shot, by volunteering, under the pretence of zeal, favourable observations upon it in his Reports, and calling forth a "Circular" upon this and other matters still more detestable, and one of recent date, to defile a sacred Profession; thus turning upside down the laws which have been established for the government of not only our military, but our physical and moral life in the army. These things have never been found necessary until the absurd officiousness of an assistant-surgeon obtrudes itself upon the authorities, who lend a willing ear to a proposal to corporal mutilation, and catch at anything that may be construed into a pretext at improvement in the "repression of crime," as their phrase is; for they know no, nor do they trust in any, other mode of weaning the soldier from the habits he adopts of dissipating the *annui* attendant on his monotonous life,—such is their short-sightedness and perversity. So great is the cunning of these officials at the War Office,—not the Horse Guards, for the Commander-in-Chief is not favourable to a scheme which has as totally failed in diminishing military offences as it has succeeded in increasing immorality, there being no less than *seventeen* men suspected of malingering in one prison alone!!!—a number not equalled throughout the whole army, certainly since the Peace; and he has interfered in shortening the sentences of prisoners, and in preventing so frequent trials, that they endeavour (and succeed) to procure the medium of the medical officer, by working upon his interests—(witness this case in Dublin)—for exercising any cruelties, which, in their weak judgment, they may yet extend to the tortures of the Inquisition. Apart from the colouring and sophistry, were all things fair and soldier-like, why should a military man occupy *thirteen* out of *twenty three* pages of his Report to the Secretary at War upon military discipline, in endeavouring to prove that the prisoners have been as healthy as other soldiers; in showing that medical officers entertain the same opinion; in keeping in the dark the fact of soldiers in prison not being half as much exposed to diseases which attack an army as those in garrison?

I am, &c.

A MILITARY SURGEON.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. P. M. LATHAM, President.

The first meeting for the present session was held, as usual, on the third Tuesday in last month, at the Society's rooms. The meeting was a very large one. The President commenced the proceedings at eight o'clock, by calling on Dr. Ogier Ward, who presented a specimen of

DIAMOND-SHAPED HEAD FROM COMPRESSION AT BIRTH.

The child, aged seventeen months, whose head had been distorted by compression at birth, was the tenth child, a female, born after a natural labour of six hours' duration, on May 5th, 1850. At

this time the head was compressed laterally, and elongated upwards and backwards, the right parietal bone rising in a ridge over the left along the sagittal suture. May 20th.—The head remains in the same state. The child is very easily startled at the least noise, and is "convulsed" and flatulent. It looks healthy, but is very small. Sept. 21st.—Lately the child has begun to thrive, having for a long time scarcely appeared to grow at all. It is much less troubled with flatulence, but it starts and screams occasionally, without any apparent cause, unless it be from its teeth, which are beginning to distend the gums. The head is much distorted, though the right parietal bone no longer rises above the left. It is more deformed than the ordinary oblique-shaped head; for, besides the right side of the head being advanced before the left, it is very much flattened above the ear, where it is over arched by the left side, giving the child a wry-necked appearance. The left side of the head projects more backwards than the right does forwards; and the whole right side appears smaller than the other. The point of the hairy scalp is over the right eye. Since the last report, the head has very much improved in symmetry; and it is now a thriving child, though still troubled with convulsive movements attended by screams.

Three crania from the museum at St. George's Hospital were exhibited, presenting the same deformity, the right side projecting before the left, which was also the case in all the crania and living instances Dr. Ogier Ward had met with; and was attributed by him to the left side of the head at birth being compressed against the sacrum, while the right side turned upon it just previous to its expulsion from the pelvis.

Dr. Peacock expressed his belief, that in this and similar cases, the malformation was due to the position of the head, as the child happened to be nursed or carried more constantly on one side than on the other. The weight of the brain being then sufficient to cause the distortion in rickety children, or those having a tendency to that disease. On inquiry from the mother in this case, Dr. Peacock's idea seemed to be confirmed.

Dr. Brinton pointed out the lengthened period during which it was necessary to retain pressure on the head, in order to cause the malformation peculiar to the Carribean, and other Indian tribes. He thought the necessity thus shown inconsistent with the possibility of the malformation being caused by pressure during parturition.

Dr. McIntyre inquired the pathological signification of these cases, what effects they gave rise to, and how they were to be treated?

Dr. Copeland said, that he had, many years ago, pointed out, in his "Dictionary of Practical Medicine," the existence of these cases, and their connexion with idiocy, convulsions, and similar diseases. He thought that the malformation preceded and was altogether independent of parturition. He had recently seen a case in which the shape of the brain corresponded to the malformation of the skull.

Dr. Ogier Ward could not deny, that, in some instances, the deformity might be the result of original malformation of the foetus; but he had met with so many cases of the diamond-shaped head, (only one of which had remained permanent, the mother being similarly deformed,) that he could not believe them all to be malformations. They also occurred in children from their birth, who had never exhibited any other symptoms of rickets. In all the cases except one, cerebral symptoms had existed in a greater or less degree during the continuance of the deformity.

DISEASE OF THE URINARY ORGANS.—STONE IN THE LEFT KIDNEY.

Mr. Coulson exhibited a specimen taken from a man fifty-three years of age, who had suffered upwards of twenty years from stricture of the urethra, occasional abscess in the perinæum, and retention of urine. On the 19th of September, he was admitted into St. Mary's Hospital. The urine passed in drops both through an aperture in the perinæum and the urethra; it was alkaline, and contained a good deal of mucus and albumen. No instrument could be passed through the stricture, which was seated at the bulbous portion of the urethra. As the pain and difficulty in passing the urine were very great, it was thought that a free exit for the discharge of the water might lessen the patient's sufferings. On the 8th of October, Mr. Coulson divided the stricture through the perinæum, and easily introduced a catheter, which was retained in the bladder forty-eight hours. The first effect was relief to the pain; but on the next day it returned, and increased in severity until the 14th, when he died. There was a wound an inch in length in the median line of the perinæum, dividing the bulbous portion of the urethra, which was considerably thickened. In the membranous part there were two openings, one leading to the abscess in the perinæum, and the other going towards the pelvis. The

bladder was very much thickened, and its mucous surface in the several parts destroyed. On the posterior surface of the prostate, there was an abscess about the size of a hen's egg, not communicating, however, either with the bladder or the rectum. The left kidney was enlarged, sacculated, and distended with pus, the whole of its proper structure being absorbed. In its lower part there was a large calculus, which occupied nearly the whole of the lower half of the kidney projecting into the infundibula and pelvis. The ureter was very much enlarged and thickened, the mucous membrane being rough, and of a dark colour. About the centre there was a contraction of the canal, and hardness of its coats. The right kidney and other organs were healthy, with the exception of the liver, in which there was incipient fatty degeneration.

Dr. W. T. Gairdner presented a drawing of

A REMARKABLE CYST IN THE OMENTUM.

The cyst was found beneath the anterior layer of the greater omentum, in a woman who died unexpectedly, having a very large fibrous tumour of the uterus. It consisted of a highly transparent closed sac, between three and four feet in length, and from a half to one and a half inch in breadth, having a lobulated appearance externally, like that of the distended colon, but in no part subdivided by any approach to complete septa. The sac was fed by numerous vessels running within the omentum, and ramifying over it in every part. These communicated with a large artery and vein, the size of the largest goose-quill, which ran along the greater part of the cyst, and opened into other hypertrophied vessels, especially one artery and vein of equal size passing from the lower border of the stomach down the centre of the omentum. The fluid in the sac was a transparent colourless serum containing numerous flocculi. These, on microscopic examination, showed the ordinary filamentous appearance of fibrinous or albuminous matter, entangling various nuclei and imperfect forms of epithelium, evidently detached from the inner wall of the cyst. Nothing like ova, or like any portions of the structure of the true entozoa, could be discovered in the fluid; nor did the examination of the interior of the cyst membrane (so far as it could be pursued without altogether spoiling the preparation) reveal any more organised structure than that of an epithelial membrane. The peculiarity of the cyst is its anatomical disposition; and if it is to be regarded as belonging to the class of simple serous cysts, it is probably an undescribed variety of that class. The serous cysts hitherto mentioned by authors as not belonging to the class of animal parasites, have been simply globular structures, in some cases clustered together, or assuming some peculiarity of form from their anatomical relations, but not departing far from the globular type. The remarkable elongation in the present instance, the lobulated form, and the great enlargement produced in the vessels of the parent structure, seem to imply a higher power of independent organization in this than in any previously described simple cyst. The mode of origin of such a structure, especially in the omentum, where non-parasitic cysts are exceedingly rare, appears quite open to speculation. The case is rendered more remarkable by the fact, that, in conjunction with the structure above mentioned, there was found in the cellular tissue of both groins a cluster of globular cysts of the ordinary type; that similar cysts were found in the interior of the fibrous tumour; and that in the velum interpositum, occupying the position of the pineal gland, there was a globular cyst of the size of a bean. The organs of the body were, with the exceptions mentioned, healthy.

Dr. Quain remarked, that the origin of this peculiar cyst was a subject of much interest. It must be either a new formation or a modification of some of the existing textures. Of the former mode of origin there appeared to be no evidence,—could this peculiar elongated cyst, then, be due to a serous infiltration,—to a dropsy, in fact, of the cellular sheath of some of the mesenteric vessels, which had been congenitally or morbidly so modified by disease as to permit of this peculiar change?

Dr. Gairdner thought, that the complete formation of the cyst, and the presence of epithelium, militated against this view.

Mr. Prescott Hewett presented a specimen of

LACERATION OF THE RIGHT LATERAL SINUS, WITH EXTENSIVE EXTRAVASATION OF BLOOD BETWEEN THE BONE AND THE DURA MATER, THE RESULT OF AN INJURY.

The patient, a middle-aged man, was admitted into St. George's Hospital, at the latter end of August, with the following history:—At two in the afternoon, it appeared that he had fallen out of a cart and struck his head; this was followed by very slight symptoms, which soon passed off, and, after having taken a little brandy and water, he proceeded about his business, and drove six

miles out of town. At six in the evening, however, whilst delivering his last parcel, he suddenly became quite insensible, and fell. He was seen by a medical man, who bled him; he was subsequently brought to the hospital, and, when admitted, presented well-marked symptoms of pressure on the brain. The various parts of the skull having been carefully examined, were found to present a natural appearance, but pressure on the right parietal, just above the ear, and only in this spot, made the patient shrink, and the movements of the left arm appeared to be somewhat more sluggish than those of the right. The countenance was not in the least distorted. Mr. Prescott Hewett, thinking that the symptoms of compression might depend upon an extravasation of blood between the bone and the dura mater, produced by a fissure of the parietal, with laceration of the middle meningeal artery, determined upon making an incision down to that bone. The incision was carried across the two anterior thirds of the lower part of the parietal, but no fissure was detected, neither was there any single sign to show that the bone had been in any way injured. The patient continued much in the same state, and died about two hours and a half after his admission. At the *post-mortem* examination, a fissure was found in the right parietal, but at the most posterior and inferior part of the bone. Traced out, this fissure passed downwards, and divided into two branches, one of which, crossing the petrous and mastoid portions of the temporal, terminated in the posterior fossa of the skull. The lateral sinus, just as it turns under the petrous part of the temporal, presented an extensive laceration in its outer wall, which had given rise to an immense extravasation of blood between the bone and the dura mater, and a corresponding depression of the brain. The other branch of the fissure terminated in the middle fossa of the skull. The brain itself was healthy in structure, save in one or two spots, where it was slightly bruised.

Dr. J. H. Black presented a specimen of

RUPTURE OF THE UTERUS, COMPLICATED WITH A HAND PRESENTATION.

A midwife was in attendance on the subject of this case, aged 39, who said that labour had commenced three hours before Dr. Black saw her, and that she had ruptured the membranes just before sending for him, which she did in consequence of finding it a hand presentation. On examination, he found the left hand presenting over the head (child alive); the os uteri fully dilated; pains slow and feeble, the woman being apparently tolerably comfortable. He returned the hand, after which the head descended a little. Labour progressed till about nine from the commencement, when the head presented at the external orifice. After this, no further advance took place; the pains ceased entirely, and did not return; and the patient became extremely feeble. The midwife administered ergot of rye, and, finding no further advance, sent again for Dr. Black, who, late in the evening, found the patient much exhausted, and without any expulsive efforts. He at once applied the short forceps, and delivered (child dead). Placenta came away spontaneously three or four minutes after delivery. The pulse rose, and she became more comfortable. An opiate was administered. On the next day he saw her, at 11 a.m. She had then a pale, anxious, countenance, with an appearance of collapse. Complained of no abdominal or other pain, nor had she experienced any particular sensation, as of anything giving way; pulse small, weak, and frequent. Administered stimulants, etc. There had been no bleeding from the vagina. She gradually sank, and died at 1 o'clock p.m. *Post-mortem* next day—Abdomen enormously distended; peritoneal cavity filled with blood containing imperfect coagula, in all from two to three quarts. At the posterior part of the uterus, at the junction of the body with the cervix, was a transverse rupture, three inches in length, entirely through the muscular parietes, the uterus itself being imperfectly contracted. Dr. Black suggested the difficulty and importance of deciding the exact period at which the rupture in this case occurred.

Dr. Peacock presented a specimen of

EPIDEMIOLOGICAL SOCIETY.

THE first ordinary meeting of the present session of this Society, was held at the house of the Royal Medical and Chirurgical Society, on the evening of Monday, the 3rd instant; Dr. Babington, the President, in the chair.

There was a very good attendance of members and visitors.

Several new members and corresponding members having been proposed, Dr. Babington read an address, in which, after giving an account of the proceedings at the ordinary meetings held during the last session, and of the progress made by the various Committees now engaged in the special investigation of subjects

considered by the Society to demand immediate attention, he alluded to the financial condition of the Society, which, although not yet emerged from the struggles of the infant state, had undertaken inquiries which of necessity involved considerable outlay.

Dr. Babington, however, added, that there were no grounds for despair. The interest and sympathy excited by the Epidemiological Society among the general and professional public had been of no ordinary kind; and he felt assured, that the active and enlightened benevolence of this country would not turn aside from an Institution whose objects were wholly directed to the benefit of mankind.

At the conclusion of the address Dr. Babington was warmly applauded.

The President then called upon Dr. M^cWilliam to read a paper on Small-pox and Vaccination, by Mr. Gardner, of Notting Hill, founded upon an outbreak of small-pox at Mauritius in 1840. Of this paper we shall give an abstract in our next Number.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, October 30:—

DANSON, CHARLES EDWARD BOWMAN, Pocklington, Yorkshire.

CHAVASSE, WILLIAM BOYLE, Birmingham.

MILES, EDWIN JOSIAH, Gillingham, Dorset.

NUGENT, RICHARD, Antigua.

OWEN, WILLIAM, Llanfair, Montgomery.

UNIVERSITY OF OXFORD.—Mr. Hope's entomological collection is now open at the Taylor Institution to members of the University and their friends, every day during term from two to three p.m.,—a very short time for examining a valuable collection in natural history.

UNIVERSITY OF CAMBRIDGE.—The inspectors of the Anatomical Museum for the present year (the Vice-Chancellor, Dr. Thackeray, and Dr. Webster) have reported to the Senate, that the museum is in the best order, and the various specimens contained in the collection are in an excellent state of preservation; that since the last inspection, the Anatomical Professor has added to the collection of comparative anatomy thirty-eight injected specimens; of which 36 are in glass jars in spirits, and two are dry; and that of these the injections of the viscera of the shark, the ray, the cod, and of several of the molluscæ, as well as the dry preparations—the heart and bladder of a young *Balæna rostrata*, are specimens of peculiar interest; that, by the liberality of Mr. G. M. Humphreys, the pathological collection has been further enriched by the addition of twenty-four specimens, of which thirteen are placed in glass jars. Among these, the specimens of malignant disease of bone and of the stomach, together with a specimen of dilated kidney with calculi, are worthy of particular note.

OBITUARY.—On the 9th ult., at Damascus, of typhus fever, W. A. Bromfield, M.D., of Ryde, Isle of Wight. On the 2nd inst., at Brighton, Francis Clarke Ronalds, Esq., surgeon, second son of the late Henry Ronalds, M.D., of Brentford, Middlesex.

MILITARY APPOINTMENTS.—39th Foot: Assistant-surgeon John Sheldon Furlong, M.D., from the 75th Foot, to be assistant-surgeon, vice Armstrong, who exchanges. 75th Foot: Assistant-surgeon Henry Armstrong, from the 89th Foot, to be assistant-surgeon, vice Furlong, who exchanges.

NAVAL APPOINTMENTS.—Surgeon-superintendent James Stiell (1838) to the Ascendant convict-ship. Surgeons John Forbes, M.D. (1846) to the Rosamond, steam-sloop, at Devonport; Henry Richardson, M.D., (1851) to the Crane, 6, brig, at Devonport. Assistant-Surgeon William Ray (1851) to the Rosamond.

MEDICAL APPOINTMENTS AND VACANCIES.—A resident medical officer is required at the Reading Dispensary, in the place of Mr. Gamble, resigned. Salary, 120*l.* a-year, with a furnished residence. The medical officer is not allowed private practice. The duties are, to dispense for about 200 patients, about one-half of whom require to be visited at home. Election on the 19th instant. One hundred patients to be visited daily, and 200 to be dispensed for, constitutes decidedly hard work. No need to announce that private practice would not be permitted: there could be no time for it.

UNIVERSITY COLLEGE.—The statue of Flaxman, by the late Mr. M. L. Watson, presented to the Council of the College, was last week deposited there on its removal from the Exhibition. A vote of thanks to the Committee was passed by the Council.

MEDICAL BENEVOLENT COLLEGE.—It will be seen by our advertising columns, that the list of donors and subscribers to this Fund is to appear on the 22nd instant. We do trust that it will be one reflecting the highest honour on the Profession; and we earnestly entreat our friends to be prompt in sustaining the promoters of so valuable yet arduous an undertaking.

MEDICAL SOCIETY OF LONDON.—At the meeting of this Society, on the 1st, but little was done, save passing votes of thanks to Mr. Guthrie and to Dr. Owen Rees for the Lettsomian Lectures which they delivered to the members during the late session; and to Mr. Lettsom, the heir-at-law of Dr. Lettsom, who has surrendered to the Society his reversionary interest in the property in Bolt-court, late the meeting-house of the Medical Society, on certain conditions, respecting the interest and welfare of the Association. No business of a strictly medical character was transacted.

LONDON HOSPITAL.—At a meeting of the Governors of the above hospital, on Monday, it was stated that, during the past month, there had been admitted 827 cases of accidents, 217 of which were so severe as to be received into the wards as in-patients, the remaining 610 being out-patients. Of other cases there had been 120 in and 904 out-patients. The total number of persons admitted to the benefits of the institution since the 1st of January, amount to 18,021, exclusive of casualties.

ASYLUM FOR IDIOTS.—The annual election of these unfortunates into the asylum took place on the 30th ult., at the London Tavern. There were 164 eligible candidates, there being room for only 15—a sad and lamentable occurrence. The chair was taken by Sir G. Carroll, who expressed his gratification at the increasing progress of the institution. There were two large asylums in connexion with the charity, which required great care and unwearied attention—almost every separate case involving the necessity of a distinct treatment. He wished the public would visit them, and see the great improvement they were enabled to effect in the condition of the hitherto helpless idiot. It had come to his knowledge only that day, that one of the parents who had gone down to the asylum at Colchester a short time since, and who had not seen his son for twelve months before, actually did not know his own son, so great was the improvement. Their great want now was a large establishment, in which they could classify a large number of patients; for that purpose 10,000*l.* were required. The annual Report showed, that there were 180 patients in the asylum; physical training, with the necessary arrangements for bathing, shampooing, and gymnastic exercises, were in full force; while the means of education and employment were also carried into operation. Of those idiots placed under care from the commencement, three years ago, 25 were unable to walk, 114 unable to feed, dress, or take care of their persons, 20 epileptic, 12 paralysed, 68 dumb, and 25 under 9 years of age, all subjects of physical infirmity and mental imbecility. Of these, 6 had been taught to walk, and 14 had much improved in the use of their limbs; 27 who had been dumb, or made strange and unmeaning noises, were getting the use of articulate sounds and beginning to speak; 48 had been taught to feed and to dress themselves, and to observe cleanly habits; 23 had been taught to read, 27 to write, 11 to cypher, and 16 to draw. Some were taught music, nearly all singing, and most of them were in the drilling or gymnastic classes; 90 could attend with propriety on domestic, and about 50 on public, worship. Order had been established, good habits had been formed, and there were health and happiness among them. The Medical Report was so far gratifying that the officers, Dr. Conolly, Dr. Little, and Mr. Callaway, expressed their perfect satisfaction at the progress of this great attempt. The receipts of the year for general purposes amounted to 8104*l.* 7*s.* 4*d.*; and the expenditure to 7449*l.* 14*s.*, leaving a balance of 654*l.* 13*s.* 4*d.* The receipts for the building fund were 2229*l.*, of which amount 1500*l.* were funded, and 640*l.* remained in the Treasurer's hands. After the election of the successful candidates, the meeting separated.

DR. THOMSON'S INVALID LIFTER has been constructed for the purpose of raising and removing from bed, and into an adjoining room, if required, heavy and unwieldy patients, reduced to a state of helplessness by disease or accident; and likewise for the relief of dying people in the last days and hours of their existence, whose sufferings are often greatly aggravated by the impossibility of raising or moving them from bed by ordinary means. It is made of wrought iron, and the lifting power is obtained by means of a crane, which is raised and depressed by a screw. The crane is attached to a frame or carriage upon four casters, between two of which it is erected, and projects permanently over the carriage. From the end of the crane is suspended a cradle, by means of a swivel hook, which admits both of rotary motion, and of being detached from the crane. The apparatus is moved or drawn by a handle attached to

one of the front casters; and these being connected by a rod, attached to a small lever projecting behind each caster, they are brought into parallel action when moved, and the facility of turning greatly increased. A narrow, strong sheet, with a broad hem along each side, being slipped under the patient, and his pillows adjusted within the upper end of the sheet, a strong wooden rod is passed through each hem, and a leather strap passed through a hem at the head of the sheet is buttoned to the ends of the rods. This arranged, and with such bed-clothes over the patient as may be required, the carriage is run under the bed, with the point of the crane brought over the patient. The cradle being attached to the crane, and lowered, so as to admit of the rods and sheet being hooked to the cradle, the patient is then raised from bed by the action of the screw; and, when sufficiently elevated, may be drawn from it, either in the position in which he is raised, at right angles with the crane, or turned round into any other more suited to the capacity of the apartment, or to his removal through doors and passages into an adjoining one. The length of the carriage is 39 inches, and the width between the casters 27 inches. It turns in a space of seven feet square; is applicable to any size or shape of bed; and one person, with a little practice, is quite capable of working it, of raising a patient of any dimensions from bed, and of moving him into an adjoining apartment. By means of a slit in the sheet, the patient can be readily placed upon a bed-pan, and by joints in the wooden rods the legs are let down, and he can be placed upon a night-chair. The price of each Invalid-Lifter, with one pair of sheets, is 5*l.* 10*s.* This admits of a certain amount of profit, which is to be devoted to the funds of the Stratford-upon-Avon Infirmary; and as no personal pecuniary advantage is aimed at, it is hoped by the inventor, that the Medical Profession, and the public generally, will protect the proposed benefit for the charity, by ordering the apparatus either through Dr. Thomson, or from Mr. James Ward, Wood-street, Stratford-upon-Avon.

REGISTRATION NOTABILIA.—The week ending last Saturday shows a great decrease in the mortality, compared with the amount in any of the three previous weeks of October. Lately the deaths in London have never been less than 950, and they have generally risen much above that sum; but last week they declined to 861. In the ten corresponding weeks of the years 1841-50, the ten years' average was 956; which, when corrected for increase of population, will become 1052, compared with which the last return shows a decrease of 191.

Zymotic Diseases.—The zymotic or epidemic class of diseases, though it produces more than a fourth part of the total mortality, exhibits a decline on the preceding week, the number having fallen from 268 to 222. The corrected average is 248. Typhus and scarlatina indicate a slight reduction on the previous week, but they still number considerably more than any other disease in the same class; to the former 60 fatal cases are referred, to the latter 50. Small-pox was fatal to 12 children and 5 adults; measles to 13 children, hooping-cough to 19, croup to 5, thrush to 2, cholera to one, purpura hæmorrhagica to 2, intermittent fever to one, remittent fever to one, infantile fever to one, syphilis to 2, and noma, or cancerum oris, to one. One person died of influenza, and 7 of erysipelas.

Vaccination.—With reference to a case of "malignant small-pox (14 days duration)," it is stated that the deceased, a girl six years old, had not been vaccinated, because her mother had previously lost one of her children about six weeks after vaccination, which she blamed as the means of its death, though the real cause was inflammation of the lungs.

Diarrhœa was fatal last week to 26 children and to 8 persons of mature age. It seems to prevail at present to nearly the same extent as has been usual in corresponding weeks of the last five years. On the 25th October a child of three weeks died at 7, Tyssen-street, Bethnal-green, of "cholera infantum (5 days)."

Nuisances.—On the 30th October, the son of a labourer, aged 7 years, died in Middlesex Hospital of "otitis, febris, scarlatina." He had been brought from 59, Castle-street East. In the same street, at No. 14, the daughter of a cooper, aged 3 years, died on October 26, of "hooping-cough (6 months), pneumonia (1 month)." With reference to this latter house, Mr. Wallington, the registrar of All Souls, Marylebone, reported three weeks ago, that it was very defective in ventilation and drainage, in a dirty condition, and let out in single rooms, and that five deaths had occurred in it since 13th May, three of which were from scarlatina. A sixth death has now been registered, as stated above, and the medical attendant in this case states that he happened to attend a delivery which took place there many months ago under the most painful circumstances, and on that occasion he forewarned the tenants of the consequences that would result from the "filthy and disgusting" condition of the house in which they lived. Having been Superintending Inspector of Bilston and Darlaston in 1832, and of various Metro-

politan districts in 1849, he adds that a worse case of nuisance than the present never came under his observation, and that in his opinion it would fully justify the strongest measures of repression.

Prevalence of Scarlatina and Typhus.—In Hoxton, Old Town, at 24, Upper John-street, three sons of a salesman, aged respectively 13 years, 11 years, and 13 months, died, two on the 29th of October, and one on the 30th, of scarlatina, followed in one case by hydrocephalus, and in two by hydrothorax. Mr. Packer, the registrar, mentions that four deaths from scarlatina have occurred in this family within the last ten days, and that two other children are at present lying dangerously ill of the same disease. The drainage is good. Typhus and scarlatina are now very prevalent throughout the whole of the sub-district. At 13, Woburn-mews West, a coachman, aged 34 years, died on 31st October of "typhus (20 days)." Mr. Yardley, the Registrar of St. George, Bloomsbury, observes that his "informant had mentioned nothing regarding the state of the premises which was likely to generate typhus, except, what is not unusual in stables, the existence of a common privy under the stairs leading from the stable to the loft, from which a very offensive smell sometimes proceeds." The wife of the deceased is now lying ill, and so far as the Registrar could learn, her complaint appears to be of a typhoid character.

Diseases of the Lungs.—In this return the number of deaths ascribed to phthisis is 111, which is less than the average; from other diseases of the lungs the aggregate mortality is 105, showing a great decrease on the ordinary amount at this season, for in corresponding weeks the deaths ranged from 120 to 189. In this class stand laryngitis and laryngismus stridulus, which were fatal to 5 children.

Miscellaneous.—One person died of intemperance, one of destitution, and 5 infants from want of breast milk. On the 24th October a surgery attendant, aged 50 years, died in Westminster Hospital from "a dissection wound," after 10 days' illness. Erysipelas occurred 3 days before death.

In a note by Mr. Goodhugh, Registrar of the sub-district of St. George-the-Martyr and St. Andrew Western (Holborn), it is stated that "in the week ending 1st November I have registered only one death in a population of 18,809, a fact which indicates the healthy condition of the sub-district. The deaths registered between the 19th March and 29th October are 185; the births during the same period 337, showing an excess of the latter over the former of 152."

Meteorology.—At the Royal Observatory, Greenwich, the mean daily reading of the barometer was 30.043 in. on Sunday; the mean of the week was 29.623 in. The mean daily temperature was 49.9° on Sunday, 51.3° on Monday, 48.4° on Tuesday, and on these three days it was above the average of corresponding days in ten years. On Wednesday it fell to 42.8°, and was below the average on that and the following three days. The mean temperature of the week was 46.3°, showing a considerable decrease on that of the preceding week, when it was 54.5°. The wind blew generally from the north-west.—*Registrar-General.*

DEATHS in the Metropolis for the week ending Saturday, November 1, 1851.

CAUSES OF DEATH.	Nov. 1.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	398	276	169	861	7302
SPECIFIED CAUSES	397	274	167	839	9496
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	161	46	15	222	2249
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	21	23	49	477
3. Tubercular Diseases. ...	55	52	9	156	1674
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses, ...	35	22	21	78	1695
5. Diseases of the Heart and Blood-vessels	4	16	13	33	330
6. Diseases of the Lungs, and of the other Organs of Respiration ...	51	27	32	105	1463
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	15	25	10	54	559
8. Diseases of the Kidneys, &c. ...	...	2	4	6	50
9. Childbirth, Diseases of the Uterus ...	...	13	1	14	128
10. Rheumatism, Diseases of the Bones, Joints, &c. ...	1	2	...	3	72
11. Diseases of the Skin, Cellular Tissue, &c.	2	...	...	2	14
12. Malformations	5	...	...	3	21
13. Premature Birth and Debility ...	31	3	...	34	273
14. Atrophy	15	...	1	16	191
15. Age ... ..	...	...	33	33	523
16. Sudden	1	1	3	5	127
17. Violence, Privation, Cold, and Intemperance	12	9	2	23	260
Causes not Specified	1	2	2	5	66

TO CORRESPONDENTS.

Mr. G. W. Smith.—Licentiates of the Apothecaries' Company, Fellows and Licentiates of the College of Physicians of London, and Graduates of Oxford and Cambridge, are the only legal practitioners of medicine south of the Tweed. In London, and within seven miles thereof, the two former only.

M. D.—The examination at the Royal College of Physicians is much less severe than might be supposed from the printed papers of questions. Like many shopkeepers, they take less than they ask. The Latin *viva voce* examination would be the broadest farce, if all humbug were not tragedy. What would Cicero say or do if he heard the President of the College "talking Latin?" He would not be able to hiss, for his breath would be exhausted by his laughter. We recommend the subject to "Punch."

An Observer.—That cholera may arise independent of contagion is proved indisputably by the report of Dr. Parkes, published in the "Medico-Chirurgical British and Foreign Review," and Dr. J. Taylor's papers, contained in our own Journal.

A Member of the Pathological Society.—Write to the Council; the matter complained of must be remedied. It is ridiculous to suppose that a man can give two days' notice of his intention to bring a recent specimen under the observation of the Society.

[To the Editor of the Medical Times.]

SIR,—In the last number of your valuable periodical, amongst the "Answers to Correspondents," I observe it stated, that the Glasgow diploma merely confers the privilege to practise within a circumscribed distance from the City of Glasgow.

How far this may be correct as regards the practice of medicine, I cannot say, but in the practice of surgery it appears very different, from the following notice appended to the Regulations of the Faculty for granting the surgical diploma, and published in the "Medical Times," Oct. 4:—

"NOTICE.—The licentiates of the Faculty of Physicians and Surgeons of Glasgow are, by the late Act of Parliament in their favour, placed on precisely the same footing throughout the British Empire as the licentiates of the Royal College of Surgeons of Edinburgh, and consequently, as to the privilege of surgery, as the Members of the Royal College of Surgeons of England. Also, by special letters those holding the diploma of the faculty are admitted to the same privileges, in respect of the Army and Navy and East India Company's Medical Services, as those holding the diplomas of the Royal Colleges."

I am, &c.

A CONSTANT READER.

[The Colleges of Surgeons in the three kingdoms are merely chartered institutions, and have neither the prestige nor the power conferred by an Act of Parliament. Their members are, however, so far recognised by Parliament, that no one can hold a public appointment as surgeon, unless he possess a British or Irish surgical diploma. The diploma of the Glasgow faculty is, in this respect, equal to those of other surgical colleges, but it does not possess any real power.]

A. B. asks, "Why a dead homœopath is like a dead duck?" We suppose, because he has ceased quacking.

A Correspondent in the country inquires for what purposes the homœopaths employ Tincture of Bugs, and what species they use? Of course, for the disease produced by bugs, the species used is the hum-bug.

St. Mary's Hospital.—We have received letters from Messrs. H. Smith and Haynes Walton, in reference to a notice in our last, stating that the latter was senior assistant-surgeon to that Institution. In all other hospitals, and according to all usage and convenience, the assistant of the senior surgeon is the senior assistant, as he undoubtedly ought to be. But this is but one of the strange things done at St. Mary's; and we are requested to state that, although Mr. Walton is the assistant of the senior surgeon, he is only second assistant-surgeon to St. Mary's Hospital. Mr. H. Smith, of Upper Seymour-street, enjoys the high honour and distinction of being senior assistant, although only assistant to the second surgeon.

Querist.—Pray repeat the dose. We fear the first has been mislaid.

A Botanist.—Dr. Lindley's works.

A Sufferer.—We never prescribe. Consult a respectable surgeon. Such cases are exceedingly common, and every medical man is capable of treating them.

Mr. Turner.—The whole was a libel. There are some men whose anxiety to hear evil of their superiors makes them an easy prey to every rogue who enjoys a practical joke, and to every sharper who needs a catspaw.

M. T.—It is not true.

Mr. R. Terry, Clonmel.—Personal affairs, such as our Correspondent details, would not be interesting to our readers.

M. C. H.—Thanks. Mr. T. T. Tatton, who figures in Pulvermacher's bills as J. T. Tatton, Esq., of University College Hospital, is not a medical man, but one of the paid dispensers at the Hospital.

Spes.—Hope on. Remember, hope remained at the bottom of the box.

A St. Bartholomew Man.—Not at all. The members of the Abernethian Society acted wisely. One who coquets with homœopathy ought not to have his portrait among them.

Inquirer.—We believe not. Our Correspondent should write to the Secretary of the College.

Homunculus.—Advertise a pamphlet on deafness, on blindness, and on diseases of the urinary organs, and you will soon find yourself on the deaf side, the blind side, and the weak side of the community.

Mr. J., Chester.—The physician mentioned is as experienced as he is accomplished.

Mr. T. T., of York.—1. "Devergie's Médecine Legale," in two vols. 2. The man so grossly libelled is "pure at heart, and sound in head."

M.R.C.S.—Cancer of the stomach is generally admitted to be hereditary. The father of Bonaparte, one of his sisters, and Napoleon himself, all died of this disease.

A Castilian.—All those who were wounded in Spain receive pensions; the amount varies with the extent of the injury received. Our Correspondent could ascertain all particulars by applying to the Commissioner of the Spanish Government, M. Castarilda.

A Pupil.—"Graham's Elements." It is said that the concluding portion will appear before long.

A Wager.—Cod-liver oil was brought before the Profession in the country by Dr. Bennet, of Edinburgh. It was first used in England on a very large scale by Mr. O. Chalk, then resident medical officer at the Margate Infirmary.

The Parties Concerned.—We are always happy to lend our aid to adjust such differences. Divested of all extraneous matter the case appears to us to stand thus:—A is a physician, B a general practitioner, residing in the same town. A sees a patient of B's in consultation with him. A year after the patient sends for A, and says, "I am ill; Mr. B attended me formerly, but I was dissatisfied with him, and I wish you to attend me in my present illness." A does so attend, and B complains of A having taken the patient from him. Our opinion is that A is perfectly justified, under the circumstances, in attending the patient without consulting, or even communicating with B on the matter. At the same time, it would be more courteous on the part of A to mention the subject to B. B has no right, however, to complain of A having taken the patient from him.

A Subscriber of Three Years' Standing.—According to our Correspondent's statement, the Judge of the County Court was decidedly in error in assuming, that inflammation of the chest was a surgical complaint, and that a non-licentiate of the Apothecaries' Company was entitled. The wording and the spirit of the Act of 1815 were against him, and a new hearing might perhaps be obtained on the plea of an error in law, by an action in the New Court of Appeal before two puisne judges; but it is a question whether it would be worth while. Much in that case must depend on the amount at stake, and also on the animus between plaintiff and defendant. If the plaintiff practise in England or Wales, in medical cases, without the licence of the Society of Apothecaries, any one can recover a fine of 20*l.* from him on each case in the County Court. This has been done several times. As we stated in the Number of the 4th inst., an appeal should be made to the authorities of the Apothecaries' Company, and all the facts fully laid before them. The plaintiff in this case has himself apparently furnished all the requisite evidence for an adverse judgment.

In answer to **A. B.**, we beg to inform him that a new Charter for the College of Surgeons is contemplated, which, it is reported, will be carried out on a liberal basis, and be acceptable to the Profession. We shall inform our readers of its provisions as soon as we are more fully acquainted with them.

A Country Surgeon.—We believe that the successful issue of the cases of pneumonia detailed in Varrentrapp's paper, lately analysed by us, is not to be ascribed simply to the powers of nature, but to the use of chloroform. The immediate benefit observed can hardly be attributed to a do-nothing system. However, the plan will soon be tested in this country, and in the meantime our Correspondent may safely adopt it.

An Old Subscriber.—(1.) A Licentiate of the Hall can recover for medical attendance at the discretion of the jury, or of the judge, if tried in a County Court. (2.) The Glasgow diploma does not confer the right to practise in England (*Collins v. Carnagie*); and, as hitherto ruled, a practitioner can recover only on an English diploma. (3.) The reply to the first and second questions answers the third—the licentiate has the "most legal" qualification undoubtedly.

COMMUNICATIONS have been received from—

Dr. OGIER WARD, of Kensington; Mr. PINKARD, of the Clerical, Medical, and General Life Assurance Society; A MILITARY SURGEON; Mr. URE, of St. Mary's Hospital; Mr. HENRY SMITH, of Upper Seymour-street, Senior Assistant-Surgeon to St. Mary's Hospital; Mr. HAYNES WALTON, of Grosvenor-street, Second Assistant-Surgeon to St. Mary's Hospital; Dr. SNOW BECK, of Langham-place; Mr. VALLANCE, of Stratford Grove; VERAX; Mr. W. J. MOORE, of the Queen's Hospital, Birmingham; ANTI-SNOB, Birmingham; Dr. WATSON, President of the Faculty of Physicians and Surgeons of Glasgow; Mr. W. J. THOMAS, of Liverpool; Dr. HASTINGS, of Cheltenham; Mr. G. W. SMITH; M.D.; AN OBSERVER; A MEMBER OF THE PATHOLOGICAL SOCIETY; A CONSTANT READER; A. B.; QUERIST; A BOTANIST; A SUFFERER; Mr. TURNER; M. T.; Mr. R. TERRY, Clonmel; M. C. H.; SPES; A ST. BARTHOLOMEW MAN; INQUIRER; HOMUNCULUS; Mr. J. CHESTER; Mr. T. T., of York; M.R.C.S.; Mr. LYNCH, of Liverpool; A CASTILIAN; A PUPIL; A WAGER; and THE PARTIES CONCERNED.

Foolscap 8vo, cloth, 9s.,

Parturition and the Principles and PRACTICE of OBSTETRICS. By TYLER SMITH, M.D., Physician-Accoucheur to St. Mary's Hospital.

Also, by the same Author, 8vo, cloth, 4s.,
THE PERIODOSCOPE; an Instrument for Determining the Date of Labour, and other Obstetric Calculations, with an Essay on the Periodic Phenomena of Pregnancy and Parturition.

London: John Churchill, Princes-street, Soho.

Just published, 8vo, cloth, 6s.

On Animal Chemistry, in its Relation to STOMACH and RENAL DISEASES. By HENRY BENGE JONES, M.D., F.R.S., Physician to St. George's Hospital.

"The Work of Dr. Benge Jones is one of the most philosophical and practical which has issued from the Press for many years past."—Lancet.

"Dr. Benge Jones is already favourably known as the author of works and papers on Animal Chemistry, and this contribution to his favourite science is calculated to extend his reputation as an able chemist and sound physician."—Monthly Medical Journal.

"A most valuable addition to our English literature. . . . Its Author is one of our best and most accomplished medical chemists."—Medical Times.

London: John Churchill, Princes-street, Soho.

Important to Surgeons requiring INSTRUMENTS to DESIGN.—BLACKWELL (Working Surgeons' Instrument, Razor Maker, and Cutler), 3, Bedford-court, Covent-garden, London, solicits attention to the above, and respectfully invites inspection of an extensive Stock of Surgeons' Instruments and Cutlery, (guaranteed best London make,) and offered at moderate prices.

	£	s.	d.
Circular Spring Truss	5	0	double 0 7 6
Single Patent, Salmon's	7	6	0 10 6
" " Cole's	10	6	0 18 0
Scott's Reservoir double-action Aperient Vase, sold at £3 3s.	2	2	0
Ellis's Belts and Splint for Fractured Clavicle, in Box	0	18	0

Bleeding Lancets, 18s. a dozen; Dissecting-cases, from 12s.; Blackwell Registered Guard Razors from 3s. 6d.

Improved Elastic and Spring Crutches, Stockings (no lacing), Knee and Ankle Socks, Bandages, Artificial Legs, Arms, &c. Manufactory, 3, Bedford-court, Strand, facing Agar-street.

Army and Navy Surgeons' Outfits at an hour's notice; and a Variety of Cases, equal to new, for Navy and Emigrant Surgeons, cheap.

Important to the Profession.

Davenport's Syrup of the Iodide of QUININE AND IRON.

(FROM DR. GOLDING BIRD.)

"19, Myddelton-square.

"I have now, for some time, employed pretty largely the triple compound of Iodine, Quinine, and Iron, prepared by Mr. J. T. Davenport, in the form of syrup; I do not hesitate to express my opinion of its great value as a therapeutic agent. It has appeared to me, that the Quinine assisted the assimilation of the Iron, and I have found it to be of very great value in cases in which the use of the Iodide of Iron is recognised. This triple compound possesses many advantages over the simple Iodide, and not the least of them is the satisfactory manner in which it is tolerated by the stomach, especially if administered (as all preparations of Iron ought to be) immediately after a meal.

"GOLDING BIRD, A.M., M.D., F.R.S.,

Fellow of the Royal College of Physicians,
Physician and Professor of Materia Medica at Guy's."

(FROM DR. GEO. P. MAY.)

"Having for some time past extensively used the ternary compound of Quinine, Iodine, and Iron, prepared by Mr. J. T. Davenport, I can with confidence testify to its marked efficacy in cases of Struma and Anæmia, and indeed in all instances in which the exhibition of Iron and its compounds is indicated. This preparation appears to combine all the therapeutic powers of its constituents without their nauseous qualities, which renders it an admirable medicine in the treatment of some of the disorders of childhood.

"Maldon."

"GEO. P. MAY, M.D.

SYRUP OF THE IODIDE OF QUININE, is an effectual form of administering Iodine: the enervating effects are entirely obviated. Dose, $\frac{1}{2}$ drachm to 1 drachm.

SACCHARATED IODIDE OF IRON. Dose, 2 to 5 grs. 2s. per oz.

CITRATE OF QUININE AND IRON, yielding full quantity of Quinine, with the ordinary Ammonia Test. 5s. per oz.

SYRUP OF THE IODIDE OF IRON, 4 grains to the fluid drachm, 2s. 8d. per lb.

SYRUP OF THE IODIDE OF POTASSIUM AND IRON: A fluid drachm contains 2 grains of each salt. 3s. 6d. per lb.

AMMONIO-CITRATE OF IRON, 6s. per lb.

BIMECONATE SOLUTION of OPIUM. Professional testimonials acknowledge this Preparation to be the most efficient sedative extant; the unpleasant effects of ordinary opiates are entirely obviated. Dose, 11 to 30 drops. 8d. oz.

COTYLEDON UMBILICUS. The Solid and Fluid Extracts, 1s. 3d. and 1s. oz.; also the Preserved Juice 5s. 4d. lb., as recommended by Mr. Salter, of Poole, in Epilepsy.

J. T. Davenport, Operative Chemist to H.R.H. the Duke of Cambridge, 33, Great Russell-street, Bloomsbury.

Prize Medal awarded to Markwick's

SPONGIO PILINE POULTICE, declared by Mr. LEADAM, Surgeon to the Great Grimsby Docks, "to surpass any one article used by him during the last 80 years for **CLEANLINESS, EASY APPLICATION**, and, above all, **EFFICACY**, and an immense saving of expense; the **IMPERMEABLE PILINE**, invaluable in **GOUT, RHEUMATISM, and LUMBAGO**, and for applying stimulating liniments; and the **PILINE RESPIRATORS, CHEST PROTECTORS, WARM GLOVES, and SHOES-SOCKS, &c.** Lists forwarded on application to **ALFRED MARKWICK and CO.**, Patentees, and sole Manufacturers, 32, KING WILLIAM-STREET, CITY.

To the Faculty.

RHEUMATISM, CUTANEOUS ERUPTIONS, AND INFLAMMATORY SYMPTOMS GENERALLY.

Measam and Co's. Medicated Cream,

which has now been used for upwards of twenty years in the largest Medical Establishments and Hospitals in England, and by some of the first Practitioners of the day, and has now become so essential in Surgical and Medicinal Practice generally; and, in consequence of the daily applications from the Faculty and Hospitals to be served with it in larger quantities at lower prices, it will be sold to the Profession in jars of 7, 10, 20, and 32 lb. at a reduced rate, to enable them to use it for general purposes.

Sold at the Depot, 238, Strand, Temple Bar, in pots, 1s. 1 $\frac{1}{2}$ d. and 2s. 9d.

Surgical Instruments, &c.—James E. MADDOX'S LIST of PRICES of SURGICAL INSTRUMENTS.

TRUSSES, &c. &c., forwarded post free on application.

J. E. M. will feel honoured by a personal visit of any of the Profession to examine his Instruments. Being an actual Manufacturer on the premises enables him to supply Instruments of the best quality and finish (with the latest improvements) at his usual moderate charges.

Pocket Cases from 20s.; Dissecting ditto, from 15s.; best Lancets, 18s. per dozen; best Enema Apparatus, 15s. to 21s.

19, UNIVERSITY-STREET, UNIVERSITY COLLEGE, LONDON, (facing the principal entrance to the Hospital.)

Important to the Medical Profession.

BROWN'S CANTHARIDINE BLISTERING TISSUE.—PREPARED, under the immediate care of the Inventor, from pure Cantharidine, and of the same strength as the Emp. Lyttæ of the London Pharmacopœia. This Tissue differs most essentially from every other Blistering preparation. It is equally vesicant, and in the majority of cases with a saving of one-third in time, much less painful to the patient, more readily applied and removed. It has never produced Strangury, or troublesome after-sores, is elegant, with the absence of all appearance of quackery, and to the practitioner a great saving of cost, time, and trouble. The only care required on its application, is to cut it into such pieces as may be laid on the part without wrinkling, with a compress of linen to insure perfect adhesion.

In Tin Cases, containing Twelve Square Feet, 6s. 6d., and Small Cases, Six Square Feet, 3s. 6d. each.

"Army Medical Department, 16 January, 1847.

"The principal medical officer of the General Hospital, Fort Pitt, Chatham, reports that Mr. Brown's Blistering Tissue has been used extensively in the Military Hospital,—has been found effective as a Vesicatory, when carefully applied, and has not been productive of any degree of Strangury.

"ANDREW SMITH, M.D.

"Deputy-Inspector General of Hospitals.

"Mr. T. B. Brown, Druggist, Handsworth, Birmingham."

BROWN'S TISSUE DRESSING.

An elegant, economical, and cleanly substitute for all ointments as a Dressing for Blisters, &c., and may be called a Companion to the above.

In Tin Cases, containing Twelve Square Feet, 1s. 6d. each.

Sold by the Sole Consignee, Mr. W. BAILEY, North-street, Wolverhampton, and all wholesale and retail Druggists and Medicine Agents throughout the British Empire.

Nevill's Arabica Food, the Patent

FLOUR of LENTILS.—This beautiful food is prepared by a patent process from the veritable Arabian Lentil, and possesses natural restorative properties for indigestion, constipation, and all derangements of the stomach and digestive organs. This pleasant, nutritious, and agreeable food never distends, or turns acid on the delicate stomach of invalid or infant. Beware of impositions. Ask for Nevill's Arabica Food, and note the signature of the Patentee,

A. H. NEVILL.

Sold in canisters, 1 lb. at 1s.; 3 lb., 2s. 9d.; 6 lb., 5s. 3d.; 12 lb., 10s.; to be had of most respectable Chemists, Grocers, &c.

Analysis of Nevill's Patent Flour of Lentils and Du Barry's Health restoring Food, the Revalenta Arabica:—

"Having examined Nevill's Patent Flour of Purified Lentils, I find it to be a pure vegetable farina, perfectly wholesome, likely to promote a healthy action of the stomach and bowels, and thereby to counteract dyspepsia, constipation, and their nervous consequences.

"Having also examined Du Barry's Revalenta Arabica, I find it to be composed of the best purified Lentils and Barley Flour, in the proportion of from two to three parts of the latter farina to four of the former. In so far as the lentils may be considered the medicinal ingredient, Nevill's article merits the preference.

ANDREW URE, M.D., F.R.S., &c. &c.,

Professor of Chemistry and Analytical Chemist.

"London, 24, Bloomsbury-square, 23rd October, 1850."

A 12 lb. Canister of the Patent Flour of Lentils sent **CARRIAGE FREE** within 100 miles of London, on receipt of Post-office Order for 10s., and to any part of the Kingdom for 11s.

NEVILL and CO., Groat and Invalids' Food Manufacturers, 12, Liverpool-street, King's-cross, London.

ORIGINAL LECTURES.

CLINICAL LECTURE ON SURGERY,

AT

GUY'S HOSPITAL.

By BRANSBY B. COOPER, Esq., F.R.S.

Senior Surgeon to, and Lecturer on Surgery at, Guy's Hospital.

You may remember, Gentlemen, that I concluded my last clinical lecture with a case of malignant disease. This is one of those cases in which an operation could only be undertaken with the hope of alleviating the suffering of the patient, and not with much reasonable expectation of producing a cure. It is at least undoubtedly so when once the malignant taint has fixed itself in the constitution. The characteristic of malignant disease is its tendency to go on indefinitely increasing,—possessing, in fact, a kind of self-generative power, and appears to be inextinguishable when once its germs have taken root. From the peculiar nature of the poison generated in malignant disease, it is likewise capable of absorption into the system generally, so that the disorder is not confined to one locality, but ultimately becomes developed in parts distinct from its original seat, the whole organism being consequently contaminated with the disease. Although the effects of true malignant disease are so dangerous, and indeed fatal, there are many cases in which it is difficult to determine whether the affection be malignant or not. In such cases, it is evident that an operation is particularly admissible, for, in addition to the relief which the patient is likely to experience should the disorder be malignant, there is the possibility of its proving innocuous, in which case the operation would be the means of permanently removing it.

Where so-called malignant affections have been cured by operation, I believe the reason of the cure would be found in the fact, that the disease was of an innocent character, although it physically resembled, in certain respects, some form of malignant tumour.

Case 1.—The first case I shall take to-day is one of chronic abscess. This may not be considered a very important disease to be selected as the subject of a clinical lecture; but it must be remembered, that the object of clinical lecturing is to make the student practically acquainted with the methods of investigating all forms of disease; to teach how to apply his senses in connexion with his sense, in distinguishing diseases of different kinds. Although, therefore, chronic abscess may not be a disease of very great importance in itself, still, as showing the value of certain physical appearances and constitutional symptoms, it offers many points of interest and instruction. The subject of the disease, in this case, is a girl, aged 15, admitted into Dorcas Ward on the 15th inst. She is described as a pale, weakly girl, with dark hair and eyes. She lives in Bermondsey, and gets her livelihood by making trowsers for the slopsellers. Her occupation keeps her much confined to the house; and, as she can earn but little money, she is badly fed, seldom tasting meat. About two months ago, being at the time apparently in good health, she first noticed a swelling on the inner part of the thigh, a little above the knee. She had not received a blow on the part, and could not account in any way for the appearance of the swelling; from the first it was painful when touched, but there was neither rigor, fever, nor constitutional disturbance. When first the tumour appeared, bread-and-water poultices were applied for about a week, the patient continuing to follow her usual employment; after this, however, the poultices were discontinued until within a week of her coming into the hospital, when, owing to the swelling becoming more painful, she applied linseed-meal poultices: as all this failed, however, to produce any beneficial effect, she applied to be admitted into the hospital. When the diseased part was examined, it was found occupied by a large but ill-defined swelling, somewhat reddened; but this apparently proceeded from the effect of the poultice: it was sensibly hot to the touch, and the patient likewise complained of a sensation of heat in the part. It was not usually painful unless pressed; nevertheless sharp lancinating pains were now sometimes felt; there was distinct fluctuation, and the fluid appeared to be near the surface. Two days after her admission a puncture was made in the swelling with a small lancet, and about

four ounces of thin purulent fluid of a dusky yellow colour were evacuated; the thigh was afterwards supported by strapping. Ordered:

Quinæ cit. c. ferro., gr. iv.; syr. aurant, 3ij; aquæ ʒiiss. ter. die.

Four days after this the puncture had healed, the sac had in some measure contracted, the walls having evidently become thicker; but the fluctuation was still present, although it was less distinct than before.

The matter continued to re-accumulate until the 24th inst., the health of the patient remaining about the same as at first. On the 24th, two ounces of purulent fluid were let out, and the pain caused by its presence was consequently removed.

This belongs to a class of cases unfortunately too frequent among the poorer classes of the community. The patient in the present instance is a poor needle-woman, probably constrained by the low rate of remuneration obtained for such labour, to apply herself unremittingly to her work, in order to gain the barest necessities of life,—her greatest exertions, after all, being insufficient to enable her to obtain more than a scanty supply of food of the coarsest description. In addition to this, we must remember, that employment of the above kind is carried on in close, ill-ventilated apartments, often situated in the most densely-inhabited and most insalubrious districts in the Metropolis. What must be the effect of such conditions upon the constitution? From the want of proper nutrition and a due supply of fresh air and light, the vital energies become gradually so much depressed, that almost any accidental circumstance is sufficient to determine an attack of disease. If this state of the constitution be superadded to a naturally strumous diathesis, the predisposition to disease is still further increased. This appears to be the case with the patient now under our consideration. In this case the vital power is too low to produce an ordinary circumscribed abscess, the swelling remains sluggish and undefined, and secretes an unhealthy ill-formed kind of pus. The treatment in such a case is of course directed to the improvement of the constitutional powers; in addition to the remedies mentioned above, she was also ordered full diet, with a pint of porter daily; this, with a comfortable bed, and altogether improved conditions of life, will probably prove more effective than any kind of medicine. It was also ordered that pressure should be applied to the limb; the object of this is to keep the tissues surrounding the abscess in contact, so as to promote a healthy action of the parts by the local support.

It must be observed, that in this case the functions of the uterus had not yet commenced; this may be probably taken as another proof of constitutional weakness. Consequently, steel was ordered in combination with the other tonics. Under this treatment, it is probable that the constitutional powers of the patient will be restored, so as to throw off the present disease; but a return to the former habits of living will in all likelihood reproduce the same state of constitution as before, giving rise to some other form of disease, to which the patient will very likely fall a victim.

Case 2.—The second case is headed one of phimosis. This is a disease which is sometimes congenital, arising from a malformation of the parts, the orifice of the prepuce being too narrow to admit of its being pulled back over the glans penis. This condition ought always to be relieved by operation, either by circumcision or by dividing the prepuce; for it has been remarked by Sir Astley Cooper, and my own experience corroborates his view, that individuals who are the subjects of congenital phimosis are especially liable to cancerous disease of the penis. In the present case, the phimosis is not congenital, but is the consequence of the swelling produced by acute inflammation of the parts caused by sexual intercourse. The subject is

A young man, aged twenty, admitted into the hospital on the 15th inst. About ten weeks ago he became infected with venereal disease. He had a slight discharge at the time, but this soon ceased, and a swelling appeared in each groin. One of these buboes burst five days since. He had also sores on the glans penis; for these he took medicine, but, about a month ago, found that he could not draw back the prepuce; this condition had continued without any discharge up to the time of his admission into the hospital. At that time the orifice of the prepuce was very much contracted, and the glans itself apparently much swelled. He was ordered:—

Hydrarg. chloridi, gr. ij.; ext. coloc. co., gr. xv.; ant. potass. tart., gr. $\frac{1}{4}$; nocte sumend. Haust. sennæ, cras mane.

Three days after the inflammation having somewhat subsided, and the patient being in a comfortable state, it was ordered that the prepuce be divided at the under part, near the frænum, preferring this mode of operating to the more general one of dividing the upper surface, thus avoiding the deformity, which is usually the consequence of the latter operation; the bleeding was stopped by the application of cold water, which was continued; the patient was likewise to take:—

Pil. Plummer, gr. iij.; ext. hyoscy., gr. v. Omni nocte.

Decoc. sarsæ co. 3iss., ext. sarsæ gr. x., hydrarg. bichlor, gr. 1-16th. Ter die.

After the prepuce was divided, an ulcer was discovered upon its upper surface; the sore had a peculiar livid aspect, was of an oval form, and its edges were not much indurated. The day after the operation the prepuce was swollen and painful, although he had slept well and was in other respects quite comfortable; since this time the swelling has continued to decrease slightly, his bowels have been regular, he has used the warm water dressing, and the incision is now healing gradually, although the swelling has not much diminished. In the account of this case it must be remarked, that the division of the prepuce was not executed until the inflammation was in a certain degree subdued. It is always proper, before performing a surgical operation upon any part of the body, to subdue inflammation if it be present; without this precaution very bad effects may often follow an operation, and the reason must be obvious; the division of the tissues by the knife is in itself sufficient to excite inflammatory action, even in parts previously in a healthy state; if inflammation already exist, the operation must then necessarily tend to exalt that condition to a degree beyond that which the tissues can support, and sloughing would very probably be the consequence. In opening an abscess, or evacuating a fluid which may itself be the cause of irritation and inflammation in surrounding parts, it is not necessary to wait for the inflammation to be subdued, for the evacuation of the fluid would itself have that effect; but when an operation is to be employed as a means of producing a reparative action, the inflammation should be first removed, as I have mentioned above. In operating for phimosis, it is better always to operate on the under part, near the frænum, than upon the dorsum of the penis; in the latter case, two large flaps are formed by the incision, and when the parts are healed, a very unsightly cicatrix is left. In making the division near the frænum, this is avoided, and, at the same time, the constriction is equally well relieved; great care must however be taken not to cut into the urethra, which may be very easily done at this point, as, owing to the swelled condition of the parts, the director is very liable to pass into the orifice of the urethra, instead of between the glans and prepuce. I have known this to happen twice; in both cases the glans was slit open.

The present case is put down as one of phimosis; but it ought rather to be called one of venereal disease. It cannot be called syphilis, for the proofs of virulence are not sufficiently marked. There is often some difficulty about such cases, in distinguishing the syphilitic from common venereal or strumous ulcers; they often resemble each other in many respects; there are the same everted edges, same kind of ulceration, same induration of base; of course, there exists the one great distinctive mark, one is inoculable, the other not,—the one is capable of propagating the disease, is itself specific in character, and must be cured by specific remedies; the other is innocent so far as concerns propagation, and must be cured by remedies directed against the general constitutional deterioration. In the present case, the sore had been covered by the prepuce up to the time of the division of the fore-skin. Indeed, in complicated cases, it may be necessary that the prepuce should be divided, if for no other reason than to enable us to see the state of the sore beneath. It is better I believe not to inoculate; for I cannot agree with M. Ricord in the opinion, that the number of chancres or the amount of virus introduced into the system does not tend to aggravate the disease. Indeed, we have a case in the hospital at the present moment, in which the factitious sore resists every treatment, although the primary chancre has long since been healed. A better plan of procedure is to give mercury in small tonic doses; for example, three

grains of Plummer's pill with five grains of hyoscyamus at bedtime, and 1-16th of a grain of bichlorid. mercury in sarsaparilla or bark, twice a day; if the health improves, which will soon be seen by the usual signs, particularly by the alteration in the complexion, and the sores take on a more healthy appearance, the mercury may be continued in a more active form; but if it fail to produce any benefit at first, and the sore, instead of showing a disposition to granulate, puts on a still more unhealthy action, or even becomes phagedenic, we must discontinue the mercury, and try iodide of potassium, arsenic, and similar remedies to improve the constitutional powers.

Case 3.—The next case is one of a girl, who, about eight weeks ago, ran a needle into the palm of her right hand. She was admitted into the hospital on the 22nd inst. She is 21 years of age, and of strumous appearance. She stated, that when the needle entered her hand, it broke at about its centre; that she took out the head, but that the point remained in her hand, causing her much pain and inconvenience; she accordingly applied a poultice of linseed meal, but the point of the needle still remained. Soon after this her arm became very painful and much swollen, and she employed fomentations of warm water; this removed the pain and swelling, but an abscess formed upon her shoulder; the latter, however, soon healed. There is, at present, a swelling situated over the first and second metacarpo-phalangeal articulations; it is rather hard, and not very tender at the corresponding point in the palm of the hand. There is a small cicatrix of the wound caused by the entrance of the needle, and an evident thickening deeply situated among the tendons of the flexor muscles of the fingers. Pressure on the part produces slight pain; this is particularly felt when the implicated joints are pressed; but no crepitation can be discovered. The patient does not complain of much inconvenience beyond that arising from the impediment to the use of the hand. She has had fleeting pains in other joints, perhaps arising from rheumatism. She was directed to keep the arm supported in a sling, and to take

Vini colchici, 3iss.; mag. carb., 3iss.; liq. am. acet., ʒi.; mist. camphoræ, ʒviiij. Cap. cochl. larg. ij. bis quotidie. Pulv. Doveri, gr. v., h.s.s. Emplast. lyttæ partis affectæ.

This case is not by any means clear. The girl seems convinced that she ran a needle into her hand; that in endeavouring to extract the needle it broke; and that one portion remained imbedded in the flesh. It appears, that it was not while working with the needle that the accident happened, but that she casually caught her hand on a needle which was sticking in her dress. Supposing the point of the needle to be still in the hand, it is remarkable that manipulation produces not the least pricking or shooting pain which would be expected to indicate its presence. A careful examination of the part has been made, without obtaining any evidence of the presence of the needle. It is said, that when a delicately poised magnetic bar is brought over a very small piece of iron or steel, the presence of the latter is indicated by the dip of the bar. This test was tried in the instance before us, but without effect. There is, however, independently of the supposed presence of the needle point, considerable disease of the bones of the fore finger, and an indistinct crepitus can be distinguished. Now, we find by the account of the case, that the girl had complained of pain in the other joints, probably rheumatic; it is therefore a question, whether the present affection of the hand is not some form of synovial disease. With this view colchicum has been administered; for it must be remembered, that colchicum is as effective in any diseases of the synovial capsules as in rheumatism: colchicum seems indeed to possess a specific power in synovial disease, although, it must be confessed, that in this case it has not as yet produced much benefit. The fact is, I believe, there is some hidden cause of disease still in operation. I ought to remark, that, under such circumstances as I have now described, some may think it advisable to cut down at the part to seek for the foreign body. I believe, however, that such would be very bad practice. In the first place, the chances are many against finding a small body like the point of a needle; and, secondly, there must always be great danger in making such an exploration in the neighbourhood of numerous tendons and thecæ. If the presence of a foreign body be the only cause of irritation, nature generally takes effective measures to stop the mischief, either by expelling the body by the formation of abscess, or by enclosing it in a

factitious sac or cyst, which so completely isolates, and shuts it off from the surrounding tissues, that it is no uncommon thing for a foreign substance to remain imbedded for years in the body, without producing the slightest ill effect; but more generally, such a substance would give rise to inflammation, an abscess would form, and the substance would escape in the matter. Sometimes, however, needles, by some inexplicable process, have been known to travel subcutaneously, and finally to issue from the body at a point far distant from that at which they entered. Such cases must, I think, be regarded with some suspicion. Of one thing I am quite convinced: it is always injudicious to cut down to seek for such a foreign substance, unless it be felt, and its actual situation so well ascertained, that it can be reached and removed by one simple incision.

ORIGINAL COMMUNICATIONS.

DEFORMITY OF THE LOWER EXTREMITIES,

REMEDIED BY

DIVISION OF THE HAMSTRING TENDONS.

By JOHN WIBLIN, Esq., F.R.C.S.,
Southampton.

THE division of tendons for the cure of various deformities and contractions of the upper and lower extremities, has been of late years so frequently and successfully executed, by most practical surgeons, that the operation may be now fairly regarded as one of the most legitimate and promising that we can be called upon to perform.

Taking into consideration, however, the interesting and elaborate contributions to orthopædic surgery with which the Profession have been favoured from time to time by many modern surgeons, viz., Stromeyer, Little, Tamplin, Liston, and others, it is to me a subject of surprise, that this department of operative surgery should be so frequently neglected, and that patients of all ages should be permitted to parade our streets and public thoroughfares without the prospect of their deformed condition being in any degree meliorated.

The operation for the division of contracted tendons in any part of the body, is certainly one of the most simple we can undertake; but the great daily trouble and extreme care required to regulate the appropriate adaptation of mechanical contrivances, is, undoubtedly, one of the most formidable questions the operator has to consider; for on the faithful discharge of this portion of his duty the success of the operation entirely depends.

About twelve years ago I operated on a child who was suffering from talipes valgus of either extremity; and, having occasion to leave home, I left the patient under the care of Mr. Albert Smith, at that time a very promising surgeon, but now of literary notoriety. From causes over which that gentleman had no control, he was unable to follow out my instructions relative to the daily use of mechanical appliances; and the case turned out a complete failure. Shortly after this case, I operated on a man named Williams, a mechanic, who had been suffering for some time from contracted hamstring tendons of the right leg; and I cannot forget the trouble I experienced in daily attempting to regulate the screw-joint apparatus, similar to that used in fractures of the bones of the leg. I was at last obliged to abandon the instrument, and to have recourse to a more simple and effective one, which I shall presently have occasion to describe, and by means of which my patient was completely cured, and is now enabled to walk twenty miles a day with ease and comfort.

I have at present under treatment, three different forms of distortion of the lower extremities, one of which, in point of interest and practical importance, far exceeds any other that I have perused in the writings of the gentlemen to whom pleasing reference has already been made; and the satisfactory manner in which the case is progressing, fully justifies me in bearing my testimony to Mr. Skey's remarks on the same subject, viz., "that the treatment of this form of distortion constitutes one of the greatest triumphs of modern surgery." The accompanying sketches of the patient, taken before and after the operation, were executed by Mr. Dayman, surgeon, of Millbrook.



Towards the latter part of last year, I was consulted upon the case of Wm. Short, aged nine years, the son of a railway porter, who had a malformation of both lower extremities, which had existed from the period of his birth. The leg of either side was drawn up in such a manner, under the corresponding thigh, and there was so firm a contraction of the tendons and other structures entering into the formation of the popliteal space, that the boy was unable, in the slightest degree, to use the ordinary means of progression. Both limbs were wasted to an unusual extent, and that on the right side was farther complicated by partial paralysis. Ever since the boy has been able to get about, he has employed, as a mode of progression, a very low stool, upon which he sat, and, by raising his body from the stool by means of his hands, and fixing his toes into the ground, he was enabled to move about only a few yards from the door of his residence. He was a truly pitiable object; and his case was one well calculated to excite great interest in the mind of any surgeon who had paid attention to the nature and cure of these distortions or analogous deformities.

It appears that the patient had been seen by many surgeons, and that he had presented himself at several public institutions; but those who had seen and examined him had considered that it was not a case which would be benefited by operation. The father informs me that he took the little patient to London about eighteen months ago, to procure the advice of the medical officers of the Orthopædic Hospital; but so little hope was held out of any ultimate benefit accruing to the child from operative procedure, that he was brought back to Southampton. After having examined the case, it occurred to me, that although the deformity was so unusual and extensive, and the case was so unpromising from partial paralysis of the right leg, some benefit at least might be obtained, if, by a careful division of the contracted hamstring-tendons, and a subsequent judicious application of mechanical means, the extremities could be placed only in a more natural position; for it was evident while they remained as they were during the active period of the child's growth, the distortion would only increase, and that there could be no hope of any success from mere mechanical appliances. On the 8th January last, I again made a very careful examination of the contracted state of the joints, and at the same time I availed myself of the opinion of Mr. H. Smith, of Caroline-street, London, who happened to be on a visit to me, and I then determined to attempt to remedy the deformity, which was of so much painful interest both to the patient and to the parents.

Operation.—The youth was accordingly brought under the influence of chloroform, and placed with his face downwards upon a little table. Mr. Ware, surgeon of this town, supported the thigh, and Mr. H. Smith regulated the necessary amount of extension during the division of the contracted parts. A subcutaneous incision or puncture was first made on the outer side of the popliteal space of the right leg, and the tendon of the biceps flexor cruris was then divided.

With the left hand, the knife was again introduced at the inner side of the same space, and the tendons of the semi-membranosus and semi-tendinosus muscles were cautiously divided. An attempt was then made to test what amount of extension could be fairly permitted without the risk of endangering the success of the operation, when I found that very little benefit had been derived from the division of the tendons in question. The whole of the subcutaneous structures appeared to be indurated, and to be involved in the contracture; and to divide them effectually, it became evident that no ordinary amount of care and precaution would be required to preserve intact the popliteal vein, nerve, and artery. Every part that offered resistance to the knife was divided, without the loss of more than a few drops of blood. The left leg was afterwards subjected to the same operative interference, and every stage of the proceeding was almost identical with that just described.

The limbs were at once brought down without force to a great extent, but by no means to the straight position. The punctures were dressed, and a bandage was applied from the toes to the thighs. An instrument, consisting of a thigh and leg piece, with a screw to adjust the necessary amount of extension, was applied to each limb, while the patient was still under chloroform. In this position he was taken to his bed, and a pill, containing a quarter of a grain of morphia, was ordered to be given at bed time.

January 9th.—Had passed a somewhat restless night; bowels constipated, and complained of great thirst.

Ordered a saline aperient, and a quarter of a grain of morphia at bed-time.

10th.—Passed a very good night; bowels freely purged.

11th.—Febrile excitement entirely subdued, and going on most satisfactorily.

13th.—The subcutaneous incisions apparently healed. For the first time, gentle extension was made by means of the screw adjustment, and this was continued until the 17th, when, to my regret, I found that suppuration had taken place in the popliteal space of either extremity. The bandages and apparatus were at once removed, the wounds dressed, and the patient kept perfectly at ease. In the course of ten or twelve days, the parts were in such a condition as to induce me to recommence the extension of the limbs. On this occasion, I abandoned the double inclined plane apparatus, and had recourse to a long straight splint; the foot and leg were carefully bandaged over the splint, and the angle formed by the thigh and leg was rendered much less acute than I could have expected. It was most gratifying to witness the apparent improvement from day to day; his case, however, required the most vigilant attendance for four months, and on most occasions his bandages had to be re-adjusted.

From my experience in this case, as well as in another before referred to, I am confident that the simple straight splint is far more preferable than the screw apparatus. By means of the former, the necessary degree of force required to diminish the acute angle at the knee-joint is accomplished with much greater facility, and any amount of pressure can be produced by tightly bandaging above and below the patella. During the latter period of treatment, I regulated the degree of extension, by simply tying a pocket handkerchief over the same parts.

The screw apparatus is in no way calculated to produce so desirable a result; for, whatever amount of care the surgeon may take to pad the thigh and leg piece, he will find, in all probability, at the end of a week or ten days, a very troublesome sore, occasioned by pressure on the soft parts about the upper or lower extremity of the apparatus; this I found in my two cases. With this instrument, also, the pressure and extension are effected at either extremity, and, not as it should be, over the parts entering into the formation of the contracted joints.

The effect of the operation and subsequent treatment has by far exceeded my expectations. About the beginning of June the legs could be perfectly straightened, and they could be bent on the knee nearly to a right angle. He was now ordered to get about on crutches, much to the delight of his parents and himself. About this time I ordered him to wear a straight grooved metallic splint, instead of the wooden one, which very materially assisted him in the act of progression; and by these means he was enabled to run about very well and even to bathe in the sea. For the last two months I have requested him to leave off his splints,

and to accustom himself to get about without them. The improvement of late has been most rapid and pleasing; he can flex and extend the left leg with the greatest ease; the right leg can be flexed and extended equally well, by the patient or by myself, the power of voluntary motion in this extremity being as yet most imperfect; but the youth is enabled to walk about tolerably well for about a hundred yards without his crutches, if the metallic splint be placed behind the right leg. His general stature has much increased, and the muscles of the inferior extremity are daily augmenting in size and power; and the patient bids fair, at no distant period, to walk about as well as the rest of his fellow-creatures.



I cannot conclude my remarks on this case without drawing particular attention to the present condition of the boy, which is most remarkable. The extraordinary development of the upper extremities, from their previous great muscular exertion, and the atrophied condition of the lower extremities, present a striking and most interesting contrast. It will be seen, on reference to the sketches which accompany this paper, (and which may be relied on as most accurate,) that the upper extremities, when extended, may be made to touch the bases of the patellæ, giving to the patient a most awkward and unnatural appearance. This unfortunately cannot be remedied; but, may we not hope, that in process of time, both extremities may become more natural; the one from diminished, the other from increased muscular activity.

Southampton.

[We call especial attention to this interesting and complete case, which reflects great honour on the operator. We rejoice to see the provincial surgeons distinguishing themselves in the higher branches of the Profession, and proving themselves worthy of public confidence in diseases and malformations requiring deep and scientific knowledge to make out, and courage and anatomical skill to relieve by operation. It has been reported to us, that not long since, in a provincial hospital, the operation of amputation of both thighs was performed in a case precisely similar to that which Mr. Wiblin has so successfully relieved. —*Ed. Medical Times.*]

OBSERVATIONS

ON

SOME OF THE MORE IMPORTANT DISEASES
INCIDENT TO WOMEN.

BY THOMAS LIGHTFOOT, M.D.,

Formerly Consulting Surgeon to the Nottingham Union Hospital and Dispensary.

(Continued from page 302.)

*On Chronic Inflammation; Induration and Ulceration of the
Utero-Vaginal Mucous Membrane and Subjacent Tissues;
with Remarks on their Diagnostic and Remedial Treatment.*

THERE are few subjects in the practice of medicine and surgery which have given rise to more conflicting opinions and to a greater amount of personalities on the part of the contending parties than that to which I now venture to call the attention of medical men. The doctrines which I shall have occasion to discuss, like those already examined in the preceding memoir, are mainly of continental origin; the diagnostic methods are strictly so; and the same may also be said of the remedial measures. Even there,—I mean on the Continent,—and within the walls of that illustrious academy, the National Academy of France, to which medicine and surgery owe so much, some few personalities were indulged in; but it was chiefly when transferred to Britain that the dispute assumed a wholly personal character. Violent abuse became the order of the day. In the contest for victory truth was, as usual, lost sight of, and parties fought for the theories and practice of others, not merely as foreign theories adopted by them, but as if such theories and views were actually their own offspring. I shall endeavour, in my subsequent remarks, to narrow the question, by removing from it the various obtrusive English and Continental accessories; to trace the original views, if there be any, back to their real authors; and to ascertain, in the first place, the pathological truth of those views; secondly, the necessity for the diagnostic methods proposed by continental physicians and surgeons,—methods which have been followed to an incredible extent in this country by British medical men; and thirdly, to test the value of the remedial means proposed for a disease which may or may not exist; or which, if present, may or may not be productive of the pathological symptoms and sympathies ascribed to it. The question will be found to be a much more extended one than may be at first supposed. It embraces not merely, as, indeed, the title expresses, diseased conditions of the utero-vaginal mucous membrane, but likewise the history of that vast amount of ill health affecting the matron and the single woman in civilised society. It embraces, in fact, a range of physiological, pathological, and practical inquiry, of a nature so extended, that those not familiar with the class of diseases to which it refers, and called on, as I have myself been in so many instances, to decide on the true character and origin of symptoms whose connexion with the alleged pathological changes did occasionally seem at the best problematical,—that those, I repeat, not familiar with such practice can scarcely credit. These remarks are made merely to insure the attention of the members of the Profession to an investigation, the importance of which, until I had all the leading facts placed before me, I did not myself clearly comprehend. The saying, applied with much truth to certain doings in certain countries, that in some places "it never rains but it pours," may be applied to the letter with reference to the subject I now discuss. When it became known that such things were done, had been done, and could be done in France, certain parties, ever on the alert for novelties, and knowing where to look for them, visit Paris for instruction and enlightenment. They inquire into the fashions (for medicine has its fashions in practice), the latest views, instruments, diagnostic manipulations, specula, sounds, and pessaries; they pick up what is new in mind and in matter, in ideas and in action. The reader will bear in mind what I have already said in the first part of this memoir, respecting the theories and respecting the practice. Certain diseased conditions exist; they occur in the single and in the married, at all ages, from puberty upwards; they resist, when severe, the most approved methods of treatment; they are looked on as intractable, and generally as incurable, by the Profession; some cases recover, no one knows how; others remain for years neither much better

nor worse, but profitable patients for all that to the physician. In the mean time the pathology of the complaint remains unknown, its real nature misunderstood; accessories and accidental complications are mistaken for essentials, essentials for accessories. Is it to be wondered that the public and the Profession alike should at last get weary of such a state of things, and fly to any quarter for relief? When the first surgeons fail, the bone-setter is uniformly appealed to, whatever be the rank of the patient, whatever be the status of the surgeon. No position in life, no professional reputation, has ever yet been known to secure the public from the intrusion of empiricism in cases of disease, the rational treatment of which baffles the best directed efforts of the regularly-educated physician or surgeon. The leader, though perhaps not the inventor of the deviation-theory party was Velpeau; Lisfranc led the van of those who traced to engorgement, inflammation, acute or subacute, all the symptoms and all the subsequent mischief. We have already disposed of the deviation theory, and of its British adjunct, namely the presence of undiscovered fibrous tumours of the uterus, supposed at one time, in despite of the most positive statement to the contrary by all pathological anatomists, to be incredibly frequent. These theories were disposed of long ago in France, but they stood their ground for a while in Britain. Lately they gave rise to scenes which it is impossible to describe; if described, they would scarcely be believed.

Next, then, in importance, came the engorgement theory of Lisfranc; another name, I presume, for a low inflammatory condition of the utero-vaginal mucous membrane and its subjacent tissues. To these pathological conditions of the uterus, chiefly followed by erosion, ulcerations, and fissures, this illustrious observer and surgeon was disposed, many years ago, to trace most of the symptoms of the disorders affecting women; I mean, of course, those disorders characterised by white or yellow vaginal discharges, variously coloured, even to green itself; lumbar pains, grievous sense of weakness, with pain in the region of the sacrum, headaches, fever, loss of rest, of spirits, of appetite, and wasting of the body; lastly, uterine discharges of a more serious character, sterility, enlarged cervix uteri, fissures, ulcers, bleeding fungous excrescences growing around the os tincæ. That such pathological appearances exist occasionally in all the forms I have mentioned, no one now denies; the speculum, unquestionably, has mainly contributed to bring out the fact of their occasional existence. I think it possible that, by a careful comparison of symptoms, independently of all examination, digital or specular, the nature of most of these cases might, readily enough, have been decided on. For, after all, in the greater number of such cases, there exists no real organic mischief; it is a disease of function which often departs without leaving a trace. Obscure in its origin, this condition of the tissues of the uterus and vagina may be analogous in its nature to some affections of the anal orifice. How often do we find fissures, inflammation, abscesses, arising in and around the bowel, in both sexes, clearly traceable to bad health, removable occasionally by local treatment, but more certainly by the restoration to good health, to be effected by constitutional treatment and exercise, change of diet and of place? May it not also happen in respect of the utero-vaginal system, with this additional evil to woman, that the sexual system constitutes, as it were, for nearly twenty years of her life, her whole existence,—that its sympathies in her are universal—that they affect alike the mind and the body, and feel the reciprocal influence? At times the cause, at times the effect, of a loss of general health, such pathological conditions must, I think, have, in different cases, different origins. They will be in some—though rarely, I think—a local disease influencing the constitution, curable by local means. In other cases, and these by far the more numerous, the local symptoms are merely the local exponent, as it were, of a constitutional affection, displaying itself in the sex of that system of organs most likely to test the actual condition of the health. Of the general condition of these views, I might cite numberless cases in proof; but the proof must be known to all medical men of extensive practice.

A young married woman becomes affected with white, yellow, or green coloured leucorrhœal discharges, with pains, flushes of face, hectic loss of flesh, constant ill-health. She either becomes or continues sterile; and now, from some unknown cause, she suddenly recovers her health and strength, without the aid of medicine, local or general appli-

cations, or any medical advice whatever. What has become of the chops and fissures, the inflammation and ulcerations, of the engorgements of the cervix uteri, the vascularity of all the tissues? Such recoveries are not rare; on the contrary, they are quite common. On a point like this, I may appeal to the experience and good sense of the Profession. Cases with all the symptoms of ulceration, erosion, excrescences, or hypertrophy, recover without the aid of any local applications.

It would seem, then, that all the symptoms of this disease may be present, and the pathological conditions or alterations of structure absent; and, *vice versâ*, the pathological conditions or alterations of structure have been shown to be present by careful exploration, while all the symptoms were absent.

There is, then, no absolute link and necessary co-existence between the two sets of phenomena, or, if it exist, it has not been demonstrated. That, in some cases, the general and local sympathies stand in relation to the morbid alterations in structure; the engorgement, the inflammation, the erosion, the excrescences and ulcerations, as effects to a cause, may be admitted, without supposing, for a moment, that such is the general rule. The exception, as in so many other cases, has been taken for the law. In proof whereof, I may offer the statistics of Hygrie, who found that, of 2527 cases of women affected with utero-vaginal discharges and diseases, there were only 183 in all who laboured under engorgement, or subacute inflammation and enlargement of the uterus. In these 183, the cervix was the part affected in 160; in 8, it was the cervix and body of the uterus; in 15, the body alone. I speak not of the fact of simple engorgement being mistaken for cancer, as was shown by Roux and Moreau; of uterine sounds being thrust into the interior of the uterus during pregnancy; all this is known, but not, perhaps, sufficiently so.

The actual difficulty is, to discover the real nature of the changes which take place in the uterine system when the disease of which I now treat is present; not what they are, or seem to be, but what relation they stand in to the symptoms. Are they the effects of a constitutional disease, causing local disturbance or disorganization, or is the local disease primary, and the constitutional but secondary? Both views may be adopted, and will, in all probability, be found to be correct; but, of the two, the first is more consonant with the little we really know of the physiology of these organs.

In conclusion, the substitution of the speculum for digital and other modes of exploration, forms a chapter in the history of uterine disease which those who follow us will read with astonishment. The actual condition of the utero-vaginal system may generally be made out by oral inquiry; in very doubtful cases, where the sufferings are great, it may be advisable, no doubt, to institute ocular inspection, which can be done only with the aid of the speculum. In this respect it resembles affections of the rectum, such as fissures, pro-lapsus, piles, fistulæ, abscesses, and their consequences.

In serious and important cases there must be no guess work, no trifling with woman's life, whatever be the extent of the sacrifice of feeling. When the question of death or recovery from a serious disease is fairly submitted to the patient, she will at once submit to whatever is requisite, to whatever is required for the full elucidation of her peril. All that remains for the Profession to do in such cases is to take care that no offence be given to public morals. Enough has been done in this direction to bring the Profession into discredit, but it need not extend further: diseases are generally recognisable by symptoms which plainly manifest themselves on the surface; their varying stages are known by a varying symptomatology. Ovarian disease, for example, is generally recognisable by constant symptoms, though no actual inspection of the affected organ be possible; and neither lungs nor liver, nor brain, require to be inspected during life, with a view to discover in them the actual nature and seat of the disease. It must be precisely the same with affections of the uterus, and more especially with those unaccompanied by organic lesion, to which class of disease most of the cases of uterine and vaginal discharges are clearly referrible.

Of the inflation of the womb for relief of malposition, of Fallopian catheterism to remove sterility I shall say nothing. Pathological anatomists of the highest standing have assured me, that scarcely a morbid condition in woman is so rare as permanent obstruction of the Fallopian tubes.

They are mucous canals, and like other mucous canals, do not become obliterated under any circumstances perhaps; and certainly not, as a condition of inflammation, whether acute or chronic. Our penal colonies long since settled the question as regards prostitutes. Barren in England so long as they practised their unhappy calling, they readily became mothers of large families so soon as that course was abandoned; the Fallopian tubes, which had closed in England, had somehow or other become unclosed in Australia, without the aid of Fallopian catheterism, of inflation or washing out the uterus. The truth is, they had never closed, but in the heated imaginations of men deficient in a knowledge of sound minute anatomy, and unequal, by their temper, or by their education, to a patient inquiry after truth. I might here bring this memoir to a close, for the reader must have gathered from the preceding remarks, that I am opposed to all inspection, digital or specular, when not imperatively demanded by the condition of the patient; that I object to the use of strong local measures, such as energetic caustics and strong astringent lotions, which inflame and heat the organs; and that I approve of the mildest mode of treatment, trusting more to constitutional than to local remedies. The following remarks, therefore, on affections of the ovaries, and more especially on sterility, I insert here, more from a conviction, that the sexual system in woman has a concert so general of all its individual parts, that scarcely a section of it can be diseased, without more or less affecting all the others, the ovaries above all, these being the organs regulating, as it were, woman's existence as a woman.

Sterility.

It was a maxim which I have often heard *ex cathedra*, that in 100 cases of barrenness in married women, in 98 of these the woman was in fault; but experience and deeper reflection on this matter have led me to a precisely opposite conclusion.

At puberty, the ovaries enter on their functions, presumed to be the production of ova; their full development brings out the whole character of woman; as they continue healthy, so does she; when they fall into disease, corresponding changes take place in her; when their functions cease prematurely, the symptoms of such cessation can scarcely be mistaken. Simultaneously with the establishment of the ovarian functions, menstruation appears, the causes of which are still imperfectly known. Mr. Abernethy assigned for it a final cause, but this view has not been generally adopted. The production of ovarian results must be most important in the female economy; they establish the proof, that the ovaria are performing their functions. This cannot be all; there must be reaction and absorption of ovarian secretions into the blood, of the nature of which we know nothing. The Hippocratic theory would have explained it well enough, but the observations of Fallopius in 1618, of Harvey in 1642-6, and, above all, of that anatomist, the most acute and accurate, perhaps, that ever lived—De Graaff, in 1668, closed the Hippocratic theory of the admixture of seminal fluids, substituting the theory of ova, now universally admitted. As a necessary result of the theory of ova, followed the ovo-menstrual; still a theory too deficient in certain links of observation and certain high generalizations, to place the view or theory among the admitted facts in physiology, but a probable theory no doubt, and useful in explaining many phenomena hitherto inexplicable.

But, in whatever way we view these physiological points surmised and pointed at by Cullen and the vitalists of his day, one thing is certain, viz., a healthy condition of the ovaria is essential to the health of the individual, during that portion of her existence at least which extends from puberty to the close of the child-bearing period. When these organs do not enter on their functions—are not properly developed as to structure—become altered or inflamed, the whole frame feels the result, more or less. In youth, consumption appears, and carries off its victim. At other times, it is hysteria, or mental aberration, under their varied forms, from mere eccentricity to furious madness.

The non-development of their functions leads to disease, and sometimes to death; aberrations, as to functions, lead to hysteria, eccentricity, madness. When the moral restraints are broken down by the extreme violence of the disease, the condition induced resembles the œstrum of animals.

It has been said, in language more beautiful than correct,

that woman owes all her beauty, grace, tenderness, and dignity, to the development of the ovaria at puberty; but this is only partly true. In some of the most beautiful, finely-formed women I have ever seen, the ovaria had, seemingly, not entered on their functions; neither will their full development alter the form of the body.

On this I need not dwell. The development of the ovaria adds to the stature, amount of muscular strength, vivacity of character, and brilliancy of complexion of the individual, but it has nothing to do with the natural forms of the body; these have their own natural laws, which those who have written on this matter do not appear fully to comprehend.

To whom does the word sterile properly apply? I have seen it employed in cases where the women were not sterile, but had ceased to bear children; to many others, who were sterile, simply because unhappily married.

In framing conjectural theories as to the causes of sterility, it was natural to commence with mechanical obstructions which, present or not, have been found, from the os vaginæ externum to the abdominal extremities of the Fallopian tubes. Then came explorations, dilatations, excisions, inflation. Of the measure of success of such practices I need not speak; it is known only to those who put them in force. In the mean time, the main point seems never to have been inquired into, namely, the natural condition of the stroma or tissue of the ovaria. Occasional barrenness is not peculiar to women, but extends probably more or less to all animals. In former times, its occurrence was held by legislators and theologians as a curse; the same class of persons now maintain that its occurrence is a blessing. In the mean time, nature follows her own course, vindicates her own rights, and sets at defiance all conventional arrangements and laws of man, pursuing her own path to that great unknown end. Of this vast path, if I may so say, the scientific man sees portions,—fragments, and he collects from these hasty glimpses what truths the times and the circumstances admit of. The ovular theory of menstruation was a happy guess of a theoretic mind; it still requires confirmation, and throws but little light on the question I now discuss. Many married women menstruate regularly and fully, and yet bear no children.

If false corpora lutea be a test of the escape of an ovum from the Graafian vesicle, then assuredly ova form in, and have been discharged from, the ovarium long prior to puberty at least, and long prior to menstruation. False corpora lutea should be most abundant in all women, if an ovum escapes at each menstrual period; but it is not true that they abound to this extent. The ovular theory of menstruation may be, and probably is, true; but it does not rest on a series of well-observed facts. The other view of the case, namely, that ova only quit the ovarium during the œstrum or excitement, carries with it a much greater probability.

As physiology has its theories, so also has pathology.

The ovular theory of menstruation has been followed by the "subacute inflammation of the ovaria and Fallopian tubes." Ovulation came to be looked on as a kind of inflammation, and hundreds have been found to labour under deep-seated inflammations of the sexual organs, as usual without any proofs, any connecting link between observed symptoms during life, and pathological inquiries after death. Dysmenorrhœa was also traced to the same cause, and ovaritis took its place among the legitimate phlegmasiæ. It is needless to say how cautious the physician should be in acting on such conjectural views. They prevent or interfere with sound, cautious deductions from facts, and they retard the progress of medicine; above all, they show the public that our art, being almost wholly conjectural, is not entitled to the name of a science.

Some have imagined that a false membranous deposit investing the ovaria, and subacute inflammation of those organs, preclude the exit of ova, thus adding to the catalogue of symptoms; but, of such a false membrane we have no anatomical proof; nor are we more certain that membraniform exudations from the uterus are always proofs of ovaritis. I feel disposed to look on painful swellings of the mammæ as a surer indication of ovaritis; such symptoms I have seen, and I believe they depend on ovaritis. But, upon the whole, phlegmasia of the ovaria must be a rare disease.

In conclusion, as regards sterility, a separation from the husband is the natural remedy for young persons labouring under leucorrhœal discharges, indurations, tumefactions, ulcerations of the cervix and os uteri, or, in other words, a

restoration of the general health by any means whatever, will remove the local complaints. Disordered function of the sexual organs is common in women; organic local disease is comparatively rare.

There are many women who are in the most perfect health, who, nevertheless, never bear children; the same happens amongst animals. Many men who were never equal to the reproduction of the species, yet enjoy the most perfect health. Higher generalisations are wanted to explain such facts. In man, it is by no means unusual for the preparatory male organs to waste away and shrivel up to nothing, even in the prime of life; the same may happen in respect to the ovaria, and with the same results. But it is just possible that a uterine phlegmasia may after all be the most frequent cause, not merely of the result I speak of, namely, sterility, but of most of the symptoms I have so often alluded to—a catarrhal phlegmasia in some cases; in others, a result of cold, of shocks, of constitutional affections.

This seems to be the opinion of M. Dubois, whose calm judgment exercised over matters like these must ever have its weight with the Profession.

CASES OF RHEUMATIC AND LOCAL PARALYSIS,

TREATED BY
PULVERMACH'S CHAIN BATTERY.

By T. J. VALLANCE, Jun., M.R.C.S., &c.

IN introducing the following cases to the notice of the Profession, I may observe, that they are not picked ones, but are simply taken as they occurred; also, that they have been treated *only* by electricity; the instrument used being Pulvermacher's chain battery. Whether the superior efficacy of this battery in cases of rheumatic and local paralysis over the electro-magnetic machines, is due to the circumstance of the current being primary, or to the fact, that the current is constantly in one direction, is a question I shall at present leave; but the cases I have treated appear to me so striking in the rapidity with which they have been cured, as compared with any that I have found recorded to have been treated by galvanism, evolved from other sources, that I may, perhaps, be pardoned in noticing an observation from the pen of Dr. Golding Bird, contained in a paper on the hydro-electric chain in the *Lancet* of Oct. 25, to the purport, that "the current evolved has no peculiar properties, and that it will effect nothing more than that evolved by any other means." Now, with all deference to the learned Doctor, I will only request that he place himself under the influence of any ordinary machine, and then under that of the chain battery, and say whether or not the effect produced is at all similar? It is true, that a galvanometer cannot detect a difference; but there are things in physiological phenomena which have no μέτρον.

When Dr. Golding Bird deplores the puffing of this invention into a universal panacea, I for one most heartily agree with him in regretting such injudicious exaggeration.

Case 1.—Alfred Cooke, aged 26, a gardener, was attacked on the 4th of July, 1851, with acute rheumatic fever. He was treated in the usual manner, and was confined to his bed about a fortnight, suffering much in the muscles of his extremities and back. After he was able to leave his bed, he had great pain in his shoulders, wrists, and loins, increased by the slightest motion, so that he was incapable of dressing or feeding himself. He continued in this condition up to the 29th of August, (nearly nine weeks,) during which period he was treated by tonics, occasional doses of Dover's powder, and turpentine frictions; these, however, had no apparent result.

On the 29th I found his arms hanging useless by his sides; the right was somewhat the worst; it felt cold, the skin tense and hard, and the muscles much atrophied; the hand he was unable to close. The metacarpal joint of the index-finger was much swollen; it felt hard, and was very painful on pressure, or on any attempt to bend it. Thinking this a fair case for the application of galvanism, I resolved to try the chain battery, and accordingly passed a current from one hand to the other. The first effect produced was considerable faintness; the man, however, quickly rallied, and

ten minutes having elapsed, I found he could close his hand perfectly, that the swelling was considerably diminished, and that all pain was gone. The same evening he undressed himself without assistance.

Aug. 30th.—Arms slightly painful on motion. The current was again passed with marked benefit.

Aug. 31st.—A good deal of pain in hip and knee, increased by movement. Current was passed in the direction of the sciatic nerve, which removed the pain.

Sept. 3rd.—Slight returns of pain, and immobility in the upper extremities, speedily removed by the passage of a current.

From this date to the 10th, as there remained some trifling stiffness in the limbs, a moderate current was passed every morning. Its use was generally followed by a little diaphoresis, and a slight feeling of exhilaration.

On the 11th the man returned to his work.

Case 2.—Edward Connor, aged 60, a labourer, strong habit of body, has been prevented following his employment by rheumatism for three months; first seen by me August 30th, when he complained of violent pain in the shoulders and neck, which was so much affected that he was unable to turn his head; he complained also of great pain in the right clavicle, on examining which I found a considerable amount of periosteal induration, forming a large swelling near the sternal extremity. I pointed this out to my friend Mr. Beale, of Plaistow, and then, assisted by him, passed a current along the clavicle for about five minutes, during which time the man said he felt the pain leaving him, and, at the end of that period, that the pain was gone. On re-examining the part, the swelling had disappeared, but the man is still unable to lift his hands to his head.

August 31st.—Finding much induration of the subcutaneous cellular tissue over the pectoralis major, I passed the current in the direction of the muscle, producing powerful and rapid contractions. I then passed the current from hand to hand for about ten minutes, when it caused a gentle diaphoresis, and expelled the pain from the shoulder, and enabled the hands to be elevated above the head without much difficulty.

Sept. 1st.—Neck very stiff and immovable, but not painful; the current was passed through it for a quarter of an hour, after which it became capable of motion.

Sept. 2nd.—Current again passed through the neck, attended with good result.

Sept. 5th.—So much improvement has taken place, that the man says he shall go to work next week.

Case 3.—30th Sept., 1851, Sarah Whittaker, aged 70, states that in the month of February, 1851, she fell down a flight of stairs, fractured two ribs, and sprained her back, and was confined to her bed for seven or eight weeks afterwards; but never entirely recovered, having almost lost the use of her right shoulder and neck, so that she is unable to turn her head; has suffered frequently from rheumatism. On examination, I found her very weak and thin, and the muscles of the right shoulder much smaller than those of the opposite side; there was no difference, however, in temperature or sensibility to the touch.

I passed an intermittent current through the back of the neck, which relieved the pain, and enabled her to turn her head; I afterwards passed the current from hand to hand for half an hour; it did not, however, produce so powerful an effect on her as it does on most persons; this is easily accounted for by her age, as I uniformly find young persons more susceptible to the influence of galvanism than are the old; it however considerably improved the power of motion in the shoulder.

Oct. 3rd.—Battery again used with good effect.

4th.—The current repeated.

5th.—Better; repeat the current.

7th.—Much better; can now lift her hand to the back of her head, and feels better than she has done since her accident; the current was again applied, and motion improved.

9th.—Said she had nothing to complain of.

N.B. When the word current occurs in the above cases, it is to be understood that in each instance the intermittent current was employed, produced either by the interrupting cylinder or clockwork.

Stratford-grove.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

By HENRY SMITH, Esq., F.R.C.S.

(Formerly House-Surgeon to the Hospital.)

GANGRENE AFTER AMPUTATION OF THE TOE, IN CONSEQUENCE OF DISEASED CONDITION OF THE WHOLE ARTERIAL SYSTEM.

A case of considerable interest, and of some perplexity, has, during the last few months, been under the care of Mr. Fergusson in this hospital, and it will be seen that it well illustrates a disease which is more or less frequently seen, but not perhaps to such an intense degree as was observable here, and the effects of the pathological change which had occurred in the arterial system. As the treatment of the case extended over a long period, we shall merely give an outline of the main features of it, and not minutely chronicle every circumstance and change which occurred during the course of some six months.

The patient was a short thin man, of unhealthy appearance, and looking older than he really was, his age being fifty-seven. He had been a labourer during his life, and residing in a country district. He was admitted into the hospital in January, in consequence of his having an intractable and painful ulceration of the right great toe. He stated that, during the last winter, he was much exposed to cold and vicissitudes of the weather, and that both his feet became frost-bitten. Poultices and simple remedies were applied, and the left foot got perfectly well; but he could not use the great toe on the right side. The nail has been twice reproduced, and twice destroyed. On admission, the phalangeal extremity of the toe was very much swollen and inflamed, more especially on the under part of the ball, where there is situated a nasty unhealthy-looking ulcer, which leads down to a portion of the phalanx in a state of necrosis.

About a fortnight after the patient was brought into the hospital, Mr. Fergusson removed the diseased extremity of the toe, and found a portion of the last phalanx in a state of necrosis. A sufficient flap of soft parts was left to cover the wound. On Feb. 7, which was three weeks after the operation, the wound had not united, but was very swollen and painful, and in a few days the flap sloughed. The patient was low and irritable, and in pain; the countenance indicative of mischief; the pulse quick and irritable. He was allowed liberal support. A portion of slough was brought away from the wound, and for a short time it looked pretty well, but there was no healthy process, and on March 20, the foot became painful and inflamed, and gangrene seized upon the stump. In a few days a distinct gangrenous spot showed itself at the root of the great toe, and a well-marked redness had extended to the ankle; the pain had become very severe, and it was necessary to give him opium twice a day. The gangrene gradually spread up the foot, and the pain became of a more severe and burning character, and he got but little sleep; still no line of demarcation formed, and it was not considered judicious to perform an amputation higher up at present.

Early in April, a distinct line of demarcation formed on the dorsum of the foot, but the gangrenous destruction seized upon and spread along the sole, and nearly the whole extremity of the foot became completely destroyed, the disease still slowly spreading upwards, and reducing the health of the patient, who suffered intensely from pain, which failed of being allayed by large quantities of opiates. It was hoped that a distinct line of demarcation would form, and allow of amputation being performed; for, whilst the disease was still active, and the patient in such a miserable state, it was not thought proper to perform any operation; everything was tried to meliorate the man's condition, but the disease kept on slowly spreading, and threatened to destroy the life of the man; consequently, after waiting until July 15, Mr. Fergusson determined to amputate the limb so high up that there would be less chance of the mischief again attacking the stump. Consequently, on that day he performed amputation just below the knee; and even during the operation, the cause of the disease was found out, for on

relaxing the tourniquet no vessel bled but a vein and a few small arterial branches, which latter were ligatured. On looking at the anterior and posterior tibial vessels in the amputated limb, they were found to be pervious, although it was conjectured that these trunks were obliterated as well. Three days after the operation, a suspicious-looking appearance was found, about the size of a shilling, on the outer part of the upper flap, and on the next day this put on a decidedly gangrenous hue, and from this time the return of the old malady became evident. This process spread much more rapidly than it had done previously. The flaps became so much destroyed, that when his death took place, on the 18th of August, there was only about two inches of the lower flap left. Somewhat curiously, he felt now hardly any pain except when the stump was dressed, but he complained of much pain in his back, although there were no bed-sores, notwithstanding he had lain so long.

A *post-mortem* examination was made. The flaps, as before stated, were nearly destroyed, and the bone protruded greatly, and was in a necrosed condition. The viscera of the abdomen were healthy; the lungs were soft and congested. The heart and aorta were carefully taken out, and the vessel dissected out until it terminated in the stump; and it was now found what extensive disease there was in the arterial system. The heart itself was without actual disease, although it was soft; and the arch and abdominal aorta, to the extent of some inches, was in a perfectly healthy condition; but just where it bifurcated the diseased appearance manifested itself in a firm atheromatous, almost bony deposit in the middle coat here and there. The most extensive disease was in the superficial femoral artery; from just below the profunda; the whole of the middle tunic of the vessel, for the extent of some four or five inches down, was so metamorphosed by the bony deposit, that it had converted the vessel into a solid tube. Below this, just where it became popliteal, the artery was obliterated by a firm fibrous coagulum. Attention was now directed to the vessels of the side, which had not been diseased. The femoral was first cut down upon, and a portion removed; this was also greatly diseased, but not to such an extent as that on the other side. Two inches of the popliteal were cut out and examined, and this also was found to be in as bad a condition as the femoral on the other side. The posterior tibial behind the malleolus was looked at; this vessel also was much, and in a similar manner, diseased. But it was not confined to the arteries of the lower extremities, for, on looking at the humeral on the left, and the radial vessel on the right, a large amount of the same deposit was found in them. The arteries of the brain, unfortunately, were not examined.

It is by no means a rare thing to meet with instances in which the arterial system is in a more or less diseased condition; the subjects of this morbid change being very old persons, or younger ones, having long lived under very depressing causes. With the occurrence of this morbid conversion of the arterial tunic, are associated certain maladies which render the knowledge and study of this pathological condition necessary and interesting to the practitioner. In the case under notice, the most remarkable feature is the almost universality of the disease of the arteries,—such, in fact, as has never fallen to our lot, in very many *post-mortem* examinations, to observe. The arteries of the brain, unfortunately, were not examined; but there can be little doubt that these vessels would have been found in a diseased condition.

The point in the case most instructive, perhaps, is the circumstance of the popliteal artery having been found blocked up and impervious; for this will account not only for the obstinacy and incurability of the original disease in the toe on that side—it has been observed that the left foot was affected equally with the right at first, but soon got well—but there is no difficulty in estimating the cause of the re-appearance of gangrene in the stump of the leg, for it appears that the limb was removed just at the spot where the popliteal vessel had been rendered impervious, so that the stump could not be sufficiently supplied with blood. Had it been possible to have ascertained this condition of the vessel previous to the operation, and had amputation been performed in the thigh, it is very probable that the patient might have escaped the recurrence of gangrene; but there was no suspicion that any part of the arterial trunk was obliterated. We learn, however, from the case, the necessity of thoroughly ascertaining the condition of the vessels prior to operating in similar instances, which, nevertheless, must be rare.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

- This Evening, Nov. 15.—MEDICAL SOCIETY OF LONDON. *Subject*:—MR. RICHARDSON, "On the Fibrinous Element of the Blood in Relation to Disease." Eight o'clock.
- Monday, November 17.—CHEMICAL SOCIETY. Eight o'clock.
- Tuesday, November 18.—PATHOLOGICAL SOCIETY OF LONDON. *Meeting of Council*. Seven o'clock.
- Thursday, November 20.—HARVEIAN SOCIETY. Eight o'clock.
- Friday, November 21.—WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON. *Subject*:—DR. W. V. PETTIGREW, "On the Treatment of the Cicatrices caused by Burns." Eight o'clock.
- Saturday, November 22.—MEDICAL SOCIETY OF LONDON. *Subject*:—DR. T. SNOW BECK, F.R.S., "On the Enlargement of the Uterus which Remains after Birth." Eight o'clock.

THE MEDICAL TIMES.

SATURDAY, NOVEMBER 15.

MEDICAL CHARITIES (IRELAND.)

THE organization of a system of medical relief on a scale commensurate with the extent to which the ravages of disease are known to prevail among the poorer classes of our fellow-subjects, forms a problem worthy to engage the mind of the most philanthropic and enlightened statesman. But, though the improvements of modern medical science admit of manifold and systematic application to the purposes of the prevention, diminution, or removal of disease, as well as the establishment of extended measures of hygiene, it is but rarely that we find the legislature sufficiently alive to the vast importance of providing for those great social wants which are so apparent to one who regards with the eye of the educated physician the condition of the poor, whether in the city or the rural districts. Legislation on medical subjects, even in these days of enlarged commercial views, when the principles of association and order have pervaded all our transactions, continues to be, as it has ever been, partial, fragmentary, local, subservient to special interests, and only worthy of approbation when it has not marred professional honour or privileges. To these statements, the *Irish Medical Charities Bill* forms no exception. As a Bill to provide medical relief in Ireland, it is essentially partial and fragmentary; and, though we have in the main always agreed with its principal provisions, and warmly advocated its claims to the consideration of the Profession in the sister island, we cannot be blind to the conclusion that it only forms a portion and fragment of a more extended and comprehensive system, which we feel convinced the Legislature will one day, sooner or later, be compelled to establish to meet the requirements of this country as well as of Ireland. The Act now under consideration, affiliated as it is to one already in operation, may be stated to be the third distinct legal provision for affording medical relief in Ireland, which the wisdom of successive ministers has thought it expedient to place on the Statute-book; and yet it would require no ordinary exercise of ingenuity to establish the existence of any correspondence or necessary connexion between all or any of them; and it is extremely improbable that, without considerable modification, they could be made to form harmonious elements of one comprehensive scheme, should such be deemed expedient on any future occasion. Thus, for instance, we find that the Act which has just received the Royal assent, instead of being brought under one system with that which regulates the support and management of

Infirmaries, to which it will doubtless be admitted that a Dispensary system presents some natural affinities, has been engrafted on the Poor-law system. How far such a connexion is the one most expedient, and perhaps, under existing circumstances, the most feasible, we do not wish to deny, but we are anxious to convey our opinion that, until medical legislation assumes somewhat more of the features of a *natural* arrangement in its several sub-divisions, it cannot at all be regarded as having arrived at a definite and fixed stage; it must ever be looked upon as temporary, incomplete, and liable to every modification which the pressure of a local interest, or the passing gale of ministerial influence may impress on it. As a legislative enactment, the Irish Medical Charities Bill becomes, as we have stated, incorporated with the Poor-law system; they cannot, therefore, be considered separately. With the machinery which has been in operation in the execution of the laws for the relief of the poor in Ireland, our Irish readers, at all events, must be sufficiently familiar, it will therefore be unnecessary for us to do more than indicate the changes which the Poor-law Commission has undergone. By the first clause, it becomes lawful for Her Majesty to appoint under her sign manual, two persons, one of whom shall be a physician or surgeon of not less than ten years' standing, who, together with those already in office, shall constitute "The Commissioners for Administering the Laws for the Relief of the Poor in Ireland."

This may be actually resolved into the addition of one member, (*viz.*, the Medical Commissioner,) to the governing Poor-law Board as hitherto constituted, as the second appointment may be regarded as the elevation of the Assistant Commissioner, (which office henceforth ceases) to the rank and privileges of the other members of the Commission. The several individuals thus associated together constitute a body in whose hands, as we shall see, is reposed the guardianship of the rights, privileges, and welfare of a large body of the Medical Practitioners of Ireland. It would be idle to discuss, at present, whether the interests of the Profession are adequately represented by the appointment of *one* of its members to a seat and voice in councils in which, as it is quite possible to conceive, lay influences will have such weight. While the Bill was yet in progress through the House of Commons, we put forward suggestions for a more complete and full representation of the mind and faculties of our Irish brethren on a Board which contemplates such direct and extensive interference with their nearest interests. It cannot be denied, that in the selection of Dr. John M'Donnell as the Irish Medical Commissioner, the choice of the Government has fallen upon one whose professional character, knowledge, and past career, entitle him to the confidence and respect of his brethren; while honoured with the trusts and duties of such an important office, he must bring to their performance qualities of unimpeachable integrity, judgment, and decision.

By clause 3rd, the Commissioners are empowered to appoint a number of persons, being physicians or surgeons of not less than seven years' standing, to be inspectors, to assist in carrying out the provisions of the Act. Of their powers and duties we shall come to speak more at length hereafter; we shall merely state, at present, that by clause 5th it is specially provided, that neither the Medical Commissioner, nor any of the inspectors, shall, while he continues in such office, practise as physician or surgeon, or in any other professional capacity. We remark with regret, that while the condition of the Irish Dispensaries demands such immediate attention, no steps have as yet been taken by the

Commission with regard to the appointment of the Inspectors.

While the general direction of all operations conducted under this Act is entrusted to the Commission constituted as we have just seen, we find that the actual working and carrying out of its special provisions devolve on the local authorities, subject to the approval of the central board, these being the guardians of the several Poor-law Unions. In proceeding to consider the powers delegated to these local bodies, it will be at once seen, that the Act embraces a far less extensive sphere of operation than would be naturally inferred from its comprehensive title. Thus it may be said, that, with a few unimportant exceptions, the Medical Charities Act provides only for the distribution, support, and management of Dispensaries; and, indeed, for all practical purposes, the name of "Dispensary Act" would be far more consistent with its aims and objects.

The first step to be taken by the guardians on requirement of the Commissioners will be the division of their respective Unions into Dispensary districts, *having regard to the extent and population of such districts*. Men practically acquainted with the requirements of the localities with which they are connected by residence and property may no doubt be considered the best judges of the nature and extent of the dispensary relief which the poor of their districts may stand in need of; but we freely confess our great satisfaction at perceiving that their decisions on such matters are in all cases subject to the approval of the Commissioners, who are empowered, should they deem it necessary, to direct the division of districts which to them may seem required in particular instances. It is specified, that in the division of Unions, no dispensary district shall be made of smaller extent than that of the electoral divisions under the Poor-law Act. We doubt much that there is any reason to apprehend that the guardians will be disposed to make unnecessary subdivision of Unions, or to increase unnecessarily the number of their medical staff: we would prefer to see some special provision against requiring of the Poor Dispensary doctor attendance on either too populous or too extended a division. It is only those who are intimately and practically acquainted with the present dispensary system, that can fully sympathise with the toils and hardships of the country physician, whose duties call him, after a hard morning's work with his dispensary patients, to ride through the snow and sleet of a winter's day over many miles of an unsheltered road, to the wretched cabin where a dropping case of typhus, *always endemic in Ireland*, awaits him. The remedy for these evils is fully and effectually in the hands of the Commissioners; and we sincerely trust that they will, in no single instance, sanction the division of dispensary districts made by *any* board of guardians, without a close scrutiny of their statistics as to population, extent, etc. They would do well to take counsel of some of their inspectors, who are practically familiar with local particulars, (Denis Phelan, for instance,) in such scrutiny and examination of the distribution of dispensary districts submitted to their approval. The dispensary district formed, it is now to be placed under the immediate government of a committee, which committee is to be elected annually by the guardians from the rate-payers resident in the district, whose property is rated at the nett annual value of 30*l.*, and who, with the *ex-officio* and elected guardians of the poor, shall be the committee for the management of the dispensary. The number of the committee is to be decided by an order of the commissioners. To this body are entrusted considerable powers. In them is vested the election of the medical officers

and the management of numerous matters connected with the working of the dispensary, the decision as to the rights of claims to relief, etc.; while to the members individually, as well as to the relieving officer and warden of each division, is given the power to afford medical relief by the issue of a ticket for medicine and advice. We have now stated pretty closely the formation and general direction of the new dispensary system, under the Medical Charities' Act. Let us examine a little more closely into its working; and here we think that much has been left undone by legislation which came fairly within its province; that much, in fact, remains to be accomplished in its regulations and the practical working of its details, before we can anticipate that an end will be put to the many crying evils which have so long disgraced the present system of dispensary management, and, in many instances, made the position of the dispensary physician little better than that of a menial; to say nothing of the galling and humiliating ordeal of his candidature before he arrived to the enjoyment of this eminently lucrative and honourable office. With the Commissioners rests the power of determining the number, order, and requisite qualifications of the medical officers to be appointed for the service of each dispensary district; with the Committee of Management is vested the election of such officers; and to the guardians is deputed the right of determining the salaries payable to each: the Commissioners being fully empowered to *regulate* the amount of all salaries from time to time, as they may see occasion; they are also further empowered to remove any medical officer on sufficient grounds, and to direct the Committee of Management to appoint another in his stead; and, on their failing to do this within one month, it is lawful for the Commissioners to appoint a proper officer under their own seal. We trust that the interests of our Dispensary brethren will be duly considered by the Commission. There are some points connected with the method of election to which we shall return on an early occasion.

NECESSITY OF MEDICAL REPRESENTATIVES IN PARLIAMENT.

THE question has been often asked,—Why is it that, notwithstanding the multiplied efforts that have been made for a reform of the Profession,—the speeches, the contests, the combinations, the addresses, the manifestoes, the charters, the bills, that have from time to time engaged the sympathies, and raised the hopes of medical reformers,—nothing has yet been done towards a just and comprehensive reconstruction of our institutions? Effort has been followed by defeat, expectation soured by disappointment, and a silent brooding discontent has cast its shadow over the hearts of the philanthropic and sanguine advocates of melioration and progress. Surgical men are bad politicians. We believe most firmly and assuredly, that failure has happened because there have been few or no men in Parliament who thoroughly sympathised with the wishes, and understood the wants of the Profession. It is also our opinion, that a good Medical Bill will never be passed until a number of medical men, sufficient to represent fairly the interests of the Profession, have seats in the House of Commons. If the Profession will once more make an effort to establish their rights, and place their corporate institutions on an equitable basis, they must unite to obtain under the New Reform Bill the right to send to Parliament competent and uncompromising medical Representatives; for by such means alone can success be attained. The Tower Hamlets could, at any time, return a medical Representative, if the Profession

were so willing; and we have no doubt that small boroughs, of less extreme political views, could be found, where the Medical Practitioners would have sufficient influence to sway the votes of the principal electors in favour of their candidate.

We have been reminded by a judicious letter in last week's *Spectator*, that there are other questions of vast importance to the public, whose advancement and direction would fall peculiarly within the province of medical Representatives. Such are all questions relating to sanitary science—the supply of water, sewage, model lodging-houses, and public baths; the improvement of towns, the treatment of the insane and of the poor, all of which demand acquaintance with the principles of medical science, to secure for them sound and wise legislation. None but medical men can speak with authority on those subjects; and we are satisfied, that six or seven intelligent medical representatives, returned *directly* by the Profession, would effect more improvement on these questions in one Session than has been hitherto accomplished in a century. At present, these important subjects are entrusted to the management of lawyers, builders, military officers, and the cadets of noble families,—men who have publicly announced, that their want of knowledge is no disqualification for office, however much it may disqualify their office from being useful to the State.

We shall revert to this subject in future Articles, as we consider that it embraces the whole question of Medical Reform. In the meantime, we tender our thanks to the *Spectator* for its consideration of the interests and dignity of the Profession.

THE LONDON DISSECTING-ROOMS. —NO SUBJECTS!

THE Medical Schools of London profess to teach Anatomy; but at the present moment we have reason to believe, that, with the session nearly one quarter passed, the dissecting-rooms, which have never been filled, are now *completely empty*. The Anatomical Lecturer sadly spins out his time with the "bones and ligaments." The Demonstrators wander about in irritation and disgust.

Such a state of things is utterly discreditable to a civilised nation in the 19th century; and the remedy which has been provided by Government is to seek aid of the Inspector of Anatomy.

In a dark and filthy back chamber, in a small house in a street of questionable morality in the Adelphi, there may be seen a jocose, stout man, called the Inspector's Clerk, who receives visitors with astonishment, and treats their complaints with a laugh. If the Inspector happen to be present, there is seen an elderly, feeble man, very polite, rather positive, irritable if crossed, and utterly useless. The main thing, therefore, for all the schools to agree upon is, to get rid of the whole establishment, and procure some younger and more efficient man to carry out that which the reputation of the London Schools of Anatomy imperatively demands.

O'REILLY versus CHURCHILL.

THIS cause was tried on Thursday, the 13th inst., in the Court of Exchequer, before Mr. Baron Martin. The plaintiff, who had acted as Sub-Secretary to the late Medical Protection Society, complained of certain allegations contained in a letter signed "*Philo*;" and published in this Journal.

Mr. Humphries was counsel for the plaintiff, and Mr. Montague Chambers for the defendant. Evidence having been taken as to the history of the Society, and Mr.

O'Reilly's connexion therewith, the jury returned a verdict for the plaintiff—damages ONE POUND. COSTS REFUSED.

Let us briefly recall to the memory of our readers the circumstances in which this action originated. We must premise, that about fifteen months ago, the Medical Protection Office, of which Mr. Brearey was the Manager, and Mr. O'Reilly Sub-Secretary, was broken up in consequence of the inability of the Office to meet the demands of the members, to the amount, as it was afterwards proved upon investigation, of 2000*l*. Mr. O'Reilly subsequently started a new office, under the name of the Pharmaceutical Society, and afterwards of the Medical and General Agency Office; and as we had been instrumental in exposing the mismanagement of the Medical Protection Society, in which Mr. O'Reilly held an important office, we felt it our duty to publish a letter from a Correspondent, signing himself "*Philo*," in which the new attempt of Mr. O'Reilly was commented upon in terms of some severity. The result of this letter was that the new Office came to a speedy dissolution.

As soon as the letter in question appeared, Mr. O'Reilly's solicitor, stating that his client had suffered much pain and injury in consequence of the allegations it contained, required that the name of the writer should be given up; a proposal which was distinctly declined. The solicitor then expressed his desire that an apology might be made to Mr. O'Reilly. Having discovered that the writer was in error in respect to a particular statement, of which Mr. O'Reilly at that time, and even since at the trial, chiefly complained, we did not hesitate to insert such an explanation in the Journal as, in our opinion, ought to have removed any false impressions the erroneous allegation was calculated to convey.

Mr. O'Reilly still, however, declared himself dissatisfied, and wished for an apology of a more ample character, which we, having made ourselves fully acquainted with the facts of the case,—as our readers will observe came out in the course of the trial,—refused to give, although we were aware that such refusal, under the operation of the present imperfect law, would entail upon us considerable cost. We did not, however, conceive it would be consistent with truth, or with the character of this Journal, to publish such a statement as Mr. O'Reilly required.

We may congratulate ourselves upon the issue of this trial, as it proves to the Profession and to the world, that, in the opinion of twelve unbiased men, we could be influenced only by public motives, and by an earnest desire to benefit the Profession, in giving insertion to the letter complained of by the plaintiff in this cause. Our readers are aware that, in the present state of the Law any statement having a tendency to disparage a man's character, is considered a libel, and it is therefore almost impossible, under particular circumstances, when it is imperative on a Journalist to perform a public duty, to avoid giving publicity to such language as may be construed in obedience to the letter of the law to be a libel. It is, however, a source of the highest satisfaction to us, that in the present case, the jury, though compelled to pronounce the letter in question to be libellous, expressed their opinion of the utter worthlessness of the plaintiff's case, and of the independence and integrity of our conduct as guardians of the public and professional interest. In accordance with this view, the Jury awarded the insignificant sum of twenty shillings as a *compensation* for the personal damage sustained by the plaintiff; while the rectitude of our conduct in this question is also further certified by the Judge, who peremptorily refused to certify costs.

Our course, for the future, will be still to maintain the same independence which has hitherto characterised this Journal. Individuals or Societies who may seem to us likely to endanger the interests or injure the character of the Profession, shall receive no mercy at our hands; and we trust to receive the same sympathy and support from the Profession, in the performance of this duty, that have hitherto been awarded to our exertions.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

INDIA.

By JOHN BARCLAY SCRIVEN, M.R.C.S.,

Assistant-Surgeon H.E.I.C.S.

CASE OF STRICTURE OF THE URETHRA.

William Ross, gunner, aged 50, admitted into the Artillery Hospital at Dum Dum, July 15, 1851; a stout, muscular man, of phlegmatic temperament and dark complexion; in India sixteen years; has enjoyed excellent health all his life, with the exception of the present complaint, his own history of which is as follows:—

In April, 1842, while in Afghanistan, he contracted gonorrhœa, for which he was attended by Dr. M'Kray, and got well in five or six weeks. He used no injection. Subsequent to this, he thinks about July or August of the same year, being then in the Horse Artillery, his horse reared and fell back upon him; he was stunned at the time, but recovered in about twenty minutes. Afterwards he had considerable difficulty in passing his urine, which came only in drops; and he says he suffered pain in the lower part of the abdomen, but not along the urethra. However, next day he got upon his horse, and did his duty as usual, not being required to ride beyond a walking pace. In three or four days a clot of blood escaped from the urethra, after which the urine passed freely. He now felt himself quite well, but, in a fortnight's time, the stream of urine began to diminish in size. He applied to Dr. M'Gregor, but no instrument could be passed, nor indeed ever has been passed. The stream of urine continued to get smaller, and at last it sometimes came only in drops; but he was able to go on with his duty as an artillery man until June last year, when, getting abscess of the perinæum and complete retention, he was brought into this hospital. He now had a succession of abscesses, which were laid open, and for a long time the whole of his urine passed through these apertures, one of which remained till very lately. He went out in November, the urine passing occasionally in a small stream by the penis, but generally only in drops, and dribbling also through the perinæal fistula. He continued much the same till three weeks ago, when the fistula closed. Since this, he says, the stricture has been worse, which is the reason of his coming again into hospital. (This last assertion, however, must be taken with some reservation, as he is a prisoner.)

Present State.—Often he cannot make water at all. When it does come, it is only in drops, or in a very fine stream, about the size of a knitting needle, which is frequently divided into two, or twisted like a corkscrew. It generally takes him five or ten minutes to empty his bladder, which, however, he very seldom does completely, a little almost always dribbling from him afterwards. There is a muco-purulent discharge from the urethra.

On introducing a moderate-sized catheter, it is arrested about three inches from the orifice, and from this point, as far as can be felt externally, the canal is very much thickened and indurated. There seems to be no induration in that portion which may be felt from the rectum, nor enlargement of the prostate. There is a slight obstruction at the external orifice. General health good; tongue clean; pulse 60.

Treatment, July 16.—A small metallic bougie (a), No. 2, was introduced, and in a short time entered the stricture, penetrating into it about one inch and a quarter; it would not pass further, and was therefore left in the urethra for an hour, after which the patient made water better, he says, than he has done for nine years.

(a) The instruments used in this case were solid steel bougies, slightly conical towards their point, such as are frequently used at University College Hospital; they are numbered according to the size of the ordinary catheters, to which each one corresponds at its thickest part, the smallest being No. 2, the next size No. 4, the next No. 6, and so on.

July 17.—The same instrument, after a few minutes steady, but gentle pressure, passed through the stricture, and into the bladder. After an hour it was withdrawn, as he complained of pain in the lower part of the abdomen, and said he wanted to void the urine, which he did with more ease even than yesterday.

July 18.—The patient has passed a small clot of blood, but otherwise has not suffered from the effects of the instrument. The same bougie was introduced, and retained an hour, when he began to complain of the same pain as yesterday, and had some tendency to rigor; it was therefore withdrawn.

July 19.—Says he had a little difficulty last night in passing the urine, and that a little blood has come away. The instrument was again introduced with still less difficulty, and retained an hour and a half.

July 20.—Succeeded in passing No. 4. No hæmorrhage followed.

July 21.—Could not succeed to-day with either instrument. He has been suffering a little pain in the abdomen, and the tongue is slightly furred.

To have a fomentation.

R. Hydrarg. protochlorid., gr. iij.; ext. colocynth. comp., gr. v. M. fiat pilulæ ij. statim sumend.

11 a.m.—Has passed a good deal of blood from the urethra since I saw him this morning. To keep the horizontal position, and have another fomentation if any return of pain.

July 22.—No. 4 passed easily to-day, and was retained about an hour and a half. It produced a little pain while in the urethra; but this was relieved by fomentation.

July 24.—No. 4 at first only entered the stricture, but being left in it for an hour passed readily.

July 26.—No. 6 passed to-day; it was followed by a little blood.

July 28.—No. 6 again.

July 30.—No. 8 was tried to-day; at first it only entered the stricture, but, being left as on a former occasion, it passed readily. Water now comes in a good stream, and without any straining, but it is a little twisted.

August 1.—No. 8 again to-day.

August 3.—No. 10 to-day passed a considerable distance. At first it would not go on; but, as with the others, being left awhile in the urethra, it passed easily.

August 5.—No. 10.

August 7.—No. 10 passed again, and was withdrawn easily; not being grasped in the stricture as formerly.

The urine now passes quite freely, but the stream becomes wide and flattened at a short distance from the penis. Within the last few days he has had one or two slight attacks of retention following the passage of the instrument, but they have subsided without any trouble.

Discharged from the hospital and reported fit for duty. To come twice a-week and have the instrument passed.

August 10.—Came to-day according to orders. Stream continues free. No return of retention. No dribbling away after making water. There is still a discharge from the urethra.

August 14.—Instrument passed again to-day. Patient continues well; much the same as last time.

September 1.—About the same; says he makes water with perfect freedom.

Dum Dum, near Calcutta.

FRANCE.

SCIENCE IN BALLOONS.

MM. Barral and Bixio, whose misadventures I related in a former letter, have made a second ascent from the Conservatory. Better precautions were taken this time, and the voyage in the air was at least more agreeable, if not very profitable to science. The day had been extremely clouded, yet, nothing daunted, our adventurers went off about four o'clock p.m., and, in twelve minutes, attained a height of 6000 feet. At twenty-five minutes past four they entered a snow or rather ice-storm in the clouds, at a height of 15,366 feet, the thermometer marking 9° below zero. Soon afterwards it was at 23°; and in a few minutes more, at the height of 21,012 feet, the thermometer marked 37° below zero,—that is to say, a point nearly as low as the freezing point of mercury. It was now high time to think of descending, for the extreme cold prevented the travellers from making any kind of observation whatever. Accordingly, the balloon, as if endowed with intelligence, burst at this precise moment, and the descent of the voyagers became,

to use the official phraseology, "quite involuntary." They contrived, however, to moderate the rapidity of the fall, for the rent was not large, and took *terra firma* on the Strasbourg road, some twenty miles from Paris, without any accident. Having packed up their goods and instruments in a common cart, they started for the nearest station; but the horse was bad, the roads worse, and an unlucky upset broke many of their most valuable instruments. The register thermometer fortunately escaped, and showed that the lowest temperature had been 39° below zero, within one degree of the freezing point of mercury; yet neither M. Bixio nor M. Barral suffered much from this excessive cold.

QUARANTINE AND CHOLERA.

This question and the measures of M. Dumas I lately alluded to, have created a good deal of irritation in the South of France. The great chemist, indeed, seems to have forgotten his logic altogether in this matter; for while he condemns quarantine as being completely useless against cholera, he aggravates the enactments of the law of 1848, by ordaining, that all vessels from a country infested with cholera shall be submitted to quarantine; whereas, formerly this was only applied in cases where the disease had actually broken out during the voyage.

But, without giving too much importance to the contagious element of cholera, it may be fairly asked, Are sanitary regulations so completely inefficacious as M. Dumas represents them to be? No one would think of attempting to arrest the epidemic spread of cholera by quarantine; but many facts on record prove that the spread of the disease into a healthy locality through persons arriving from an infected one, may be prevented by proper precautions.

M. Reynaud, of Toulon, has published a very conclusive fact of this kind, which is worthy of record. In 1833, the frigate *Melpomene* arrived at Toulon from Lisbon, at which latter place cholera was raging. The *Melpomene* had lost fifteen men before she started, and more than half the crew had been attacked during the voyage. On her arrival at Toulon, where not a single case of cholera prevailed, the cholera patients were taken into the lazaretto, where four galley-slave attendants with an inspector were sent to wait on them. Four ordinary attendants were also sent on board the frigate. One of the latter was immediately attacked, and died in eight hours. On the next day, two others, who likewise died. The fourth was also attacked, but escaped. Of the four galley-slaves in the lazaretto, two died on the second day; a third soon afterwards, and the inspector on the fifth. The disease did not spread beyond the precincts of the lazaretto, and Toulon remained free from it for two years.

It seems impossible to deny the contagious property of the cholera in the above case. There was no epidemic influence at Toulon at the time, and the galley attendants were manifestly the victims of contagion. From contagion to preventive precautions the transition is logical. But in truth, the question of quarantine has now become a commercial, not a sanitary one. M. Dumas revives it merely to prevent the exclusion of French vessels from the ports of Italy and Spain. Yet there is no quarantine at Trieste, whither all importations from Egypt, the Levant, and India would be directed, were quarantine too strictly observed in France. The weapon is double-edged and cuts both ways. The Academy of Medicine here has long since promised a report on this question of contagion, but the members seem afraid of committing themselves, and their "delivery" will probably be deferred to the Greek Kalends.

CRETINISM AND GOITRE.

A Committee, appointed by the King of Sardinia to inquire into the causes, &c., of cretinism, has published a very complete and interesting report on the above subjects. Materials were abundant; for, in a population of 2,650,905 souls, Sardinia contains 5073 cretins with goitre, and 2014 cretins without goitre. The Committee shows that cretinism is almost always accompanied by a defective conformation of the cranium, with absence of muscular energy, with impotence and more or less idiocy. The cerebral mass is diminished in quantity, and in proportion to this defect are the subjects of it more or less degraded. Thus, 2165 were complete idiots, having no consciousness even of their sex, nor a single moral or intellectual quality; 3518 could speak imperfectly, but their limited intelligence was confined to objects of bodily want. Finally, a higher degree of intelli-

gence—perhaps enough to enable the individual to learn a trade—existed in 1414. Cretinism and goitre are not necessarily connected together. The Alpine population of Lombardy is extensively subject to goitre, but entirely free from cretinism, while, on the contrary, many of the higher valleys in which cretinism abounds do not present a single case of goitre.

According to the Sardinian Committee, cretinism is confined to the plains and valleys immediately abutting on the summits of the Alps. The higher we ascend into those deep, moist, and dark valleys, which seem, as it were, crushed between the granite walls which enclose them, the more completely is the human race modified and converted into a degraded being, which can scarcely be called man, inhabiting the most hidden recesses of the mountains, as if conscious of their state, incapable of moral sentiments and barely conscious of sensation.

The medical treatment of cretinism may be said to be unknown. The only attempts made in a rational manner are the praiseworthy exertions of the virtuous Dr. Guggenbühl, at Abendberg. But it is evident that nothing but sanitary measures, on a very large scale, can have any permanent effect on the condition of the cretin; and it has been established by experience, that proper attention to certain points essential to the public health is sufficient to eradicate cretinism from localities in which it prevailed. This has been clearly shown by the Committee for the two contiguous valleys of Challant and Gressonet. They both present the same conditions of locality, soil, exposure, etc.; but the inhabitants of the latter valley are free from the disease, because they are industrious, well-fed, and lodged in dry, well-aired houses. The inhabitants of Challant are a negligent, lazy set, and are subject to both cretinism and goitre in a high degree.

SCOTLAND.

UNIVERSITY OF EDINBURGH.—ADDRESS OF PRINCIPAL.

THE winter session of the University of Edinburgh, commenced on Monday, November 3. There was more than the usual show of students for a first day of meeting, and altogether the attendance appears to be considerably on the increase. Principal Lee opened the session with an address. The students present in all departments numbered between 700 and 800. There were seventeen professors present, and among the rest Professor Henderson. The Principal's address had no particular reference to medicine. He drew the attention of his audience to the great extent of error prevalent among men, urging, as a motive to exertion in the pursuit of knowledge, that the prevalence of error did not arise from incapacity to appreciate the truth, but from love of ease and habits of careless observation. He dwelt on the paramount necessity of exertion, on the part of the student, to render the instructions of the teacher available for his improvement. He pointed out, amid the variety of their studies, that while some were more directly useful for the improvement of their mental faculties, and for immediate application to the ordinary purposes of life, others served to enlarge the sphere of enjoyment, by opening up new sources of rational pleasures. He warned them against the dissipation of time in frivolous pursuits,—that there are frivolities which put on the guise of literature and of science, which, however zealously followed out, lead to no solid gain. He reminded them, that it was not less incumbent on them to attend to the moral health than to the intellectual culture. "I am fully persuaded," he said, "that there are few places in which so many young men have been associated in literary undertakings, in which there has been less ground for complaint or censure than has generally been discovered or suspected here. But still we cannot venture to affirm, that irregularities have never existed to an extent which, however limited, was always a grief to the authorities, who were reluctantly compelled to visit those acts with serious reprehension, and, on some rare occasions, with the exclusion from the privileges of our society, of some offenders against the cardinal rules of prudence and temperance, who were at one time expected to prove ornaments to the University. There are some offences which it would be an indelible reproach to tolerate. Dissipation in every form is a blot on the youthful character, which no time can ever altogether efface; ostentatious idleness, exhibiting its unblushing front within our very walls and at our gates, is a thing worthy the abhorrence of all right-hearted men, and of all who have not cast off the modesty of true wisdom. But I will not allow myself to dwell on this

nauseous theme; and I earnestly hope and pray that you all may be preserved from every snare of thoughtlessness, from every tampering with temptation, from every appearance of evil, and much more, from its active reality!

The Principal then went on to point out the various encouragements held out to the student to persevere in well-doing. He referred to some of the distinguished persons who had been educated at Edinburgh; he touched on the early age at which the students so often repair to the Scottish Universities, and, without drawing any inference from the fact, he mentioned the names of several distinguished persons who had begun their academical career at an unusually early age; among those within his own knowledge, were Sir David Brewster, Dr. Chalmers, and Lord Campbell,—Sir David having gone to College at twelve years old, and the two latter when no more than eleven. The last part of the lecture related to matters of a purely local character.

EXTRA-ACADEMICAL SCHOOL.—ADDRESS OF DR. MACLAGAN.

On the next day, Tuesday, November 4th, the winter session of the Extra-Academical School was opened with an introductory lecture by Dr. Douglas MacLagan. The attendance of students was numerous, and not a few of his medical brethren assembled to hear Dr. MacLagan's lecture—among the rest, Dr. J. S. Combe, the new President of our College of Surgeons. The lecture was listened to with the most marked attention; it may, indeed, be truly said, that every word told with effect on the audience; the topics, the tone and whole manner of the lecture being skilfully adapted to find a response in the thoughts and feelings of medical students.

After a few preliminary remarks, the lecturer proceeded to point out the two opposite views which might actuate the medical student in the conduct of his studies. He might, he said, direct his studies with his attention exclusively fixed on what was to be the business of his future life, namely, the treatment of diseases in the sick chamber; or, as too many did, he might lose sight of this great object of his studies, and think only on the very subordinate purpose of preparing himself, throughout his curriculum, for the examinations by which he was to obtain his diploma or his degree. The lecturer dwelt at some length on the vast difference in the progress of the student in real medical knowledge, according as he adopted the one or the other of these two plans of proceeding. He showed how necessarily the due preparation for the practice of the medical profession must include that which was required for passing the examinations, and, on the contrary, how completely the mere attention to what was sufficient for a successful examination was inadequate to fit a student for the serious duties which his intended course of life was to impose on him. He warned them against catching up the false ideas prevalent as to the character of the examinations to which the candidate for a diploma or a degree was subjected; he assured them that nothing but such solid knowledge as was requisite for the practice of the Profession would on these occasions be demanded of them, and called on them to give up the fear of examinations and to betake themselves to the acquisition of a real and solid knowledge of the several branches of study laid down for them in the medical curriculum.

He then proceeded to warn them against the seductions by which they might be withdrawn from the proper conduct of their studies. He pointed out the insidious nature of the steps by which they might be led into idleness, dissipation, or intemperance. On this point he dwelt at some length, and with much eloquence, concluding with an account of a student whose health had recently sunk under the effects of irregular courses, who, with his last breath, had besought Dr. MacLagan to warn his fellow-students against the danger of the steps which seem, at first sight, but a trivial departure from the path of duty.

This year presents no change in the teachers of medicine, either in the University or in the Extra-Academical School.

HEALTH OF EDINBURGH.

With the exception of scarlet fever, which, for several months, has hung about the town and neighbourhood, there is no epidemic disease prevalent here at present. Continued fever remains, notwithstanding the approach of winter, nearly at its minimum. It may be suspected, however, that it is slowly rising, as it is now nearly three years since the last epidemic may be said to have terminated, and there has been, within the last twelve months, a considerably greater number of cases of fever in the infirmary than in the twelve months preceding November, 1850.

SOCIÉTÉ DE BIOLOGIE DE PARIS.—We have great pleasure in announcing, that, at a late meeting of the Committee of this Institution, Mr. D. MacLise, the author of the "Surgical Anatomy," was unanimously elected a corresponding member of the Society.

GENERAL CORRESPONDENCE.

MR. QUEKETT AND THE *QUARTERLY* REVIEWER.

[To the Editor of the Medical Times.]

SIR,—My attention has been directed to an Article in your *Journal* of Nov. 1st, which exposes very fully the "hasty blunders" committed by a reviewer in the *Quarterly*, in his insidious attempts to disparage Mr. J. Quekett's well-known microscopical skill. The reviewer refers to a letter, addressed by Mr. Quekett to Mr. Brittan, in 1849, respecting the nature of certain bodies which the latter gentleman had just discovered in cholera evacuations, and makes the following remarks upon the discovery and the letter:—"The more careful and skilful microscopic observations of Drs. Baly, Gull, and Busk, showed the true value of the statement and its certificate; the supposed cholera fungoid proved to be the common *Uredo Frumenti*," etc. As my name has been mentioned in your Article in connexion with these investigations, I may, perhaps, be pardoned for referring to so old a story. It is also but justice to Mr. Quekett to state, that the bodies which were afterwards said to be the spores of an *uredo* were never submitted to his notice. Had the Reviewer read with any degree of attention the Report of the Cholera Sub-Committee of the College of Physicians, embodying the "careful and skilful microscopic observations" on which he seems to place so much reliance, he would have observed, that the so-called cholera bodies are referred to several distinct sources, and that the bodies which the Report states to be the *uredo segetum*, are met with only in a very limited number of cases. Now, these bodies were first described by myself, but were never submitted to Mr. Quekett's notice; nor was any account of them published until after Mr. Quekett's letter had appeared in the *Medical Gazette*. They were afterwards carefully examined by one of the highest authorities on the natural history of fungi, the Rev. Mr. Berkeley, who, in a communication to the *Medical Gazette* of December 14, 1849, states, that he is quite undecided as to their real nature, but clearly proves that they are not the spores of any species of *uredo*; an opinion which was confirmed by the subsequent admissions of Mr. Busk. So that even if Mr. Quekett had been shown these bodies, and had failed to recognise them as *uredos*, he would have been so far borne out by the most trustworthy investigators. I am, &c.

Clifton.

JOSEPH GRIFFITHS SWAYNE.

[It could hardly be expected that we, when penning our article on the Review in the *Quarterly*, should be so well acquainted with the intricacies of the disputed question as Dr. Swayne, the discoverer of the so-called *uredos*. It sufficed for our purpose, to show that Mr. Quekett had not sanctioned the opinion, that these and other bodies discovered by Mr. Brittan were the causative agents of cholera. We speak from experience when we say, that few things present greater difficulties than the examination and determination of the objects seen in the contents of the alimentary canal of animals. Not only are they exceedingly numerous, but the changes produced on them during the digestive process, are such as to render the recognition of many of them almost if not absolutely impossible. Dr. Swayne, it will be perceived by our readers, has absolutely overthrown the argument so confidently relied on by the reviewer, and thereby falsifies all his statements. The Rev. M. J. Berkeley's authority on this point is paramount as no man, either in England or on the Continent, is better acquainted with this interesting class of plants than that gentleman. We leave the purely geological inaccuracies and misstatements of the Review in the hands of Sir Charles Lyell, who is so well able to defend himself, and to castigate the reviewer as he deserves.—*Ed. Med. Times.*]

THE BIRMINGHAM INVESTIGATION.

[To the Editor of the Medical Times.]

SIR,—Will you permit me, as one of your readers, to express the gratification which I feel in noticing your remarks upon the recent medical investigation at the Birmingham Hospital. I am greatly deceived, if your article will not render service to the Profession at large and to the poor creatures who frequent our medical charities; and it will be especially welcomed by the members of the Medical Profession in Birmingham. It is quite possible to disconnect Mr. Gutteridge from the charges made against

Mr. Baker; and you do justice to the case, by allowing Mr. Baker's transactions to stand alone, and upon their merits. Mr. Gutteridge, by his persevering opposition to the "doings" of the constituted authorities of the hospital, medical and lay, has earned justly or unjustly an *ill* name. Mr. Baker but a few years ago was a pupil of a very respectable surgeon at Birmingham, and has long been a *protégé* of the most distinguished surgeon of which Birmingham can boast, and thus has obtained, deservedly or otherwise, a *good* name. Your readers will, therefore, presume, that the Committee of Investigation, viz., the ordinary weekly Board of the hospital, would be in no wise indisposed to doubt Mr. Gutteridge's statements, and to accept Mr. Baker's explanations; and yet this partial Committee could not but find the conduct of Mr. Baker *injurious*, in having neglected, at least, if not refused and contemned the decorous and time-honoured practice of calling a consultation of his surgical colleagues; and in this the community, medical and otherwise, will heartily concur. It is highly probable, that Mr. Wood, the old and long-tried servant of the charity would have given his veto, had such a consultation been held, and this would not have forwarded the views of the gentleman concerned, who has not had a tithe of his practical experience. But this Committee was not a Board of medical men, and there being some discrepancy in the opinions of the medical witnesses as to the propriety of the operations, it was bound to give Mr. Baker the benefit of the doubt, and, having done so, consistency required that it should seek to regain for him the confidence of the Governors. But you, sir, have summonsed Mr. Baker to a medical bar, and with the exception of a few needy and reckless men, your reprobation of ovariectomy, and of such ovariectomy, will be echoed by every member of our Profession. One cannot but shudder at the idea of needlessly placing the existence of a young woman in the utmost possible peril. Does life bear no proportion in value to the empty fame of a surgeon? Are there no laws to protect ignorant and confiding young women from the knife and fingers of aspiring operators? If not, thank God, we can appeal to public opinion; and I hope you will not cease to expose such atrocities, whatever may be the verbal verdict of a Board of partial and lay investigators. I enclose my card.

And am, &c.

Birmingham.

ANTI-SNOB.

[To the Editor of the Medical Times.]

SIR,—In your leading article of last week, after making various remarks on the late investigation at the General Hospital in this town, you give a portion of the evidence of one of the witnesses, which runs as follows:—"That if the books of this hospital had been well and truly kept, you might have known the amount of patients who died from amputation; but I can say, that from amputations of the thigh, 7 out of 10 die." Now, I am not prepared to deny this statement as far as it relates to the witness; but I am perfectly ready to deny that such is a fair sample of Birmingham surgery.

Notwithstanding remarks such as these, I can moreover maintain, that the mortality after capital operations in Birmingham (or at least in some parts of Birmingham) does not average that of many other places; and, as proof of this, allow me to state, that during the time I have had the honour to be resident surgeon at the Queen's Hospital, now much above two years, we have only lost six patients after any description of operation.

Besides this fact, the statistics of the hospital show, that out of nineteen capital amputations performed during the above time, only one patient was lost, and that patient a navigator, who had met with a severe accident, was conveyed some miles to the hospital, and died during removal of the leg; likewise, out of six amputations of the thigh, all were discharged well.

After this statement, you will doubtless acknowledge the haste of your sweeping remarks on the evidence of the witness: "This may be Brummagem surgery. It is unknown elsewhere." I believe the latter sentence to be true, but in a totally different sense to the one intended; for where, let me ask, will you find a lower rate of mortality than the statistics of this hospital show to be the case? I am, &c.,

W. J. MOORE,

Resident Surgeon to the
Queen's Hospital, Birmingham.

[It was Mr. Hodgson, no small authority in Birmingham, who provided the statistics of "Birmingham surgery." We rejoice to find the Queen's Hospital disclaim the imputation, and our Correspondent, Mr. Moore, so ready to defend his hearth.—*Ed. Medical Times.*]

HOMŒOPATHY, AND THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times.]

SIR,—Allow me to suggest, through your columns, the paramount importance of affording to every Fellow of the Royal Medical and Chirurgical Society an opportunity of signing the excellent requisition to the Council, praying that body to afford to the Society an opportunity of repudiating homœopathy. The names and addresses of the requisitionists will of course by-and-by be published; and, if the step which I suggest be adopted, the list will be valuable, as indicating, in an authentic form, who of the Fellows are on the side of the Profession, and of a repudiation of the quackery now skulking within our shelter, and who also are favourable to the supine policy and lax behaviour of the Colleges. This is a point upon which General Practitioners, both in town and country, are very impatient to be well informed; and it would be wrong to allow to slip the present opportunity of affording it. I have troubled you with this note, because I learn that the document is lying at an inconvenient place, and has not yet been taken to the residences of any of the Fellows.—I am, &c.

London.

ARGUS.

THE HOMŒOPATHS AND MEDICAL ETHICS.

[To the Editor of the Medical Times.]

SIR,—Now that you are helping, in so efficient a manner, the well-wishers of the Medical Profession, to expose and exterminate that disgrace to and stigma on medical science, homœopathy, by those high-toned and powerful Leading Articles which have from time to time, and especially recently, appeared in the *Medical Times*, it occurs to me that the movement ought to become universal amongst the Profession. We have some of its abominations, (if any of its creditableness,) in Birmingham; and I imagine it would be difficult to say where it is not, for it is growing, and becoming bold, like all quackery does when it is encouraged by a portion of the public.

I beg to transmit you a report of a Provident Society, annexed to which you will see there are many medical officers; amongst them is a professed homœopath, who has been connected with the Society a considerable period. Now, it occurs to me, that medical men have often themselves to blame for a good deal of the success which has attended the followers of this system. Here is a professed homœopath placed side by side with nineteen legitimate practitioners, and practising upon the public, therefore, with all the authority which such a body of medical men would give in a public sense, and with that too which must be exercised by a very large institution.

The fact of the connexion of this homœopath with this body came to my knowledge six months ago for the first time; and I could scarcely believe that so many medical men, two or three of whom are my personal friends, could for a moment tolerate such a connexion. Now, I am sure, these nineteen medical men are capable of much better things; and could, with a breath, if united, expel the offensive and renegade practitioner, and with little trouble. I had once thought of writing an appeal to them, and request you to publish it; but, possibly, a few words from your able pen, spoken from a distance, as it will seem altogether free from selfish feelings of every sort, would be more effective. May I take the liberty of suggesting and requesting such a course on your part?

Birmingham.

I am, &c.,

AMICUS.

[The names of the medical men referred to in our Correspondent's letter, are as follow:—Messrs. Hoskins, 128, Broad-street; Dufton, Temple-street; Bracey, Bristol-street; Knowles, St. Paul's-square; Archer, Deritend; S. Chavasse, 45, Whittall-street; Meek, Gosta-green; Williams, Newhall-street; Hadley, 5, Prospect-row; Lawrence, Great Hampton-street, *Homœopath*; Downes, Handsworth; Horton, Bradford-street; Onion, Jennens'-row; Baker, High-street, Bordesley; Harmar, Newhall-street; Simons, Masshouse-lane; Badger, Bromsgrove-street; J. G. Sproston, Snow-hill; Roden, St. Paul's-square; Pasquin, Great Hampton-row; Davis, 92, Ashted-row.

We are quite sure they will see that it is necessary to act in the manner suggested by our Correspondent. The principle of non-intercourse and non-co-operation with homœopaths must be carried out without reservation. It is as binding on the surgeons of a Pre-

vident Club, as it is on the members of a Royal College. The Profession must act unanimously in this matter, or the demonstration will be useless. If the practitioners of Birmingham do not at once make a stand against this insidious quackery, the time will come when they will regret their inertness or their indifference, and will strive in vain to recover the 'vantage ground they have unnecessarily surrendered.—Ed. *Medical Times*.]

HOMŒOPATHIC "NIBBLERS."

[To the Editor of the Medical Times.]

SIR,—I understand that a list of "nibblers" (a) is in circulation, based upon the causes assigned by certain gentlemen for not signing the anti-homœopathic requisition to the Council of the Royal Medical and Chirurgical Society. Can you not get hold of it, and publish it *pro bono publico*?—I am, &c.

RUSTICUS.

[When the requisition has been signed and delivered to the Council, we shall be happy to publish the names of the requisitionists. Everybody may then draw their own conclusions from the list.—Ed. *Med. Times*.]

CORONER'S COURTS AND MEDICAL MEN.

[To the Editor of the Medical Times.]

SIR,—If the recent proceedings of the Coroner for the Western division of Suffolk do not render him amenable to some higher authority, or are in accordance with the law respecting medical witnesses, then I am sorry to find your efforts on behalf of the Profession, in the memorable Hounslow inquest cause, and Lord Denman's remarks in delivering the unanimous decision of the Court of Queen's Bench on that subject, are perfectly futile, and medical men are left as much as ever at the mercy of Coroner's prejudices. But, Sir, I cannot imagine such a state of things can be permitted to exist in a country boasting of its justice and protection to the meanest subject; and it is with these views that I address you, who have always stood forward as the unflinching advocate of the Profession, for advice.

The facts are these: I was called to attend, as parish surgeon, a girl, who was stated to be suffering from severe pain in the body and diarrhœa, then prevalent in the neighbourhood. Immediately upon seeing her I felt convinced she had had a miscarriage, and was then labouring under peritoneal inflammation. I treated her for this disease, visiting her twice the next day, three times the following, and again on the one she died; and I conceive, in the absence of any circumstances to lead me to suppose her illness had been brought on by other than accidental causes, I should not have been justified in withholding a certificate which stated the cause of death to be "peritonitis."

After the funeral, a rumour became afloat that she had taken something to produce abortion, whereupon the Coroner, without in any way communicating with me, orders a *post mortem* to be made by a surgeon who never saw the deceased, and holds an inquest two days afterwards; an adjournment takes place for eleven days, when the inquiry terminates without my having been summoned, the Coroner well knowing that I was the person in attendance; and, although no imputation whatever was attempted to be cast upon my treatment of the case, the fact of my being virtually excluded from the investigation might lead to such a supposition, and thereby operate injuriously to my professional reputation. What transpired at these sittings of course I can only glean from reports; and although the state of the uterine organs does not appear to have been inquired into, save being found in the intestines, (together with the now very general admission in the village, that she actually did miscarry with twins a short time before,) goes, I think, very far to prove the correctness of my diagnosis, a case being recorded in Beck's "Medical Jurisprudence," page 836, where a female died after taking this shrub to produce abortion, and upon dissection was found extensive peritoneal inflammation.

I pass over the observations I am informed the Coroner thought proper to make with reference to myself in my absence, as unworthy of remark; but without wishing in the least to set up my own private feelings as a criterion, I venture to assert, proceedings

(a) This is Dr. Murphy's name for those who pander in physic to fashionable fools.

such as these are but little calculated to command respect either for the person of the Coroner or his court.

I am, Sir, &c.

BENJAMIN BAKER.

Thurlow, near Newmarket.

[A Coroner is not legally required to summon the "medical man in attendance" to make a *post-mortem* examination of a deceased; but it is but courteous to him, and it would be more conducive to a satisfactory result, that such a course should be adopted; as, presupposing the competency of the medical attendant, he is better qualified to supply any deficiency in the demonstrative proof by collateral evidence, and, having had his attention directed to certain lesions during life, is more likely to discover the cause of death in doubtful cases than a stranger, who may not know what to look for, and perhaps not how to find it. The guesses of such an investigator must be suggested by mere rumour, and he may, or may not, enter upon the right course of inquiry.]

Although the coroner is not called upon by law to summon the medical attendant, yet he cannot refuse to receive his evidence when offered. He may deprive the medical attendant of his fee, but he cannot deprive him of the right of being heard. This point was decided by the Hounslow Cause.—*Ed. Medical Times.*]

SCOTCH DIPLOMAS.

[To the Editor of the Medical Times.]

SIR,—I was surprised to notice, among your Answers to Correspondents, in your number for Nov. 1, the following:—

"Mr. Wm. Farrage, Rothbury.—A practitioner cannot recover on a Scotch diploma. The Glasgow diploma confers the right to practise only in a very circumscribed area around that city."

The latter clause is absolutely incorrect. The licence of the Glasgow Faculty of Physicians and Surgeons confers the title and privileges of Surgeon throughout the empire, the same as that of the Royal College of Surgeons of Edinburgh. The mistake as to the diploma of the Faculty being only available within a very circumscribed area round Glasgow, may have originated in the circumstance that, till the date of the late Act of Parliament, (a copy of which is enclosed,) consolidating their privileges, the Faculty possessed exclusive corporate privileges over Glasgow and the four neighbouring counties, comprising a third part of the population of Scotland,—no very circumscribed area you must admit,—within which none other than their licentiates could legally practise; but they never were restricted to these bounds, any more than the licentiates of the Royal College of Surgeons of England were to London and its vicinity. These corporate privileges the Faculty voluntarily resigned, as will be seen from the Act,—perhaps the first real step in advance towards that desirable state of things, so ardently looked forward to by the Profession, where equal acquirements will entitle to equal privileges throughout the British dominions.

As to whether a practitioner can recover under a Scotch diploma, which only confers surgical privileges, I do not exactly know; but this I know, that our diploma entitles to hold surgical situations under parochial boards, etc., in England and Ireland, and qualifies for the Army, Navy, and East India services, the same as the diploma of the Royal College of England. Of the privileges of the London Apothecaries' Company, of course we in Scotland are not well qualified to judge; but presume that these privileges must interfere with the right of suing for the recovery of fees, in regard of a licentiate of the Royal College of Surgeons of England, as well as of a Scotch licensing body.

It would oblige me much, could you, in your own way, and on as early an occasion as possible, correct the statement above referred to, as being calculated to do much injury to that body over which I have the honour to preside.—I am, Sir, &c.

JAMES WATSON, M.D.

President of the Faculty of Physicians
and Surgeons of Glasgow.

Glasgow Faculty Hall.

[We think the best way to rectify the misstatement, is to give insertion, as we have done, to Dr. Watson's letter.—*Ed. Med. Times.*]

ELECTRO-PHYSIOLOGY.

[To the Editor of the Medical Times.]

SIR,—In your last Number, in a notice on Electro-Physiology, when speaking on M. du Bois-Raymond's experiment regarding

the production of an electric current by voluntary muscular action, it is said, "Any one may test this fact with a galvanometer."

This is very far from being true.

If the galvanometer is exceedingly delicate, an electric current may be evident. All that is required is a most delicate galvanometer; but then comes the real difficulty, which lies in proving, that this current is caused by the voluntary development of electricity, and by nothing else.

M. du Bois-Raymond's note, of March 25, 1850, to the French Academy, and the report made on July 15, 1850, though most important, have not effected the final solution of this question. Though the third and forthcoming volume of M. du Bois-Raymond's splendid and laborious work may remove the doubts and difficulties which still surround this experiment, yet, at least until the author publishes his final account of the experiment and its explanation, the safest course will be to suspend your judgment.

I am, &c.

H. BENCE JONES, M.D., F.R.S.

DR. THOMSON'S "INVALID LIFTER."

[To the Editor of the Medical Times.]

SIR,—I am afraid, that, from the absence of a woodcut, few of your readers will be able to follow the description given in your last Number of Dr. Thomson's (of Stratford-on-Avon) "Invalid Lifter." Dr. Thomson has been kind enough to lend me one of the machines for three or four weeks, and it is now in No. 4 Ward, University College Hospital. As I am anxious that a very useful invention should be more generally known, I shall be happy to show the "lifter" to any one on my visiting-days, Mondays, Wednesdays, and Fridays, at three o'clock; or if this hour be inconvenient, Mr. Clover or Dr. Burder will show it at any time.

I am, &c.

E. A. PARKES.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. P. M. LATHAM, President.

Dr. Peacock presented a specimen of

OBSTRUCTIVE DISEASE OF THE AORTIC VALVES

DEPENDENT ON

MALFORMATION—SMALL ANEURISM IN THE VENTRICULAR SEPTUM.

The subject of this case was a man, forty years of age, who was admitted into St. Thomas' Hospital, under Dr. Peacock, in July last. He had been ailing for eleven weeks, but before that time had never suffered from any serious disease or injury. His illness commenced with slight rheumatism and dyspeptic symptoms, and to the latter were superadded, soon after his admission, considerable difficulty of breathing and pain across the epigastrium. A loud and harsh systolic murmur was audible over the upper part of the sternum and in the præcordia, and no second sound could be detected. The difficulty of breathing and epigastric pain increased, and he became the subject of double pneumonia, under which he sank about three weeks after he entered the hospital. The left ventricle of the heart was somewhat hypertrophied and dilated, and the aortic valves were very extensively diseased. The contiguous sides of the right and posterior valves were united so as to produce one large valve, imperfectly divided on its upper surface, and the posterior and left valves were also partially adherent. The fusion of the valves was evidently of very old date, and most probably congenital. At the base and rather to the left side of the right valve, there was a small aperture, leading into a sac situated in the substance of the septum of the ventricles, and which formed a slight protrusion into the right auriculo-ventricular aperture. A second and larger aperture, leading into the same sac, was situated in the space between the right and posterior valves, and a communication also existed between it and the right sinus of Valsalva, but this was probably the result of decomposition after death. The sac was of sufficient size to lodge a hazel nut, and was lined by a distinct membrane, but it did not contain any laminated coagula. There were vegetations of recent date in the aortic and mitral valves, and in the endocardium of the left ventricle. Dr. Peacock regarded the case as one of congenital malformation of the aortic valves, and he supposed that at the time the slight rheumatic symptoms occurred, some weeks before the admission of the patient into

the hospital, the valves had become the seat of endocarditis, and thus the obstruction at the aortic orifice, originally only slight, became much aggravated, and probably led to the formation of the small aneurism. Cases very similar in several respects have been placed on record by Dr. Hope and Dr. Thurnam, and more recently by Dr. Todd.

Dr. Peacock presented a specimen of

OBSTRUCTIVE AND REGURGITANT DISEASE OF THE AORTIC ORIFICE.

This specimen was removed from a female, aged thirty-three, who first came under Dr. Peacock's care, at St. Thomas' Hospital, in May, 1850. She stated that she had been first seized with the symptoms under which she laboured when in an advanced stage of pregnancy six months before; and that she had never had rheumatism, inflammation of the chest, or any other disease to which her illness could be ascribed. She suffered from palpitation, great difficulty of breathing, and a severe pain in the epigastrium, extending thence to the spine, and down the left arm. A loud systolic murmur was heard over the upper part of the sternum, and this was succeeded by an imperfect second sound, terminated by a diastolic murmur, which was most distinct at the lower part of the sternum. While in the hospital she improved, so as to be able to resume her usual avocations, and Dr. Peacock did not see her again for some months. She then applied at the hospital as an out-patient, and stated she had been pretty well till she had again become pregnant, and her breathing was then extremely difficult. She died about two months ago, three or four days after her confinement. The heart was found very large, and the left ventricle especially was much hypertrophied and dilated. The aortic orifice was considerably diminished in capacity, the outlet measuring in circumference only twenty-two French lines; and, at this point, there was a very considerable deposit of atheromatous material under the lining membrane. The inlet of the orifice was relatively large, measuring thirty-one lines. The valves were diseased; the left and posterior valves being much thickened, and their sacs very shallow; while the right valve, together with the corresponding sinus of Valsalva, had undergone considerable dilatation, and presented, at its most dependent part, an orifice by which a column of fluid freely regurgitated from the aorta into the left ventricle. The case afforded a good example of one of the modes in which alterations in the relations as to capacity of the inlet and outlet of the aortic orifice operate upon the valves, so as to occasion their incompetency.

Mr. Pollock exhibited

SECTIONS OF TWO LARGE MASSES OF HAIR AND STRING,

which had been removed from the stomach and duodenum of a young woman, after death. M. E. N., aged 18, came under Dr. Blakeley Brown's care, on 7th August, 1849. She had always been delicate, but more so during the last year. She appeared sickly and childish. The bowels acted irregularly, and were generally relaxed. The catamenia had appeared only once, about ten months before the above date. Appetite was variable, and she frequently vomited after meals. For several months she had been suffering from a tumour, apparently about the size of a large orange, situated in the epigastric region, which projected slightly, but was not painful on gentle pressure; apparently solid, and very slightly moveable. It had very gradually increased. She complained principally of general debility, and of the inconvenience from, and of the occasional pain about, the tumour. Under treatment she improved for about six weeks. On the 30th of September, she complained of much pain in the region of the tumour, which had come on after a severe attack of vomiting. This was relieved for a short time, but recurred the next day. Soon afterwards she became collapsed and died. *Post-mortem Examination.*—The cavity of the peritonæum contained several ounces of purulent serum, and the general surface of the intestines afforded evidence of recent peritonitis; there were also some older adhesions. On opening the stomach and intestine, the masses of hair and string exhibited were found in these cavities. That from the stomach is moulded to the shape of that viscus, which was much dilated; it occupied the larger portion of the greater extremity, a narrowed part projecting into the pylorus; very little solid food could have been taken latterly into the stomach, and little else than fluid would have passed by this mass into the duodenum. The mass consisted chiefly of long black hair and pieces of string rolled up and matted together with ingesta. It now measures, when dry, 6 inches in length, $3\frac{1}{2}$ in depth, and $2\frac{1}{2}$ across; but was much larger and heavier when first removed. The second mass has taken the shape of the lower portion of the duodenum and commencement of the jejunum, which were considerably

dilated. This mass consists of much less hair, but a very large proportion of string; it is 14 inches in length, $2\frac{1}{2}$ inches in depth, and $2\frac{1}{2}$ broad in the thickest part. From the history of the case previous to the attendance of Dr. Blakeley Brown, it appears that she had been observed to put hairs into her mouth when only three or four years of age, but that her habits had not attracted any particular attention of late.

Dr. Risdon Bennett presented a specimen of

DISEASED AND MALFORMED AORTIC VALVES.

A butler, aged sixty, was admitted into St. Thomas' Hospital, under the care of Dr. Bennett, on the 30th September. For six months he had been the subject of diarrhoea and other symptoms of functional derangement of the digestive system. The last week he had had cough. He was thin and haggard in look. He referred all his uneasiness to the epigastrium and belly, which was swollen, but no fluctuation could be detected. The respiration was quiet, but he had cough, attended by tenacious, slightly sanguineous sputa; the skin was soft and cool; the pulse very feeble, somewhat quickened, and the tongue thickly coated with a moist brown fur. The resonance of the chest was much impaired on the right side, posteriorly below the scapula, and anteriorly beneath the clavicle; there was general deficiency of respiratory murmur, with small crepitation here and there. Subsequently the dulness increased very much, and the sputa became much more abundant and sanguineous, preserving the same tenacious character. He continued, however, to complain almost entirely of the uneasiness of the belly, and the respiration was never laboured nor much quickened. The heart's action was not attended by any bruit, nor except very occasionally was there any irregularity. The extent of cardiac dulness was considerably increased.

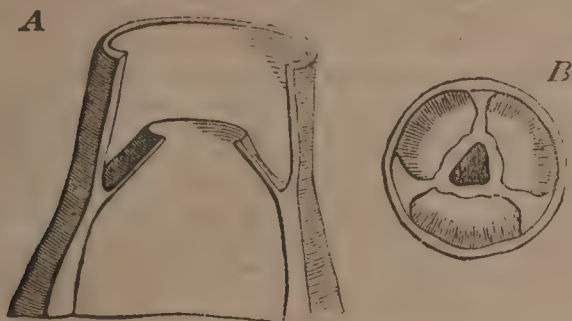
Post-mortem.—The lungs were emphysematous, and contained masses of coagula. The heart was much enlarged; the left ventricle thickened, dilated, and distended with coagulum. Besides the more ordinary coagula, there were entangled amongst the carneæ columnæ numerous small semi-organised clots, some of which were softened internally into a puriform fluid. The aortic valves were only two in number, and much diseased. The most anterior was extensively ossified, especially about its free margin, which, from one extremity to the other, formed a nodulated mass of bony matter about a quarter of an inch in thickness. It was perfectly rigid, and blocked up one half of the aortic orifice; the openings of the two coronary arteries were placed above this valve. The posterior valve was ossified, but to a less extent, the greatest amount being at the base, where were several large nodulated masses. The valve could move slightly, and was evidently capable of closing the orifice, though not of flapping back against the aorta, in which direction it could only move so far as to leave a narrow chink for the passage of blood. In the angle between the two valves to the right side was a small rudimentary third valve. The walls of the right ventricle were thicker than natural, and its cavity distended with coagulum. The auricles also were filled with coagulum. All the valves except the aortic were healthy. The only other morbid appearances worthy of notice were found in the lungs. These were very emphysematous, and contained large masses of pulmonary apoplexy.

Dr. W. T. Gairdner observed, in reference to this case, that he was convinced, from an examination of various specimens in different museums, of disease affecting so called congenital malformed aortic valves, that the presence of two in the place of three valves, in many of the cases, was due to disease and not to malformation, the disease being so situated as to separate from the walls of the aorta the conjoined attachment of two valves which then constitute but one large deformed valve. A similar malformation may result from accidental injury, as illustrated in a case reported by Dr. Quain, in the first volume of the Society's "Transactions." In progress of time, the traces of the original injury in these cases are as it were blotted out, partly by the cicatrization of the arterial wall, and partly by the increasing deformity of the valves, which become contracted and thickened. In many of the preparations, he (Dr. Gairdner) had found traces of the ulceration sufficiently distinct; in others they were less evident, amounting merely to a small white scar, situated midway between the two insertions of the larger valve; in a third series, no such evidence of laceration could be found, and he was willing to admit that some of these were probably real instances of congenital malformation. Most of these cases are examples of very old disease, in which the traces sought for, if they ever existed, might have disappeared. On the other hand, the congenital malformation usually presents (as remarked by Dr. Peacock) distinct traces of a smaller third valve, which is of course absent from those malformations which result from disease.

Dr. Peacock made the following report on

MALFORMATIONS OF THE SEMI-LUNAR VALVES.

The specimen exhibited by Dr. Bennett affords an example of the least frequent form of malformation by defect of the aortic valves. The valves are only two in number, and have interposed between them a small sac, forming the rudiment of a third. The circumference of the aortic orifice measures thirty-six French lines, and, of the two valves, that situated anteriorly measures sixteen lines in width; the other, or posterior, measures eighteen lines, and the small sac is two lines in width and three in depth. Both coronary arteries arise from the same sinus of Valsalva, that corresponding with the anterior valve, and the two vessels are much closer together than usual, being only twelve lines apart. From these observations it would appear, that the small sac must be regarded as the analogue of the right semi-lunar valve, the development of which, and of the corresponding portion of the circumference of the aorta has been arrested, so that neither has the valve assumed its proper dimensions, nor acquired its natural relations to the coronary artery. From having had my attention directed to this case, I have been led to examine the various specimens of malformation of the semi-lunar valves of the aorta and pulmonary artery, contained in the museums of the Royal College of Surgeons, St. Thomas', St. Bartholomew's and Guy's Hospitals, and in my own collection, and the cases of which I have taken notes amount to 50 in number. Of these, 41 are specimens of defective, and 9 of excessive development. Of the 41 cases, in 17 the valves have subsequently become the seat of such extensive disease, that their original condition cannot be easily or clearly ascertained, but of the remaining 24, with the exception of 3 or 4, which are so placed that they cannot be fully seen, all afford evidence that the orifices had originally been provided with three distinct valves. 1. In some of the cases the aperture is defended by a single valve, forming a diaphragm, protruded forwards in the course of the circulation so as to assume a funnel shape, and which displays on its upper side three distinct septa or fræna, dividing the same number of sacs, indicating its former divisions into three separate valves. This condition, though not often seen at the aortic orifice, is not infrequent at the pulmonic aperture. In the following diagram, *a* shows this condition of the valves, as seen from the point when divided in *b*, the united valves seen from above.

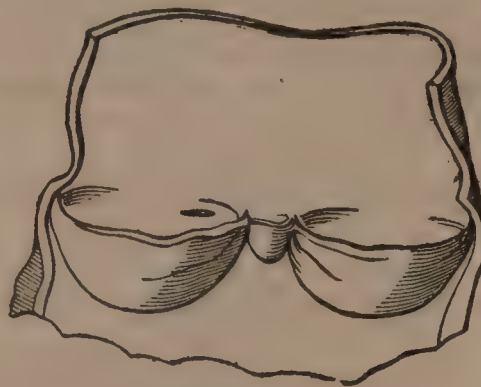


2. In a second, and by far the more frequent form of malformation, there exist two valves, and the defect in the number is apparently due to the adhesion of the contiguous sides of two of the valves, so that, in the process of development, they have become blended into one; the original separation being, however, still indicated by the disproportionate size of the united valve, by the existence of a septum dividing it more or less completely on the upper or aortic side, and generally also by a slight sulcus running across the ventricular aspect of the valve, from its attached margin to the free edge, and terminating in a small notch.



3. Of the third form, that in which the original triple condi-

tion of the valves is indicated by a small rudimentary valve interposed between the two others, Dr. Bennett's case affords the only example which I have seen.



In addition to these forms of malformation, cases do occasionally occur, in which the aortic orifice is found to be provided with only two valves; the deficiency being however occasioned by the adhesion of two of the valves together from disease after birth, and the subsequent ulceration or atrophy of the septum so formed, or by the breaking down of the angle of attachment of two of the valves. Of the former description, a preparation in the Museum of Guy's Hospital appears to afford an instance; and the latter condition existed in a specimen exhibited by Dr. R. Quain at the first meeting of the Society. In repeating that all the cases which I have examined, presented some sufficient proof of the originally triple form of the valves, I do not wish to extend the inference too far, and to deny that cases may occur in which no such evidence can be detected. For if, as we frequently see, especially when the defect is at the pulmonic orifice, and co-exists with other malformations, the two valves may be nearly of equal size, and the indications of the former division of one of them may be only traceable on very careful examination, or, if when a rudimentary valve exists, it may be so small and imperfect, as in the case exhibited by Dr. Bennett, we can readily understand that in some cases all traces of the original condition of the valves may disappear, though the mechanism of the malformation may have been precisely similar.

The term malformation is, however, as strictly applicable to the former class of cases as to the latter.

Of the forty-one cases of defect in the number of the valves, in nine the malformation existed at the pulmonic orifice, and in thirty-two at the aortic. In one case there were only two valves, both at the aortic and pulmonic apertures.

Defect in the number of the pulmonic valves, is generally attended with other serious malformations; and, consequently, is rarely seen except in young persons. When, on the contrary, the aortic valves are deficient in number, it is comparatively rare to find other co-existent malformation, and the persons in whom it is found are generally adults. This difference is explained by the greater relative importance of the pulmonic orifice during foetal life. No material deviation from the healthy state can then occur without the natural development of other parts of the heart being interfered with; for, if there be any obstruction, or the orifice be incapable of adapting itself to the increasing current of blood which it is required to transmit, those channels necessarily remain open which are natural only at the earlier periods of foetal life. The aortic orifice, on the contrary, is comparatively unemployed during foetal existence; and this, though it may conduce to the occurrence of cohesion of the valves, renders that condition of much less importance, so far as the development of the rest of the organ is concerned. When, however, the valves are defective at either orifice, the malformation, though unconnected with any other imperfection in the heart, is a powerful predisposal to disease. Of the forty-one cases referred to, seventeen presented very aggravated disease of the valves, and, in very few of the others, could they be regarded as healthy.

I have before stated, that of the fifty cases of malformation of the semi-lunar valves which I have examined, nine were examples of excessive development. Of these, eight were cases in which the pulmonic valves were in excess, and in one only was there more than the natural number of valves at the aortic orifice.

1. In some cases the excess of the number of valves seems to be due to the division of one of them into two—such valves being smaller in size than the others.

2. In other cases there are three valves of nearly equal size, with a smaller supplementary valve interposed between two of them.

3. Occasionally the aperture is provided with four valves, gradually decreasing in size.

4. In yet other cases, there may be four valves of nearly equal size and natural form.

In the two first forms it is not unfrequently found that the division between the two portions of the one valve is not complete, or that the smaller supplementary valve communicates by an opening with one of the others; and it may be supposed, that the excess in the number of the valves is due to the free fold of one of the valves having become adherent to the side of the aorta; but in the other cases it is not easy to offer any satisfactory explanation, so long as we are so imperfectly acquainted with the mode in which the semilunar valves are developed.

MEDICAL SOCIETY OF LONDON.

DR. MURPHY, President, in the Chair.

THE TANNATE OF ALUMINA.

Mr. C. H. R. Harrison introduced to the notice of the Society a specimen of the tannate of alumina, a therapeutic agent which he had found most successful in the treatment of obstinate cases of gonorrhœa and gleet, and which had effected cures after the usual injections of nitrate of silver, acetate of lead, sulphate of zinc, and others had failed. He had been induced to give the tannate of alumina a trial, on the recommendation of a medical friend, who, however, had not used it very extensively himself. The first case in which Mr. Harrison employed it was that of a gentleman who had had a gonorrhœal discharge for many months, and in whom every means had failed, although the most approved injections had been had recourse to. A solution of five grains of the tannate of alumina to the ounce of distilled water, used as an injection before going to bed, effected a speedy and complete cure. The only other case Mr. Harrison would cite was, that of a gentleman in the city, who had had a gleet (the sequela of a gonorrhœa) for eleven months. He was cured in the course of a fortnight. These two cases are fair specimens of the benefit which it appears this astringent is capable of affording. Mr. Harrison did not assume for a moment any originality of introduction; but, not knowing of any published account of it, he thought it advantageous to bring it before the notice of the Society and the Profession, and hoped, in the hands of those willing to try it, it would prove as satisfactory as it had done in the cases in which he had used it.

Mr. Dampier had already tried this preparation as an injection in gonorrhœa and gleet, but did not derive any special advantage from its use.

EPIDEMIOLOGICAL SOCIETY.

The following address was delivered by the President (Dr. B. G. Babington) on opening the session of the Society:—

GENTLEMEN,—When I had the honour of addressing you from this chair, at the first ordinary meeting of the Epidemiological Society, in December last, I spoke of the origin of the Society, and of its progress up to that period.

Part of the duty I have to perform on this the commencement of our second session, and, happily, under the same time-honoured and, to us, hospitable roof, is, gentlemen, to give you a brief account of what the Society has done since it held its first ordinary meeting here. A statement of this kind will not be without its utility, in showing to yourselves and others, that the tide of our undertaking is flowing on continuously and prosperously, as measured by the interesting matter brought forward at our monthly meetings, and, moreover, that we have an undercurrent, at least equally strong, in the more quiet but no less efficient working of our various committees.

On the 2nd of December, 1850, after I had concluded my address, a paper, by Dr. Bryson, "On the Infectious Origin and Propagation of Cholera," was in part read by that gentleman.

At the second ordinary meeting (January 6, 1851) the reading of Dr. Bryson's paper was concluded.

At the third ordinary meeting (February 3), a paper "On the Origin and Progress of Cholera in Guernsey," by Dr. Elliott Hoskins, was read by Dr. Gull.

At the fourth meeting (in March), Dr. M'William read a paper "On the Recent Yellow Fever Epidemic in Brazil."

At the fifth meeting, (April 7,) Mr. R. H. Cooke was

present to read a paper "On the Epidemic Mental Diseases of Children;" but the meeting having resolved that the discussion on yellow fever should be continued during that evening, Mr. Cooke kindly consented to postpone the reading of his paper until the meeting in June.

At the sixth meeting of the Society, (May 5,) the discussion on "yellow fever" was resumed, and, having continued longer than was anticipated, Dr. Snow, who began a paper "On the Mode of Propagation of Cholera," was obliged to defer its conclusion.

At the seventh meeting, (June 3,) Mr. R. H. Cooke read his paper "On the Epidemic Mental Diseases of Children," founded on Hecker's two pamphlets,—the one entitled, "Children's Pilgrimages," and the other "Sympathy;" after which Dr. Snow finished his paper on Cholera.

At the eighth meeting, (July 7,) Mr. Hunt read a paper "On the Uses and Limits of Statistical Science as applied to the Study of Epidemic Diseases."

At the ninth and last meeting of the Society, (Aug. 4,) a paper "On the Nature of Epidemics," by Mr. Grove, was read by Dr. M'William.

The reading of each of these papers was followed by a discussion; and reports and abstracts of all the papers read at the Society's meetings have appeared in the London and Provincial Medical Journals.

The paper by Dr. Bryson, "On Cholera," and that by Dr. M'William, "On Yellow Fever," have each, by the permission of the Council, been published in the form of a pamphlet; and Dr. Bryson's paper having been collated from official documents, it was necessary for him to obtain the sanction of the Lords of the Admiralty, which I understand was willingly granted, prior to its publication.

Having thus presented you with a brief outline of the proceedings of the Society at the ordinary meetings, I feel bound to mention, that, on each occasion, the members and visitors gave ample testimony of their sense of the value of the papers read before the Society. Gentlemen, it is to me a source of much regret—for our utility is considerably lessened by the circumstance—that the present state of its finances will not permit the Society to publish these valuable contributions. Let us hope, that the time is not far distant when, by a more general interest manifested in our labours, and a corresponding increase in our resources, we shall be enabled to do so.

I may however state, that in the meantime, although there is a law of the Society, to the effect, that all Papers, after being read, shall become its property, the Council will not refuse to permit their authors to publish them either in the medical journals, or in a separate form.

While on this subject, I may add, that a resolution of Council has been passed, that the discussion on any paper shall not be prolonged beyond the second night, as a contrary practice was found to interfere with the business of the Society.

As there may be present some of our members who have not seen the medical journals in which, from time to time, the working of the Society has been noticed, I may state, that the various committees formed for special purposes have been for some time steadily engaged in the performance of the duties they have respectively undertaken; and, with your permission, I will therefore say a few words respecting their progress.

The Committee on Small-pox and Vaccination have issued nearly one thousand printed forms of queries to hospitals and dispensaries, to union medical officers, and to other members of the Profession in London and in the country. Besides these, about thirty copies have been transmitted through the Hon. the Board of Directors of the East India Company, to medical men officially employed in the three presidencies of India. There have been already received by the Secretary of the Committee 254 replies to the queries,—a number considered sufficient to enable the Committee to proceed with their analysis without waiting for others that may come in. The Committee are however of opinion, that at least 800 more forms might be very advantageously distributed, so soon as there are funds to cover the necessary expense.

The Common Lodging-houses Committee, for the purpose of investigating the condition of common lodging-houses, as influencing the propagation and spread of epidemic diseases, have distributed 250 forms of queries, to which a sufficient number of replies has been received to enable them to draw

out a Report, which has already been submitted to the Council.

The *Hospitals Committee*, or Committee to inquire into the epidemic diseases originating and prevailing in public hospitals, have held several meetings at the house of the Chairman, Dr. Addison, and have drawn up a tabular form of queries, which they purpose sending to all the British hospitals. For this purpose, they have applied to the Council for a grant of money.

The last Committee that was formed is that styled the *Epizootic Committee*, its object being, the investigation of those diseases which are found to prevail extensively among the lower, and more especially the domesticated animals. The working of this Committee has been undertaken by Professor Symonds, of the Royal Veterinary College, who will be aided in his labours by gentlemen of the veterinary profession in London and in the provinces. Already several veterinary surgeons in the provinces have been announced as Corresponding Members of the Epidemiological Society. In compliance with a desire expressed by Professor Symonds, that some members of the medical profession should unite with the veterinary members in carrying out the objects of the Epizootic Committee, several members of Council have already given in their names to be placed upon that Committee.

As connected with these Committees, more especially with the Common Lodging-houses Committee, I must not forget a debt of gratitude we owe to some of the laity, members as well as non-members of the Society. The gentlemen of the City Mission readily tendered their valuable assistance to the Common Lodging-houses Committee, and greatly facilitated their inquiries regarding the influence which the receptacles of the lowest and most depraved portions of society exerted in originating and spreading epidemic disease.

Valuable information, I am thankful to acknowledge, has also been rendered to the Common Lodging-houses Committee by Mr. Charles Cochrane, a lay member of the Society, distinguished, as we all know, for his philanthropic exertions in the cause of sanitary improvement.

To the medical journals the gratitude of the Society is eminently due, for the facility they have afforded to the Honorary Secretaries and Secretaries of Committees, in giving notices of meetings, publishing reports, and impressing the Profession with the necessity of sending in answers to the queries issued by the respective Committees.

The editor of the *Veterinarian*, in his journal of September last, has dedicated a leading article to the Epidemiological Society.

Some important articles have also appeared in the *Assurance Magazine*, urging in strong terms the cause of the Society, and the benefits that must accrue to assurance societies by a due appreciation of those sanitary principles and laws which may be directed towards the mitigation, not only of sweeping epidemics such as cholera and influenza, but also of other diseases, which are silently, constantly, and even more fatally operating to the destruction of human life.

The publicity given to the objects of the Epidemiological Society in the *Assurance Magazine*, has procured for us a favourable notice in a German journal, the *Rundschau der Versicherungen*, edited by Herr E. A. Musius, of Leipsic.

To the General Board of Health, and to the Poor-law Board, the best thanks of the Society are due, for the permission given by these bodies to the members of the Small-pox Committee to have access to documents in their possession regarding the subject of small-pox; and to the Registrar-General we are greatly beholden for the facilities he has afforded us by the distribution of our papers among his subordinate officers.

For the information of those members of the laity who seldom if ever see the Medical Journals, I have much pleasure in stating that, at the Nineteenth Anniversary Meeting of the Provincial Medical and Surgical Association, held at Brighton in August last, Sir Charles Hastings, the founder of the Association, spoke highly of the objects and claims of the Epidemiological Society, and called upon the members of the association to give it their warm support.

The field of inquiry open to this Society is not limited to Great Britain alone; for it comprehends all parts of Europe, and extends even to India (the cradle, so to speak, of epidemic diseases), and to every portion of the habitable globe.

Impressed with this view, and feeling the necessity of establishing communications with the various countries of

Europe, and with foreign as well as with our own Colonial possessions, a Committee has for some time had under consideration the subject of the appointment of foreign secretaries. Some progress has already been made in their arrangements, and the list of secretaries will doubtless soon be complete.

From Bengal two important letters have been addressed to the President and the Secretary of the Society, on the subject of small-pox and vaccination in India, by Mr. Bedford, a medical officer in the Company's service.

A pamphlet by the same gentleman has more recently reached this country, in which the Author submits some very important suggestions for the extension and perfection of vaccination, simultaneously with the systematic study of epidemic and endemic disease in India. I cannot, gentlemen, resist the temptation to read the following passage from this publication:—"Epidemic diffusion" is the most important medical question of the day, and can only be studied through systematic and parallel observations, conducted by a number of intelligent men working under one head. India, from its climatic peculiarities, and the nature of its 'services,' offers, I hesitate not to affirm, the most magnificent field in the world for carrying out such a series of connected observations as may tend to elucidate the laws of the most terrible diseases which 'flesh is heir to;' and it will redound to her eternal honour to be in advance in such inquiries. So pressing has the question now become in Europe, that an Epidemiological Society has been formed, for the special purpose of collecting information in regard to this class of disease."

Having thus, Gentlemen, given you a hasty and, I fear, but an imperfect sketch of the past proceedings of the Society, I feel it my duty, before concluding, to say a few words as to the future.

I have already alluded to our working Committees, who are, so far as their means will admit, actively and zealously engaged in the prosecution of their respective inquiries. Able and hearty co-operation is offered to the Society, both at home and from abroad; and, for so young an Institution, it may be truly said, that the Epidemiological Society has excited an unwonted degree of interest and sympathy among the lay as well as the professional community. But like other Societies not yet emerged from the struggles of the infant state, our finances are not in a very flourishing condition.

The heavy outlay consequent upon the earlier meetings, and upon other means of giving due publicity to the existence of the Society; the expense of printing and distributing the rules and objects of the Society; of the printing and postage of the queries issued by the various Committees, with other unavoidable sources of expenditure, have, (notwithstanding the kind and courteous liberality of the Council of the Royal Medical and Chirurgical Society, in granting us the gratuitous use of their rooms during the past and present session,) exhausted the amount received in donations and subscriptions during the past year.

But there is no reason to despair. The active and enlightened benevolence of this country, is not likely to turn aside from a Society whose labours, devoted, as they are, directly to the physical welfare of mankind, cannot be successfully prosecuted, without influencing likewise their moral condition. We, therefore, rely much upon public feeling and individual exertion, to induce others to join our ranks, and to aid us by pecuniary grants.

Already have some public bodies given us substantial proofs of the interest they take in our cause; and when, by the publication of one or more of our Committee reports, the attention of the Government and of the Honourable East India Company shall have been more immediately called to the importance of the objects and aims of the Society, we may reasonably expect some assistance from those quarters, in furtherance of the good work.

For ourselves, we have only to do our duty, by endeavouring, as far as lies in our power, to accomplish the noble ends the Society has in view.

The President called upon Dr. McWilliam, one of the Honorary Secretaries, to read a paper

ON SMALL-POX AND VACCINATION,

By W. H. GARDNER, Esq., M.R.C.S.

Mr. Gardner's observations were founded on the experience derived from a severe small-pox epidemic, in the island of Mauritius,

during the year 1840. It appears that H.M.S. Lily, having captured a slaver in the Mozambique Channel, brought the unfortunate cargo, consisting of between 200 and 300 blacks, to Port Louis, in Mauritius, having lost 90 of these unfortunate beings on the passage, from small-pox and African cachexy. The great alarm excited by the arrival of a vessel infected with small-pox at this island, which for upwards of thirty years had been free from this loathsome disease, caused the authorities instantly to adopt rigorous preventive measures. The negroes were accordingly transferred to two hulks, which, under the medical charge of Mr. Gardner, were for thirteen weeks kept in the strictest possible quarantine. On first taking charge of the hulks, Mr. Gardner had handed over to him the following number of negroes:—Men, 63; women, 8; boys, 123; girls, 61: total, 255. Of these, 37 were labouring under small-pox in its most virulent form; and Mr. Gardner ascertained that 80 others had already passed through the disease. Out of 41 cases, 8 died on board the hulks. The disease, however, ceased to spread soon after the people were on board the hulks. Good ventilation, proper food, attention to cleanliness, studying their comforts, and inducing content and cheerfulness amongst them, did much to dispel the disease. Judging from his experience as regards the police ordered to assist him in his duties, Mr. Gardner considers fear a strongly predisposing cause to the disease. Before Mr. Gardner and his unfortunate charge were released from quarantine, small-pox had already appeared on shore, and an hospital was at once opened for the exclusive reception of small-pox patients, and placed under the care of Mr. Rogers, the civil surgeon of the island, and Mr. Gardner. The details of the cases brought under the notice of these gentlemen in the hospital are highly interesting. Of 702 cases, 281 bore no marks of vaccination. Of 150 deaths, 120 took place in persons bearing no marks of vaccination; 17 in persons where the marks of vaccination were imperfect; 13 of the remainder with satisfactory marks, but many of them were known to be drunkards. The patients affording these data were principally creoles, natives of Madagascar, natives of Mozambique, and of India; almost all of them fearfully addicted to indulgence in drink. Mr. Gardner stated, that those who had never been vaccinated had the disease in a most fatal form; of those who had been vaccinated very many also died, not so much from the disease itself as from the consequences. The results of Mr. Gardner's experience in Mauritius convinced him, that small-pox assumes a much more virulent form in the tropics than we meet with in this country, and that the protective power of vaccination was, in many instances, nullified by excessive indulgence in spirituous liquors, and possibly also by the high state of atmospheric temperature. Mr. Gardner justly attributed the great ravages made by small-pox throughout the island to the neglect of vaccination and feeling of false security which thirty years' immunity from the disease had lulled the people into. He endeavoured to repeat Mr. Ceely's experiments upon the cow without success, although seven of these animals of different ages were expressly provided him for this purpose, while he was on board the hulks with the negroes. On the first appearance of the disease on shore, vaccine lymph was sent for to Calcutta, to Ceylon, and to the Cape of Good Hope; but three months elapsed before any arrived, and by this time the disease was spreading rapidly over the island. Vaccination was now extensively practised. Many persons came to the hospital who had been vaccinated during the incubative period of small-pox, with the effect of residing, as Mr. Gardner considered the disease milder, and arguing from the fact of our remedial means in small-pox being very limited, Dr. Gardner considers we are not warranted in rejecting the slightest concession to them. Upon that principle, he practised the insertion of lymph the moment the nature of the preliminary fever was discovered, and whether the patient had been previously vaccinated or not. It was for some time a mystery, how, in the face of the rigorous quarantine imposed on the hulks, the disease reached the shore. At length, a man confessed having been alongside the Lily on her first arrival in a water-barge which was detained some hours. He got hungry, and prevailed on one of the crew to give him some food through a porthole. This he declared was all the communication that took place. A suspicious looking pock having made its appearance on his body, the chief medical officer there sent him off to Mr. Gardner, who had by this time been in charge of the hulks ten or twelve days. Mr. Gardner pronounced that this man had small-pox. His house was at once put in quarantine, and those who had been living with him were watched. But it was too late; all precautions proved unavailing. In the course of ten days, a woman who had been in the same house took the disease. Other cases speedily followed, until every part of the island became infected.

COURT OF EXCHEQUER.

(Sittings at Nisi Prius, before BARON MARTIN, and a Common Jury.)

O'REILLY *v.* CHURCHILL.

IN this case—an action for libel—Mr. Humphreys, Q.C., with whom was Mr. Matthews, appeared for the plaintiff; and Mr. Montague Chambers, Q.C., with Mr. T. W. Phipson, for the defendant. The Solicitors in the case were—for plaintiff, Mr. Greaves Walker; for defendant, Mr. James Johnston, of Chancery-lane.

Mr. Matthews, in opening the pleadings, said, that John Edward O'Reilly was the plaintiff, and John Churchill the defendant. The declaration stated that the defendant published a false, scandalous, and malicious libel concerning the plaintiff, in the *Medical Times*, in respect to a Society called the Mail Delivery Office, and another called the Medical Protection Office. To this the defendant had pleaded first, Not Guilty; and, secondly, so far as related to the Medical Protection Office, he had pleaded that the plaintiff had committed certain frauds and embezzlements, and that he was thereby justified in publishing the libel.

Mr. Humphreys, in opening the case, said the complaint made by the plaintiff was of a very serious character, it being that of a gross and scandalous libel. In the course of the last year there was a Society, called the Medical Protection Society, in which the plaintiff had been engaged as Assistant-secretary, and conducted himself entirely to the satisfaction of his employers. That Society broke up in consequence of pecuniary difficulties, and the plaintiff had endeavoured to establish another Society of a similar character in Foley-place, at the West-end, under the name of the Medical and General Agency Office. The object of both Institutions was very much the same, being instituted by medical men for the purpose of protecting themselves from frauds which were practised upon them, and enabling them to recover, probably, without the expense of lengthened litigation, sums of money which were due to them from their patients. With the pecuniary difficulties of the former Institution Mr. O'Reilly had nothing to do. He was merely an Assistant Secretary, receiving a certain salary, as well as a commission, on all persons who became subscribers. He was establishing his new Society, and carrying it on with every prospect of success, when there appeared in the *Medical Times* one of the most scandalous libels which could be issued by an anonymous scoundrel, who had not the courage to put his name to what he wrote in traducing the character of another. He was the last person who would say a word against any fair comments that could be made in a public paper upon public persons or bodies of persons; for it was essential to the well-being of society that such things should be permitted, and he would criticise with no very careful spirit letters published for the purpose of drawing attention to an institution professing to be established for the public good; but, when persons, under fictitious names, published a most atrocious libel upon the character of individuals, it became essential to mark with indignation conduct of that kind, which could not be viewed with any other feelings than those of entire disgust. The following letter appeared in the *Medical Times* of November 2, 1850:—

"Sir,—The manliness and public spirit with which you have exposed from time to time the shameless conduct of the Medical Protection Office, entitle you to the gratitude of every member of our Profession. Your faithfulness to our interests will be rewarded. The Profession are too easily duped, and seem positively to delight in the process, in accordance with the Hudibrastic principle, that,—

'The pleasure is as great,
Of being cheated as to cheat.'

I understand, Sir, that notwithstanding all you have written, one Mr. O'Reilly, the managing man of Brearey's office; and, as I am told, the getter up and factotum celebrity of the Mail Delivery Office, has had the audacity to attempt the establishing

of another Medical Protection Office somewhere in the locality of Foley-place."

One would suppose that this Mail Delivery Office was some abominable swindling Company, by the way it had been introduced, "and that he had actually sent round Circulars to the Profession, and found some silly enough to confide their accounts to him for collection." It was certainly surprising to say, that a man who attempted to get his livelihood honestly and properly, by the establishment of an office of that kind, should be charged with "audacity." He was not aware that there was anything "audacious" in such an attempt, any more than there was audacity in one tradesman setting up a rival shop to another. As to his connexion with the Mail Delivery Company, it was pure fiction, a wilful falsehood of Mr. "Philo's." This was the very sting of the libel, for which there was no particle of justification. The letter proceeded, "This hornets' nest must be dispersed, and every member of it driven beyond the limits of the Profession." Why the members were to be dispersed, except for the benefit of some other office, it was impossible to say. He very much suspected that "Philo" might have an interest in some rival establishment, and that he wished to bring members of the Profession to his own shop, instead of allowing them to go to Mr. O'Reilly's. "If the Profession honestly wish to dissociate themselves from disreputable connexions, and to protect their interests, they will effectually put down all such attempts as those I have referred to." Now, how were they to do this? "By joining the Medical and Surgical Protection Society—a Society founded and directed by medical men, and subjected to an excellent code of laws, which, faithfully administered, will secure the interest of all the members. The men now at the helm are, for the most part, well known to the Profession, and worthy of all confidence; and I trust the Society, to which, I may add, I have entrusted my own accounts, will be warmly supported, so that by union and co-operation, in a truly fraternal spirit, we may promote the common good." That he called the puff direct. He had no objection to a man puffing himself and his Society, but he greatly objected to his abusing other people because they did not belong to him. It seemed a very odd "fraternal spirit," to abuse a brother just for the sake of puffing one's self.

"As an evidence of what this new Society is doing, it has collected for me, since its formation, 12*l.* from a mass of debts which, whilst in the hands of the defunct Medical Protection Office, brought me exactly twelpence. I was informed at the office last week, that it was going on prosperously: and I have no doubt, if the Profession do their duty towards it, that it will prove a great boon.—I am, Sir, &c., PHILLO."

Application was made for the name of the writer, but the publisher of the paper declined giving it. Now, with regard to the advantages or disadvantages connected with these rival Societies, he really had nothing to say. No doubt "Philo's" might be a better one than the plaintiff's, but he doubted if it could maintain its position long if it adopted the principle of abusing its neighbours, and calling them names. Every man had a right to advertise in newspapers that his Society was the best. It was only the other day that he saw the following: "There is but one fact acknowledged by all philosophers: the only real spirit in the world is Betts's patent brandy." Now, every man said that his brandy was the best. Mr. Betts followed this plan, but he was too sensible to abuse the brandy of every body else. But the sting of the libel, as he had before said, was that relating to the plaintiff's connexion with the Mail Delivery Office, which, by the way, as this was a medical affair, he should have thought would be better called the *Female* Delivery Office. (Laughter.) He had never heard of the office himself, and perhaps the jury were equally ignorant of it. It seemed here to be put up for the purpose of being knocked down. It was implied that it was some swindling Society, and that Mr. O'Reilly was its getter-up and factotum. There was no justification pleaded for this part of the libel, and no such justification could be attempted. If such an attempt were made, the proper course would be to put Philo in the witness-box, and then he (Mr. Humphreys) might have an opportunity of examining him as to the other matters referred to in his letter. As to the justifications put upon the plea, he really never saw any which were more distant from the libel itself, and the plaintiff was perfectly prepared to meet all the charges that were made against him. He should prove the

publication of the libel, and, from the evidence he should call, he thought it would be clearly proved, that the object of the libel was to damage one man's Society for the benefit of another,—a course of proceeding which should meet with the reprobation of every honest man.

Various documents having been put in, and the libel read, Mr. Theophilus Simmons was sworn, and examined by Mr. Humphreys. He stated, that he knew the plaintiff, Mr. O'Reilly, when he was in the office of Mr. Brearey, the manager of the Medical Protection Society. He had read the libel in question, and, in his judgment, Mr. O'Reilly was the person to whom it applied.

By Mr. Chambers: Was clerk in the Medical Protection Society's Office, 43, Lincoln's-inn-fields. The Society had been lately re-established. Mr. O'Reilly was not in the office now. The Society was conducted by a President and a Committee. The President's name was Mr. Propert, of New Cavendish-street, Cavendish-square. Mr. O'Reilly was in the office in May, 1849, when witness joined it. Witness remained in the office till September, 1850, when the Society broke up. Plaintiff was Assistant-Secretary. He sometimes received debts, but did not go out to collect them. Witness was not in the Society when it was first established. It had been established about six months when he first became clerk. Plaintiff received the subscriptions of medical men. Mr. Brearey was the head of the Society, but he was now totally unconnected with the office. He was now living at Blackheath. Had seen him in court with Mr. O'Reilly. Mr. Brearey had an office in John-street, Adelphi, for the discovery of lost addresses. (Laughter.) There were many tradesmen who lost their debts by not knowing the addresses of their debtors, and Mr. Brearey had established an office for the purpose of discovering those addresses, and applying for the debts. He had established the office about six months. Did not attend the meeting of the Medical Protection Society when its affairs were gone into. A very great deal of money had been received at the office. Was not aware that there was a deficiency of 2,000*l.* Had not heard so from Mr. O'Reilly. He believed the deficiency amounted to a large sum. The Society existed nearly two years. A commission was charged on all the debts recovered. Subscribers paid a guinea a year. The number of subscribers was about 1,200. An attorney was employed, named Mr. Wm. Vardy Hare, who did all the legal work. Mr. Hare was now in court. Could not give any information as to the number of debts recovered by the Society, and not paid over to the parties to whom they were due. The books of the Society had been handed over to the new Society by an assignment. Mr. Henry Farman was the present superintendent. Witness was manager of the County Court department. (A laugh.) Had heard that the books were lost, and afterwards found at the bottom of the Thames by a waterman. A youth about 19 years old had charge of them. They were safe one evening, and were missed the next morning. Witness was not then in connexion with the Society. The books now appeared in as wholesome a state as ever. They did not appear to have been in the Thames a long time. The Society kept a banking account at Messrs. Dixons', in Chancery-lane, but he did not know for what length of time. Was not aware that cheques were constantly returned from Messrs. Dixons' dishonoured. Had nothing at all to do with that matter. Knew that cheques were sometimes drawn upon Dixons' in the course of business. Subscribers occasionally came to the office to complain that they could not get their cheques paid. Did not know whether such complaints increased during the latter part of the Society's existence. Did not keep a list of such complaints. Could not say whether Messrs. Dixons threw up their account with the Society. During the latter part of the time, cheques were drawn down stairs by the clerks upon Mr. Brearey, the Manager, up stairs. That practice commenced about six months before the Society broke up. The cheques were signed by two clerks in the office, witness being one. Did not know who signed the cheques upon Messrs. Dixon. Was instructed by Mr. Brearey to sign the cheques. These cheques were not always paid. They were sometimes crossed by the clerks, so that the subscribers who received them had to pay them through their bankers. Mr. Brearey was sometimes denied to persons who called to see him. Mr. O'Reilly used sometimes to see the people who called. Had never heard him called the "bully" of the office. During the latter part of the Society's existence, complaints

were very frequent; and as parties could not get their money, they made a great clamour. Knew Mr. Walker, the plaintiff's attorney. Believed Mr. Walker applied on the part of some of the subscribers for money due to them. He applied for an executorship which he had at the office. Mr. O'Reilly used sometimes to promise the applicants that he would send them cheques. Did not know that he made any other excuses. They were not always satisfied with the promise of a cheque, and sometimes threatened to take proceedings. Did not know how Mr. O'Reilly managed to get rid of them. These things did not make much impression on his mind. He was paid his salary regularly every Saturday night. He only looked after himself. He did not know about any other people. Was recommended to the office by a friend of Mr. Brearey's—a gentleman, whose character was above all suspicion. Mr. O'Reilly was not the person who recommended him. Plaintiff first showed him the libel on the 5th November, 1850. Had heard from Mr. O'Reilly, that with regard to the Mail Delivery Office, the *Medical Times* had inserted a retraction stating, that plaintiff was not connected with that office. Saw the Article in which the retraction was made. Plaintiff told him that he was not satisfied with the retraction that had been made. The names of the other clerks in the Medical Protection Society's office, were Mr. Cassell, Mr. Packer, Mr. Pratt, Mr. Roulstone, and Mr. Herbert. Winter was a collector. Did not know how long the retraction appeared in the *Medical Times* after the letter was published. Thought he saw it in the following week. Did not recollect Mr. O'Reilly being absent from the office in 1849, for about a fortnight. Plaintiff had told him that Mr. Vardy Hare charged him with offering to share the commission upon 50% recovered by him for Mr. Gourlay, but he most flatly denied the charge. Mr. Packer was a clerk in the office. Did not know him as a canvasser. Plaintiff had told him that Packer had charged him with having received 4s. commission in respect of a Mr. Joseph Baly and Mr. James Part, who were said to have become subscribers to the Society. This he denied. Had seen the canvassing-book of Mr. O'Reilly, and believed it was now in Court. Plaintiff had told him that he was accused of receiving 5s. from Mr. Naggs, and not paying it over. This charge he also denied. Plaintiff had not told him that he had received any money from Mr. William Knowles for procuring him a situation. He had been charged with having done so, but denied it. This was about six months ago. He had also been accused of receiving 2*l.* from Mr. Adams on behalf of Mr. Bromley, but he denied that charge likewise. He said, he had never received any money at all from him. Gave his services to plaintiff in Foley-place. Was not a clerk to him, his assistance being quite gratuitous. Plaintiff's Society was first called the Pharmaceutical Society, under which name it went for about two months. It was then changed to the Medical and General Agency Office. Occasionally received money for plaintiff at the office when he was not within. Plaintiff was in partnership with a person named Williams, but the partnership was afterwards dissolved. Mr. Williams was now "dissolved himself," for he was in the other world.

By Mr. Humphreys: There were several clerks in the office besides himself and Mr. O'Reilly. Plaintiff had his special department, and witness had his. The Society broke up in September, 1850, after which plaintiff tried to establish the Pharmaceutical Society, which was afterwards called the General and Medical Agency Office. The new office seemed to be going on prosperously and respectably till the libel appeared. Plaintiff had nothing whatever to do with the deficiencies of the former office or with the loss of the books. Plaintiff had brought the plea to him, (witness,) for the purpose of consulting him, and then he mentioned the charges which had been made against him, and he denied every one of them.

A paragraph from the *Medical Times* was then put in and read. It was a retraction of the statement in "Philo's" letter respecting the connexion of the plaintiff with the Mail Delivery Office.

Mr. Chambers was about to address the jury on behalf of the defendant, when

His Lordship intimated, that he thought some further evidence was necessary in order to prove, that that office answered to the description given in the averment, and to prove that it was libellous to connect the plaintiff with it.

Mr. Humphreys submitted, that no further evidence was required on that point.

Mr. Chambers then addressed the jury for the defendant. He said, he thought, as far as foul words were concerned, the plaintiff had the best of them, for he had put into the mouth of his learned friend words which they were not accustomed to hear from counsel in courts of justice. "Villain," "scoundrel," "horsewhip," and the like, were epithets used without the slightest remorse or consideration, in order to induce the jury to come to the conclusion that this was a foul libel. Some time ago, it was the habit in courts of justice to say that, so far as commenting on public institutions, and pointing out suspicious circumstances connected with the establishment of any Societies, it was not only the liberty and the right of a public journalist to do so, but he was thereby discharging a duty to the public; and for this reason there was in this country what was called a fair freedom of the press,—not its licence, not its abuse, not the attack of private character, independently of public merit, but the right of discussing in a public journal anything which interested the public. He ventured to say, that, if the present action came to a question of damages, every one would say, from the circumstances which appeared, that the action ought never to have been brought. The sting of the libel, as his learned friend had called it, had been removed many, many months ago; and if it should be considered that in dry technical law any libel was proved, and the jury were compelled to give damages, they would do so with sorrow, and consider that a farthing was too much to award. The present case was an important one not only to Mr. Churchill, but to the Medical Profession generally; it was important to every man in trade who was to be cautioned with reference to giving his confidence to any society that might be started under suspicious circumstances. He accepted his learned friend's analogy respecting rival shop-keepers. If a man set up a cheesemonger's shop in opposition to another, he had no right to attack that other's private character, and to say that he was a rogue; but, if a public journalist knew that four or five men were associated in a cheesemonger's shop at one end of a street, and had misconducted themselves so as to lead to the public suffering from their dishonesty or misappropriation of moneys; and if one of these men started another shop in another part of the street, the journalist had a perfect right to say so, and to warn people from sending their goods to the new shop, where they would be treated in the same way as at the other. It appeared, that about a year and a half ago there was a Society, called the Medical Protection Office, at 43, Lincoln's-inn-fields. That Society broke up, and it turned out that it was conducted in a most disreputable manner. Now, what had been given in evidence with regard to it? From what had appeared in evidence, the editor of the *Medical Times* had a perfect right to state, that a person connected with this Society in Lincoln's-inn-fields had established another with the same professions, and to warn people against being allured by any fresh temptation. It was clear, that the Medical Protection Society turned out to be a "hum" or a deception, 2,000*l.* having been received, not one farthing of which was paid over to the unhappy doctors to whom the money was due. Mr. O'Reilly was clearly an active man in the Society. His situation was that of sub- or under-secretary, Mr. Brearey being the chief secretary. One part of the libel was Mr. O'Reilly's supposed connexion with the Mail Delivery Company. Atrocious libel! Horrible libel! His learned friend had stated, that he had

never heard of such a Society being in existence; it had never (to use the doctors' expression) attained the state of a foetus; it was an imaginary thing altogether; the lady who was to have delivered this mail, unfortunately made a mistake. The office had never been heard of; and yet it was the sting of the libel to connect him with this extraordinary phantom. There was no innuendo in the letter—nothing alleging that the Mail Delivery Company was a discreditable Company; therefore there was no libel. But, was it acting with any degree of candour towards Mr. Churchill, to conceal the fact, until after a long cross-examination, that this very sting had been taken away by a public retraction in the *Medical Times*? If, then, the statement with regard to the Mail Delivery Office was shown to be no libel at all, that of itself disposed of three-fourths of his learned friend's speech, which was about the "Mail Delivery Company" at the beginning, middle, and end. The letter of Philo stated, that parties were silly in entrusting their money to the office that had been established by Mr. O'Reilly; and certainly they were silly. The jury had heard the whole account of the plaintiff's connexion with the Medical Protection Society, and the default of 2,000*l.*—a large sum for those to lose to whom we are indebted so much, in the hour of suffering and sickness. Mr. O'Reilly had been proved to be the managing man of that Society; and could anybody be other than silly who would entrust to him the collecting of his accounts after what had transpired? He maintained that "Philo" was perfectly justified in calling public attention to a fact in which the Profession were so much interested, and urging them to entrust their affairs to a more respectable office. If such an atrociously fraudulent Society, as that in Lincoln's-inn-fields, was not to be attacked by "Philo," or some one else, in a medical journal, then we might shut up our books, and our printing-presses might be sold—newspapers would cease to exist, and there would be no difference between a man who had earned the highest possible reputation, by being unconnected with anything equivocal in life, and a man who had passed his life in being connected with equivocal and doubtful societies. He thought the publisher of the *Medical Times* was perfectly right in withholding the name of the writer of the letter, for his learned friend had intimated, in the course of his fiery speech, that if the writer had been known, he would probably have been subjected to a horsewhipping, or to powder and ball. The duty of collecting money for the Medical Profession was one that involved a serious responsibility, and that could not be entrusted to any but a highly confidential person. Nothing was more delicate than for a medical man to ask his patients to pay their bills, and it was a last resort to be obliged to have the assistance of a third person in pressing for payment; and the duty should only be conferred upon a man of the most rigid and the nicest honour,—a man of humanity and feeling,—and not to a man who was connected with an office which had displayed itself in such ignominious colours. The learned gentleman then read the article in question, and commented at length on the various statements it contained, contending, that there was nothing libellous in any of the assertions of the writer, and that the publication of the letter was fully justified by the circumstances of the case. He drew attention to the affairs of the Medical Protection Society, to the suspicious circumstances under which it was established, and to the painful results which followed. He contended, that, if such undertakings were not fairly and fully exposed by the public press, no man would be safe from the allurements of such fraudulent adventurers.

His Lordship then briefly summed up. He explained to the jury the nature of a libel, as being a statement calculated to injure the reputation of another, by exposing him to hatred and contempt; and expressed his opinion, that the article in question legally came under this definition; but it would be a question for the jury to say what damages they would award, for the injury that had been inflicted. He then recapitulated some of the principal circumstances brought out in the course of the trial; and directed the jury to find such a verdict as seemed justified by the facts of the case.

After a very brief consultation, the jury returned a verdict for the plaintiff,—Damages, *One Pound*.

Application was made by the plaintiff to certify for costs, which his Lordship refused.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 7th inst.:—

BOWMAN, ROBERT, Richmond, New South Wales.
COLBY, WILLIAM TAYLOR, New Malton, Yorkshire.
COLSTON, HENRY SAMUEL, Bombay.
HARRIS, WALTER WILLIAM, Australia.
HAUGHTON, WILLIAM, Dublin.
HOWARD, JOHN WILLIAM, Fenchurch-street.
PATERSON, JOHN BLACK, London.
ROBINSON, WILLIAM, Carlisle, Cumberland.
WILLS, JOHN, Shaftesbury, Dorset.

At the same meeting of the Court, Messrs. FREDERICK MANGER and HORATIO HARRISON SMITH passed their examinations for Naval Surgeons. These gentlemen had previously been admitted members of the College, their diplomas bearing date respectively Nov. 27, 1846, and June 25, 1847.

THE LATE SAMUEL COOPER.—The bust of this distinguished surgeon, which was subscribed for by the pupils and friends of the illustrious deceased, has just been deposited in the Royal College of Surgeons; it is from the studio of Mr. Butler, and well maintains the reputation of the artist.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, November 6:—

CORNISH, JAMES, Crossing, Devonport.
ADAMS, WILLIAM, St. Austell.

OBITUARY.—On the 5th inst., in Cross-street, Islington, Robert Semple, Esq., M.R.C.S., aged 62, for nearly forty years medical officer to the parish of St. Mary, Islington.—On the 6th inst., at Richmond, of paralysis, in his 49th year, James Barrow Dodd, Esq., surgeon, late of Stockwell, Surrey.—On the 8th inst., R. L. Hooper, M.D., of High-street, Newington Butts, aged 55.

TESTIMONIAL TO DR. LEVER.—A very pleasing tribute of respect and friendship, as well as acknowledgment of professional skill, has just been received by the family of J. C. W. Lever, Esq., M.D., (one of the Physicians of Guy's Hospital,) from a number of ladies, being patients of his. It consists of a marble bust of the Doctor, executed in the first style of art, by Bailly, R.A. The presentation of the bust was made, on behalf of the subscribers, by their Treasurer, Mr. Joshua W. Butterworth.

UNIVERSITY OF LONDON.—*Second Examination for the Degree of Bachelor of Medicine.*—*First Division.*—Thomas James Duthoit, St. Bartholomew's Hospital; Samuel Griffith, King's College; Edward Abraham Hancock Head, King's College; Edward Jackson, University College; George May, King's College; David Henry Monckton, King's College and Royal College of Surgeons; Richard Neale, University College; William Odling, Guy's Hospital; John Russell Reynolds, University College; William Palmer Steele, King's College; John Sherwood Stocker, Guy's Hospital; Henry Thompson, University College. *Second Division.*—Lionel Smith Beale, King's College; Peter Lodwick Burchell, Westminster Hospital; Richard Hudson Courtenay, Richmond Hospital, Dublin; Richard Hunt, Guy's Hospital; John White Keyworth, St. Thomas' Hospital; James Henry Lakin, King's College; James Vaux, King's College.

THE COUNCIL OF THE ROYAL SOCIETY at their last meeting made their annual award of medals as follow:—1. The Copley Medal to Richard Owen, Esq., for his numerous and important researches in Comparative Anatomy and Palæontology. 2. A Royal Medal to Lord Rosse for his investigation of the Nebulæ, by his new telescope. 3. A Royal Medal to George Newport, Esq., for his paper "On the Impregnation of the Ovum in the Amphibia." This is the second Royal Medal obtained by this distinguished physiologist.

ST. BARTHOLOMEW'S HOSPITAL.—Dr. Black, Assistant-physician to the Royal Hospital of St. Bartholomew, has been appointed Warden to the Collegiate Establishment in place of Mr. Paget, who has resigned that office.

ROYAL ORTHOPÆDIC HOSPITAL, BLOOMSBURY-SQUARE.—At the annual meeting of this institution, held lately, it was stated that, since the establishment of the charity, about 12,000 patients have been successfully treated for very severe and afflicting deformities, patients being received from all parts of the kingdom. The applications for admission are exceedingly numerous, from 30 to 50 new cases being entered weekly on the books. Between 700 and 800 are now in regular attendance as out-patients; while the wards of the hospital are fully occupied. Upwards of 300 addi

tional cases are on the books for operation and in-door treatment, and a building-fund has been commenced to provide the extension of accommodation so necessary for the admission and treatment of the increasing number of patients.

ARSENIC-EATING.—A trial for poisoning at Cilli has brought to light some interesting facts respecting the arsenic-eaters of Lower Austria and Styria. It appears to be a custom among the peasantry of those provinces to consume a certain quantity of the poisonous mineral, commencing with a small dose, say half a grain, and gradually increasing it. An old farmer is mentioned by Dr. Tschudi, who takes daily four grains of arsenic. Those who indulge in the habit grow fat and ruddy, it is said; it relieves the lungs and head very much when ascending hills and breathing a more rarified atmosphere. We know not what credit is to be attached to the report; but it seems to us incredible and altogether contrary to the known properties of the mineral, especially to that of its cumulative action.

THE POLISH BALL.—This may seem an odd heading for a paragraph in a medical journal, but it is strictly legitimate; for when the proposal was made for the granting of the Guildhall for the annual Polish ball, Mr. Murrill, a member of the Common Council, urged that the unendowed hospitals and dispensaries of the Metropolis should share in its profits. The amendment was, of course, rejected, because it could not bring the City *quidnuncs* any reputation for *foreign* philanthropy. It was too English a proposal to tell just now.

MORTALITY NOTABILIA.—Concurrently with a great fall in the temperature, the mortality has again risen to nearly the same amount as prevailed during the earlier part of last month. The deaths registered in London in the week ending last Saturday were 989. In the ten corresponding weeks of the years 1841-50, the average was 967; but if corrected for increase of population, it is 1064; compared with which last week's mortality shows a decrease of 75.

The *Increase* on the previous week is visible among the young, the middle-aged, and persons of advanced life. It is also observed in all those classes of disease which make the largest contributions to the mortality; for last week the deaths enumerated in the epidemic class rose from 222 to 242, those in the tubercular class from 156 to 171, those caused by "diseases of the brain, spinal marrow, &c.," from 78 to 115, those by "diseases of the heart, &c.," from 33 to 40, those by "diseases of the lungs and other organs of respiration," from 105 to 148, by "diseases of the stomach, liver, and other organs of digestion," from 54 to 63, by "diseases of the kidneys, &c.," from 6 to 11, by "rheumatism and diseases of the joints, &c.," from 3 to 8, by "atrophy," from 16 to 23.

Scarlatina and Typhus.—As in former weeks, scarlatina and typhus predominate amongst epidemics, the former having increased in fatal cases from 50 in the previous week to 59 in the last. Typhus numbers 58, besides 2 from ague, 1 from remittent fever, 1 from infantile fever, and 3 from rheumatic fever; but, at present, it does not show a disposition to become more fatal.

Small-pox.—The mortality from small-pox rose from 17 deaths in the previous week to 24 (21 children having died of it last week, and 3 adults above 15 years of age.) It is stated in only one case that vaccination had been previously performed. Besides the above, the death of a child of one year occurred from chicken-pox.

Vaccination.—On 30th October, in Lambeth, at 29, James-street, the son of a wood-sawyer, aged 2 years, died of "small-pox." Mr. Daws states, that "the mother of the deceased nursed four of her children together when ill with small-pox, and, having nursed others under the same disease, she did not consider it necessary to have medical assistance, which was not called in till the child was dying. The medical attendant therefore declined giving a certificate. On asking the mother why she did not vaccinate her children, she said she had seen three different instances of children breaking out in sores on their heads after vaccination, which were not cured for two or three years. This she attributed to foul lancets being used, which appeared also to be the opinion of the doctor who attended one of the children."

Cases of Scarlatina.—In the sub-district of Somers-town, at 2, Charles-place, the daughter of a farrier, aged 7 years, died of "scarlatina (1 day), convulsions (10 hours)." Two sisters of the deceased, and a brother aged 16 years, died previously of the same disease; their deaths were registered in the week ending 27th September. In the same sub-district, at 20, Melton-crescent, the son of an engineer, aged 16 years, died of "scarlatina anginosa (6 days), hydrocephalus internus (3 days)." Mr. Matthews states that the drainage in the latter place is bad. At 3, Elizabeth-place, Ball's-pond, on the 1st and 5th November respectively, two children, aged severally 9 months and 8 years, died of "scarlatina anginosa;" and at 1, Crown-cottages, Upper Holloway, the daughter of a grocer, aged 8 years, died on 3rd November of

"scarlatina (9 days)," the sister of deceased having died of it on 27th October. On the 2nd and 3rd November, the son and daughter of a light porter, aged respectively 12 years and 16 months, died at 3, Langley-street, Long-acre, of "malignant scarlatina, after illness of 10 and 9 days' duration." In St. Mary, Marylebone, at 34, Horace-street, on the 4th and 5th November, two sons of a labourer died of scarlatina, which in one case was followed by enlarged glands. In the South sub-district of West London, at 1, Dean-street, St. Andrews, the son of a printer, aged 4 years, died on 7th November of "scarlatina (7 days)." Mr. Nason, the registrar, adds that "this is the fourth death in the same house from scarlatina, three having previously occurred in another family, that of a compositor mentioned in former reports. A child in this house, whose birth was registered last week, is said to have symptoms of the disease. It appears from the statement of informant, that the house is clean, that there is complete ventilation, and nothing to account for the disease can be assigned." On 6th November, at 67, Eagle-street, Red-lion-square, the son of a bootmaker, aged 4 years, died of "malignant scarlatina (6 days)." Mr. Goodhugh, the Registrar, observes, that "another child in the family has since been taken ill with the same disease, and that the malady must be attributed to local circumstances. The house, which is situated on the north side of the street, is let out in single rooms, and at the back is a small yard about 10 feet by 5 in size. In the corner are a dustbin and a privy in a foul state, with a cesspool, which burst and allowed the contents to run into the back kitchen, where the waterbutt is kept. In the front kitchen adjoining, which is about 12 feet square, badly ventilated and damp, a man and his wife with their four children live and sleep." In 10 cases out of the 59, in which scarlatina was fatal, it is stated that the primary disease was followed by dropsy.

Miscellaneous and Nuisances.—On the 29th October, at 41, Sutton-street, Lambeth, the son of an excise officer, aged 13 months, died of "cholera infantum (five days)." In Bethnal-green, at 25, Emma-street, a tallow-chandler, aged 73 years, died of "serous apoplexy (one week)." Mr. Murray states that "the street fronts a large stagnant pond abutting on a dustyard, both of which emit an offensive smell that must be injurious to health. At 10, Eagle-street, Hoxton, the daughter of an ostler, aged 10 years, died of "debility from ptyalism." Two persons died of intemperance, 9 infants from want of breastmilk and inanition, and 4 infants from suffocation, in three of which cases the children were suffocated in bed.

At the Royal Observatory, Greenwich, the mean reading of the barometer in the week was 29.684 in. The weather was cold during the week. The mean daily temperature on Sunday was 43.9° or 2.7° below the average of corresponding days in 10 years; it fell to 35.2° on Tuesday, which is 11.3° below the average; it then rose, and was about 42.5° on Friday and Saturday; but on every day of the week was below the average. The mean temperature of the week was 40°, which is 6.3° below the average. The wind was generally in the west or north.

DEATHS in the Metropolis for the week ending Saturday, November 8, 1851.

CAUSES OF DEATH.	Nov. 8.				Sum of Ten Weeks.
	0	15	30	All Ages.	
ALL CAUSES	461	317	202	989	989
SPECIFIED CAUSES	460	317	202	980	980
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	171	57	14	242	2271
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	...	14	20	40	454
3. Tubercular Diseases. ...	58	105	8	171	1605
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses, ...	56	29	30	115	1107
5. Diseases of the Heart and Blood-vessels ... ..	...	25	15	40	339
6. Diseases of the Lungs, and of the other Organs of Respiration ...	78	28	42	148	1055
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	23	21	19	63	602
8. Diseases of the Kidneys, &c. ...	2	4	5	11	83
9. Childbirth, Diseases of the Uterus ...	...	9	...	9	109
10. Rheumatism, Diseases of the Bones, Joints, &c. ...	2	3	3	8	82
11. Diseases of the Skin, Cellular Tissue, &c. ... ..	...	1	...	1	11
12. Malformations	2	...	...	2	22
13. Premature Birth and Debility ...	25	1	...	26	244
14. Atrophy	22	1	...	23	177
15. Age ... ..	...	...	53	33	513
16. Sudden	6	2	...	8	88
17. Violence, Privation, Cold, and Intemperance	15	17	7	40	209
Causes not Specified	1	...	...	1	67

TO CORRESPONDENTS.

In order to lay before our readers a report of the important trial for libel against the "Medical Times," we have been obliged to omit much of our usual matter. Communications, however, are in print from Dr. Guy, of King's College; Dr. Hunt, of Brook-street; Dr. Barker, of St. George's Hospital; Dr. Rooke, of the Seaman's Hospital; Mr. Henry Smith, of Caroline-street; and others.

[To the Editor of the Medical Times.]

SIR,—I shall feel greatly obliged if you could give me the following information in your next week's Number, having been surcharged double what I returned for the Income-tax. The question I want answering—Can you inform me what expenses medical men can legally deduct from their income? I am, &c. A CONSTANT READER.

[A medical practitioner may legally deduct from his gross receipts all expenses incident to the carrying on of his business—such as drug bill, bottle bill, gas account, and other sundries, together with the expense of an assistant, if one be kept, and a deduction amounting to, we believe, not more than one half of his rent.]

Seneca informs us, that some time ago his attention was drawn through our Journal to the article of the Key-tsi-Sing, or Japanese emmenagogue. He anxiously applied for a supply of it, and enclosed a few stamps so as to put Dr. Williams to as little expense as possible. Instead of being supplied with the herb, he received an answer, telling him that the applications were so numerous that he must apply to an agent whose name was mentioned. On applying to this agent some time after, he received, at a cost of 10s. 6d., instead of the simple herb, a bottle of some preparation, which, as he says, may or may not be the genuine article. He subsequently received a communication from some gentleman in the employment of Dr. Williams, stating that for the future he might have the preparation at cost price, which is half the usual charge through the druggists—on condition of communicating the results of its administration to Dr. Williams. We must confess our surprise and regret at the procedure complained of by our Correspondent. If the course adopted be general, it will disentitle Dr. Williams to the confidence of the Profession, and his remedy, which we were inclined to think serviceable, will be soon numbered in the roll of forgotten quackeries. It is highly expedient, that when a new remedy is offered to the Profession, the recommendation should be dissociated from mystery, and as much as possible kept free from the suspicion of being made a matter of mere gain. We hope Dr. Williams will reconsider the propriety of the mode he has adopted of giving publicity to his new emmenagogue; otherwise, both he and it will lose credit.

Edin.—Do not on any account create a disturbance in the University. Let all resistance be of the passive kind. If the Senate do not enforce attendance on the lectures of the Professor of Pathology, then let him lecture to empty benches; but if you attend do not interrupt him. All men should respect the law; and legal right is on his side. Our advice to students is not to go to the nuisance; let the entries at the University be very small, and the nuisance will soon cease to exist.

A Liberal.—In London a greater liberality of sentiment in the members of the Profession towards each other is experienced, because in London every man has his equal, and in some matters his superior. In London there is no surgical Syme, because there is no one pre-eminent above his fellows; and the most able surgeons, speaking generally, are surpassed in some one department of their art by a man perhaps in every other particular infinitely their inferior. It is curious to see a man inflated with the pride of a provincial reputation, collapse to his normal dimension on jostling with men of heavier metal in the great Metropolis.

Nil Desperandum.—Act up to your own motto.

X. Y. Z.—We shall seize an early opportunity of touching on the subject.

Mr. Thomas will find that his wishes have been complied with.

Mr. Carter.—The communication is declined with thanks for the offer. It is not suited for our pages.

A General Practitioner.—A Physician cannot consult with an homœopath any more than he can consult with a man who believes in the universally curative powers of Morison's pills or Holloway's ointment. An accurate diagnosis can avail the patient nothing, unless the treatment be such as shall remove or palliate the disease detected. What the better would the Duchess of — be for a consultation between the homœopath Quin and Dr. B., if the conclusion of that consultation should be, that the Duchess was suffering from sthenic pleuro-pneumonia, and that she should be treated by decillionths of a grain of tartar emetic? Accurate diagnosis is of no use but as a guide to efficient treatment.

Lic. Roy. Coll. Phys.—The blunder of our Contemporary was pointed out to us; but, as he eat his own words the following week, we were spared all trouble in the matter. A Doctor in Medicine—M.D.—is not a physician, and a Licentiate of the Royal College of Physicians, unless he has graduated at a University, is not M.D.

A Student.—The number of medical students at the London schools is generally lower than last year.

Anon.—We do not know whether the name appended was that of the gentleman who wrote the letter: it might have been merely *un nom de guerre*.

A Young Physiologist had better consult Harvey's own work,—*"De Motu Cordis."*

Mr. J.—Dr. Tripe is the author of the excellent papers on Scarlatina, published in the "Medical Times" four years since.

Mr. Every.—A recommendation from a member will obtain admission for a stranger, medical or not, to the Hunterian Museum.

J. E.—We neither prescribe nor recommend. Our Correspondent cannot do wrong by consulting an experienced *legitimate* medical man. Above all, as he values his health and his purse, let him avoid those who advertise in the "dirty corners" of the newspapers.

M. D.—When Dr. Harrison's challenge was accepted, he showed the white feather, and ran away on a quibble. There cannot be a question that the College have the powers they claim. Might is on their side. Whether the College authorities will take up the gauntlet, we doubt. Probably they will think the glove not worth the lifting. The game is too small for a College to fly at.

Mr. Johnson.—The report referred to was published in Oct., 1849. In it the value of the cholera bodies was unequivocally settled. Mr. Marshall's observations were embodied in that report. Mr. Busk's were communicated to the Microscopical Society. The results arrived at by the Cholera Sub-Committee (Drs. Baly and Gull) were:—1. Bodies presenting the characteristic forms of the so-called cholera fungi are not to be detected in the air, and, as far as our experiments have gone, not in the drinking water of infected places. 2. It is *established*, that under the term "annular bodies," "cholera cells," or "cholera fungi," there have been confounded many objects of various and totally distinct natures. 3. A large number of these have been traced to substances taken as food or medicine. 4. The origin of others is still doubtful, but these are clearly not fungi. 5. All the more remarkable forms are to be detected in the intestinal evacuations of persons labouring under diseases totally different in their nature from cholera; and the general conclusion drawn, and in which we believe every sensible man who had examined the question agreed, was, "that the whole theory of the disease which has been propounded is erroneous as far as it is based on the existence of the bodies in question. It was Dr. Budd, of Bristol, who published the celebrated letter in the "Times;" not Dr. Budd, of King's College.

A Practitioner.—One of Grave's Clinical Lectures contains an account of several similar cases. Dr. Watson's work is by far the best. We are not aware when a fourth edition may be looked for; the third cannot, we should say, be yet nearly exhausted.

Students.—The Professor mentioned in the letter of "Students," we are satisfied has the good of his pupils in view, and is animated by no selfish motive. His experience has been very great, while that of "Students," we expect, is yet small. We shall leave the matter in the hands of Mr. —, satisfied that he knows better what is right than "Students," and is quite as anxious for the welfare of those he is instructing as is our youthful Correspondent.

C. M.—To convert a degree of Fahrenheit into its equivalent on Reaumur's scale, multiply the number of degrees above or below 32° by 4, and divide by 9.

(185 Fahr.—32 = 153) × 4 = 612, and 612 ÷ 9 = 68 R.

Rochester.—We have not heard how the money is to be applied. We shall keep our eye on the subject. The money the Dean has had to disgorge must not, and we believe will not, be jobbed away. It was bequeathed for the support of a leper-house. There is at present no civil hospital for the sick in Chatham, Rochester, or Stroud. One is, we understand, greatly needed for the poor of these towns, and of the country around.

A Young Observer.—Procure a good microscope. What is worth the trouble of doing, is worth the trouble of doing well. For the purpose of examining the animal tissue, a microscope possessing a magnifying power of 350 diameters is needed. Rosse's glasses hold the first place; however, Powell and Lealand are by some esteemed to be as good. A very excellent microscope can be had for about seven pounds. French glasses come much cheaper, but they are often good for nothing.

COMMUNICATIONS have been received from—

Dr. ROUTH, of Dorset-square; Mr. BAKER, of Thurlow, near Newmarket; Mr. WILKIN, of Southampton; Dr. J. GRIFFITHS SWAYNE, of Clifton; Dr. BURNETT, of Alton; SECRETARY OF THE PHARMACEUTICAL SOCIETY; A MILITARY SURGEON; SECRETARY OF THE CHEMICAL SOCIETY; Mr. WALDRON BRADLEY, of Martley; A CONSTANT READER; SECRETARY OF ASSOCIATION FOR PROMOTING THE REPEAL OF THE TAXES ON KNOWLEDGE; Mr. SARVIS, of Winchester-street, Bethnal-green; Dr. COCHRANE, of Edinburgh; Mr. HENRY CHAPMAN, of Lower Seymour-street; Mr. CLENDON, of Albemarle-street; SECRETARIES OF THE EPIDEMIOLOGICAL SOCIETY; Dr. CROKER PENNELL, of Rio Janeiro; Mr. BRANSBY COOPER, of Spring-gardens, and Guy's Hospital; INQUIRER; Mr. STANLEY, of Brook-street, and St. Bartholomew's Hospital; Dr. BENICE JONES, of Grosvenor-street, and St. George's Hospital; Mr. GARDNER, of Bayswater; A FELLOW OF THE MEDICAL SOCIETY OF LONDON; SECRETARY OF THE WESTERN MEDICAL SOCIETY OF LONDON; Dr. MONCKTON, of Brenchley; STUDENS; Mr. REYNOLDS, of Mile-end; Mr. GUTTERIDGE, of Birmingham; C. J.; A PHYSICIAN ACCOUCHEUR; Professor GREGORY, of Edinburgh; A STUDENT; Dr. E. A. PARKES, of Harley-street and University College; Mr. PAVY, of Guy's Hospital.

The London and Provincial Medical Protection and Benevolent Society.

43, LINCOLN'S-INN-FIELDS, LONDON.

PRESIDENT.

JOHN PROPERT, Esq.

TRUSTEES TO THE SOCIETY.

John Bowling, Esq., Hammersmith. J. Probert, Esq., New Cavendish-street.
James Clayton, Esq., Percy-street. G. Webster, Esq., M.D., Dulwich.
Nathaniel Clifton, Esq., Islington.
Horatio Day, Esq., Isleworth.

The Medical Profession is informed
that the objects of this Society are—

1st. To create a higher tone in the public mind towards the Medical Profession, without compromising its honour, standing, or liberal character, and to secure the more regular payment for professional services from that large class of society who possess the means, but not the disposition, to remunerate Medical Men.

2nd. To negotiate the Transfer of Practices, Partnerships, and for the Provision of Assistants.

3rd. To Establish a Fund, to be devoted to the Erection and Support of a College for the Education of the Children, Orphans, or otherwise, of Medical Men, and also for the reception of Distressed Members of the Medical Profession or their Widows.

Annual Subscription, One Guinea, commencing January and July.

Particulars to be obtained from the Secretary.

No unqualified person can be admitted a Member of this Society.

The Trustees and Committee are responsible for all Moneys paid to the Society, and also for the integrity of their Agents.

HENRY FOREMAN, Esq., Superintendent.
WILLIAM GREEN, Esq., Secretary.

The New Equitable Life Assurance COMPANY.

(Incorporated by Act of Parliament, 7 and 8 Vic. c. cx.)

TRUSTEES.

Sir James Duke, Bart., Ald., M.P. George James Guthrie, Esq., F.R.S.
James Wyld, Esq., M.P. Sir Charles Hastings, M.D.
William Fergusson, Esq., F.R.S.

Robert Lee, M.D., F.R.S., CHAIRMAN OF DIRECTORS.

George Beaman, Esq., M.R.C.S., DEPUTY-CHAIRMAN.

BANKERS.

The Commercial Bank of London.

CONSULTING PHYSICIANS.

Marshall Hall, M.D., F.R.S.
Chas. J. B. Williams, M.D., F.R.S.
Jas. Arthur Wilson, M.D.

CONSULTING SURGEONS.

William Fergusson, Esq., F.R.S.
J. Ranald Martin, Esq., F.R.S.
Samuel Solly, Esq., F.R.S.

SURGEON AND MEDICAL EXAMINER.

Thomas Wakley, Esq., F.R.C.S., Guilford-street, Russell-square.

STANDING COUNSEL.

Sir Alexander Cockburn, Her Majesty's Attorney-General.
George Woodyatt Hastings, Esq., Paper-buildings, Temple.

SOLICITORS.

Messrs. Bell, Steward, and Lloyd, 59, Lincoln's-inn-fields.

SECRETARY.

H. Barber Beaumont, Esq.

CONSTITUTION AND REGULATIONS OF THE COMPANY.
CAPITAL.—MUTUAL ASSURANCE.

The "NEW EQUITABLE" embraces all the advantages of a strictly Mutual Office, with the addition of an ample subscribed paid-up capital, forming a *bonâ fide* security for its policy-holders.

POLICIES INDISPUTABLE.

The Policies of this Company being indisputable, they become as readily negotiable, in monetary transactions, as any other description of personal property.

SPECIAL ASSURANCES.

All the different varieties of Life Contingencies may be provided against by Assurances in the New Equitable; and every accommodation is granted to the Assured for payment of premium.

INVALID LIVES

Are assured at rates adapted to the circumstances of each case. Every circumstance affecting the health impartially considered.

DIVISION AND APPROPRIATION OF PROFITS.

The whole of the Profits will be Equitably divided amongst the holders of Policies issued on the participating scale.

MEDICAL PRACTITIONERS.

The Directors feel strongly that Medical Practitioners have not hitherto received that recognition, by Assurance Companies, which their professional knowledge, position, and valuable services entitled them to expect. They have determined, therefore, to frankly acknowledge and consult all duly qualified Medical Referees as the Medical Advisers of the Company, and uniformly transmit, with the Questions intended to be made the basis of every Official Medical Report, a Consultation Fee of Two Guineas.

ANNUITIES AND ENDOWMENTS GRANTED.

Any further information may be had on applying personally, or by letter, to the Resident Director or Secretary.

Chief Offices—WEST STRAND, CHARING-CROSS, LONDON.

To Medical Students.—Cases of Dis-

SECTING, POST-MORTEM, and POCKET INSTRUMENTS, all of the best quality.

SUSPENSORY BANDAGES, TRUSSES, ENEMA SYRINGES, BANDAGES FOR VARICOSE VEINS.

Manufactured by Fred. Walters, 16, Moorgate-street, City.

Taraxacum.—Davenport's Liquor or

FLUID EXTRACT, prepared by spontaneous evaporation. When diluted it presents the milky appearance and every characteristic of the fresh Juice. From the particular care devoted to its preparation, the properties of the Root are wholly preserved, and is found by medical experience to be most efficient where ordinary Extracts have proved inert. Dose, a teaspoonful. 6s. per pound.—J. T. Davenport, Operative Chemist to H.R.H. the Duke of Cambridge, 83, Great Russell-street, Bloomsbury.

Rooff's Improved Respirator (Patent)

for CONSUMPTION, ASTHMA, and DELICATE LUNGS, is particularly recommended for the easy respiration it permits, having separate channels for the inspired and expired air, formed of tubes instead of wire gauze; it warms and purifies the atmosphere without becoming clogged, and neither requires cleaning nor repairing. No unsightly appearance.

To be obtained, wholesale and retail, at W. B. PINE'S Acoustic Repository, 352, Strand, one door from Wellington-street.

Prize Medal awarded to Markwick's

SPONGIO PILINE POULTICE, declared by Mr. LEADAM, Surgeon to the Great Grimsby Docks, "to surpass any one article used by him during the last 30 years for CLEANLINESS, EASY APPLICATION, and, above all, EFFICACY, and an immense saving of expense; the IMPERMEABLE PILINE, invaluable in GOUT, RHEUMATISM, and LUMBAGO, and for applying stimulating liniments; and the PILINE RESPIRATORS, CHEST PROTECTORS, WARM GLOVES, and SHOE-SOCKS, &c. Lists forwarded on application to ALFRED MARKWICK and CO., Patentees, and sole Manufacturers, 32, KING WILLIAM-STREET, CITY.

Varicose Veins, Weakness, &c.—

HUXLEY'S SURGICAL CAOUTCHOUC ELASTIC STOCKINGS, Knee-caps, Anklets, &c., stand unrivalled for their efficacy in all cases of Varicose Veins, Weakness, Sprains, &c. They are drawn on with the facility of an ordinary stocking, affording equal and permanent pressure in every part. They are perfectly porous, less expensive, and more durable than any stocking yet produced. Huxley and Co. particularly solicit the inspection of the Profession.

Directions for self-measurement forwarded, and the article sent by post. HUXLEY and CO., 5, VERESTREET, CAVENDISH-SQUARE. "A Country Practitioner.—Huxley's Surgical Stockings:—We constantly use them, and find them thoroughly efficacious."—Vide Lancet, Notice to Correspondents.

Hæmorrhoids and Prolapsus Ani.—

B. F. ATKINSON, 26, Strand, London, invites the Faculty to inspect his REGISTERED ANAL TRUSS or RECTUM SUPPORTER. It effectually cures piles, and affords the greatest amount of relief in cases of prolapsus ani. It is easily applied, and can be worn with comfort under all circumstances.

B. F. A. from his extensive experience in the construction and application of surgical mechanism, confidently offers his services to all afflicted with spinal curvature, distortions of the legs, feet, &c. Trusses carefully applied. Artificial legs, hands, an arms constructed on the most improved principles.

B. F. Atkinson, Surgical Mechanist, 26, Strand, London, four doors from Hungerford-street.

Surgical Instruments, and every Im-

plement necessary for Surgeons and Druggists, can be had (warranted best quality and moderate prices), retail as well as wholesale, from the Manufacturer, JAMES ARNOLD, 35, West Smithfield, St. Bartholomew's Hospital, London.

	£	s.	d.		£	s.	d.
Single Circular Trusses	0	5	6	Case of Tooth Instruments	1	0	0
Double ditto	0	5	6	Case of Cupping Instruments	2	13	6
On Salmon's expired Patent	0	4	6	Case of Pocket Instruments	1	0	0
Double ditto	0	5	0	Brass Enema Syringe, complete	1	12	0
On Coles's expired Patent	0	5	0	Case of Dissecting Instruments, ivory handles	1	15	0
Double ditto	0	10	0	Best Bleeding Lancets, per dozen	1	1	0
Cotton Net Suspensory Trusses, from	0	5	10				
Elastic Stocking-net bandage, per yard	0	0	5				

Important to Surgeons requiring In-

STRUMENTS to DESIGN.—BLACKWELL (Working Surgeons' Instrument, Razor Maker, and Cutler), 3, Bedford-court, Covent-garden, London, solicits attention to the above, and respectfully invites inspection of an extensive Stock of Surgeons' Instruments and Cutlery, (guaranteed best London make,) and offered at moderate prices.

	£	s.	d.
Circular Spring Truss	from 5	0	double 0 7 6
Single Patent, Salmon's	7	6	0 10 6
" Cole's	10	6	0 18 0
Scott's Reservoir double-action Aperient Vase, sold at £3 3s.	2	2	0
Ellis's Belts and Splint for Fractured Clavicle, in Box	0	18	0

Bleeding Lancets, 18s. a dozen; Dissecting-cases, from 12s.; Blackwell Registered Guard Razors from 3s. 6d.

Improved Elastic and Spring Crutches, Stockings (no lacing), Knee and Ankle Socks, Bandages, Artificial Legs, Arms, &c. Manufactory, 3, Bedford-court, Strand, facing Agar-street.

Army and Navy Surgeons' Outfits at an hour's notice; and a Variety of Cases, equal to new, for Navy and Emigrant Surgeons, cheap.

ORIGINAL LECTURES.

CLINICAL LECTURE

DELIVERED AT

ST. BARTHOLOMEW'S HOSPITAL.

By EDWARD STANLEY, Esq., F.R.S.

OPERATION UPON THE CHEEK AND LOWER JAW, — INHALATION OF CHLOROFORM NEARLY FATAL: COMMENTS ON THE USE OF CHLOROFORM IN SURGICAL OPERATIONS.

THE first case to which I shall solicit your attention will be that of the patient recently in Bentley's Ward, in whom I removed a portion of the cheek and of the lower jaw, on account of carcinomatous disease affecting these parts. This case has been of especial interest to me, and it will be so to you, for the reason that the life of the patient was brought into extreme peril by the ill effects of chloroform, and, in consequence, I very nearly had the misfortune to witness an event which, up to the present time, I have but imagined with a feeling of horror, namely, the death of a patient during an operation undertaken with no idea of immediate danger to life.

Joseph Archer, aged thirty-seven, a butcher, residing in the country, in good health, and of temperate habits, was admitted into the hospital in September, 1850, on account of carcinoma in the right half of the lower lip, near the angle of the mouth. Mr. Skey removed the diseased portion of the lip without the administration of chloroform, and the wound soon became soundly healed. At the time of the operation a small hard swelling could be felt in the right cheek. About three months afterwards the cheek was accidentally struck on two or three occasions, and then the swelling began to increase. In September, 1851, twelve months after the removal of the disease in the lip, the man was again admitted into the hospital under my care. The swelling in the cheek had now become the size of a walnut, and the integument covering it was apparently about to ulcerate. His general health was good; the absorbent glands below the jaw were not enlarged or indurated; but the tumour in the cheek adhered so firmly to the jaw, that it was probable the bone had become implicated in the disease. Under these circumstances an operation to be effective necessarily consisted in the removal of a large portion of the cheek and probably of part of the lower-jaw. On Saturday the 27th of September, this operation was performed. Chloroform was administered through the ordinary inhaler for about twelve minutes, without annulling either sensation or voluntary motion. Then the mode of administering the chloroform was changed; it was dropped into a piece of lint formed into a hollow cone, and around this a folded towel was laid on the face. A few minutes afterwards I commenced the operation by an elliptical incision through the skin, circumscribing the portion of the cheek which I intended to remove. Directly this was done, my assistants, who were watching the pulse at the wrist, reported that it could not be felt, and at the same instant, without either stertor or struggle, the countenance of the patient changed, and his body sunk upon the operating table apparently lifeless. It was evident to all around, that the patient's life was in immediate and imminent peril. Accordingly, instead of continuing the operation, our attention was now directed to the means of restoring animation. Cool and fresh air was freely admitted to the face and air

passages, ammonia was applied to the nostrils, cold water was repeatedly dashed on the face and chest, sharp blows were struck with the hand upon the epigastrium, and brandy and water was slowly poured into the mouth in small quantities, but not repeated until it was distinctly followed by the effort of swallowing. Some fluid was now vomited, apparently the remains of the breakfast the man had taken several hours before the operation, and after a little time the pulse could be again felt at the wrist; but not until these measures had been continued fifteen or twenty minutes were the circulation and consciousness sufficiently restored to assure us that life was safe. Then, with the operation uncompleted, the patient was gently removed from the operating table and conveyed to his bed. The question of completing the operation was now considered, and I decided on the propriety of postponing it to the evening, under the apprehension that for some hours the circulation would not be sufficiently firm to resist the influence of the loss of blood which must ensue in the further stages of the operation. Accordingly, in the evening, with the assistance of Mr. Paget, I completed the operation with perfect safety to the patient, and, I need scarcely add, without the administration of chloroform. As the exposed surface of the jaw did not appear healthy, a semicircular portion of it was removed by means of a key-hole saw, the divided edges of the cheek being then brought together and kept so by fine pins and sutures. The subsequent progress of the case was very favourable. Within three weeks from the operation the wound had so nearly healed, that the man would not remain longer in the hospital. The tumour in the cheek, when examined after its removal, proved to be of the nature of epithelial cancer; such also was the character of the disease previously removed from the lip.

It cannot be doubted that in this instance death was very nearly occasioned by chloroform. The phenomena were not either the stertor of oppressed breathing or the sudden stoppage of breathing from the flow of blood into the glottis: they were the loss of consciousness and motion followed by sinking of the circulation, apparently to its complete cessation. The phenomena observed in this and in other similar instances show the prejudicial agency of chloroform to be directly upon the heart. Accordingly, the circulation stops before breathing, and upon recovery the circulation returns before the act of breathing, circumstances that were well observed in the following case, the history of which Mr. Paget has been so good as to draw up for me:—"In a case of tetanus, which appeared to be idiopathic, and of which the symptoms were extremely severe, a man inhaled about two drachms of chloroform, and in an ordinary time and manner was brought under its full influence. I was trying to open his mouth, but his jaw was still fixed; and while still trying, we saw him become extremely pale, and then blueish about his lips and nose; then he began to breathe heavily and frothed at the mouth; and his pulse, which had been irregular during the inhalation of the chloroform, suddenly stopped: his heart ceased to beat, and in a few seconds more he ceased to breathe, and became motionless, with his limbs flaccid. He was to all appearance dead, and thus he remained for about a minute and a half, when again his heart began to act, blood returned to his face, and his pulse again became full; then he began to breathe again, and presently he breathed freely. In a few minutes more he had recovered from the effects of the chloroform, and relapsed into the tetanic state. While he was apparently dead, various means were used to resuscitate him, including sharp blows with the open hand upon his thighs and other parts, and these appeared to be useful. It was very observable that the ill effect of the chloroform was exercised on the heart more than, and earlier than, on the muscles of respiration. His heart ceased to act before he ceased to breathe, and his heart recovered and acted forcibly, so as to propel blood well into the capillaries of the face, before he began to breathe."

Each of the several measures employed in the case which I have related probably did something towards the recovery of the patient's life. But let us suppose that these measures had failed,—that by the free and persevering administration of brandy the pulse at the wrist had not become so distinct that life could be considered safe, the patient still continuing to all appearance lifeless. Under these circumstances, one other measure would, I think, have been tried, however

doubtful its result, namely, artificial breathing, either through a tube passed from the mouth into the glottis, or through an opening made into the larynx. Some hope there would be of the success of artificial breathing in such a case from the fact that, in asphyxiated animals, it is found to be the most direct and sure means of exciting the action of the heart.

It will be a question whether, in this case, the ill effects of chloroform were owing to the excessive quantity of it used, or to the mode of administering it, or to an unusual susceptibility of its influence. My first impressions upon the occurrence of this case were, I confess, of so much alarm at the use of chloroform, that I felt inclined to return to the employ of ether as the anæsthetic agent. But upon narrowly viewing all the circumstances, I now adopt the conclusion, that in this instance the ill effects of the chloroform are to be attributed to the mode in which it was administered, and which I am disposed to explain in the following way. It is to be observed, that not until the ordinary inhaling apparatus was changed for the hollow cone of lint moistened by the chloroform did the alarming symptoms appear, and I cannot but think that from the lint thus imbued with chloroform the vapour was inhaled in too concentrated a form, not sufficiently mixed with fresh air to be drawn into the air-passages of an individual who had already inhaled it through the ordinary apparatus for twelve minutes.

Observation warrants the opinion that there is not any marked difference in the effects of chloroform upon different persons, although the time required to produce complete anæsthesia varies greatly, and the symptoms are not always the same which precede the suspension of consciousness and voluntary motion. Provided that due caution be used, chloroform may be administered with equal safety in infants and in advanced age; but in infants the action of the concentrated vapour of chloroform is so quick that great care is necessary in respect to the quantity of it used and to the mode of administering it, otherwise there will be danger of the action of the infant heart stopping simultaneously with the cessation of motion and sensation in the rest of the body.

Experience has not furnished evidence against the use of chloroform in instances of extreme debility, the consequence of long suffering from diseases of the joints or other organs. Although in such individuals the pulse may be extremely frequent and feeble at the time of the operation, yet it has not appeared that the chloroform is more likely to affect the action of the heart than when administered in opposite conditions of the system. Nor has it appeared that the use of chloroform should be forbidden when the nervous system is depressed by the shock of a severe injury, as a lacerated limb, compound fracture, or dislocation. Such, at least, is my impression from the observation of its effects in these cases.

An empty stomach is essential preparatory to the administration of chloroform. Our rule in the hospital is, that the patient should take only a light breakfast several hours previous to the time of the operation. When, from inattention to this point, the chloroform has been administered upon a full stomach, the usual result has been, that shortly after the commencement of the inhalation, repeated ejections of the contents of the stomach have ensued, occasioning much exhaustion and distress to the patient. After the fullest and most protracted administration of chloroform, no other attention is ordinarily required than the abstinence from food for five or six hours. If food is taken within this period it will probably be rejected. Headache and continued irritability of stomach are the occasional ill consequences of chloroform, but they usually subside of themselves. If these symptoms continue with depression of the pulse, it may become necessary to administer brandy, ammonia, liquor opii sedatives, etc. But rarely indeed are these measures required. Almost constantly on visiting the patient who has just undergone a severe and protracted operation, I have found the pulse of its natural fullness, force, and frequency. The general result of the use of chloroform in operations, is to leave the patient in a state neither of debility nor depression.

All the evidence to be gathered on this subject leaves my mind satisfied of the propriety of continuing the use of chloroform in operations. I do not find sufficient grounds for the substitution of any other anæsthetic agent in its place. Next to chloroform, sulphuric ether appears to be the most eligible anæsthetic agent. The advantages of chloroform

are, that it acts most quickly in annulling sensation and voluntary motion, and that it does so without irritating the air-passages or causing distress in any other way; its disadvantages are, that its narcotizing effects soon subside, and that it tends to weaken, that it may even stop the action of the heart. Sulphuric ether almost constantly excites coughing, and a sense of suffocation; its narcotizing action is usually slower than that of chloroform, but it endures longer. The quick subsidence of the narcotizing effects of chloroform renders it necessary to repeat the inhalation, and frequently at short intervals; but, if this be done with proper attention, there need be, I am willing to believe, no apprehension of the stoppage of the pulse. This attention should be directed to the quantity of chloroform used, to the mode of using it, and to its influence upon the pulse. It is desirable not to change the mode of inhalation; but, if this be done, it should be so managed, that, when the patient has been long submitted to the agency of chloroform without the desired effect, the mode of inhalation should not be changed for one which will suddenly apply to the air-passages the concentrated vapour of two or three drachms of chloroform, for this will be accompanied by the danger of instantly annihilating the action of the heart. Such, as has been already stated, was, as I believe, the error in the mode of administering the chloroform to the patient whose case I have related; and to some such defective proceeding I am disposed to attribute the fatal effects of chloroform in other instances which have been recorded. The individual who administers chloroform should be sufficiently experienced in practical medicine to be capable of quickly appreciating changes in the pulse. Whilst the fingers of one hand are applied to the patient's wrist, the other hand should regulate the application of the inhaler to the patient's face. The test of sufficiency of the influence of chloroform usually relied upon, is the suspension of voluntary motion; but in some individuals, even before voluntary motion is suspended, sensation is sufficiently annulled to allow of the operation proceeding without pain. There has been ample experience of the safety of using chloroform in operations which were necessarily protracted. In a youth aged 15, I removed an osseous exostosis from the neck of the humerus. The full influence of chloroform was maintained an hour and a quarter without occasioning the least derangement of his system; and, in another case, chloroform was safely administered for an equally long period to a member of our Profession during the removal of a tumour situated upon the parotid gland, but beneath the primary branches of the portio dura, and, consequently, I had to detach each branch of the nerve separately from the tumour, and to draw all the branches aside, whilst the removal of the tumour was completed; all of which could not have been accomplished without the aid of chloroform, for, during the restlessness attendant on severe suffering, the nerves could not have been separated from the tumour without the division of some of them, and the consequent paralysis of the face. If there should be mistrust in the prolonged use of chloroform, it has been reasonably suggested, that, after the first narcotization by chloroform, it may be changed for sulphuric ether, which will require less frequent repetition, as its effects endure a longer time, with, it has been considered, and if truly, the important advantage of not tending, in the same degree, to weaken the action of the heart.

There is not, I believe, any good ground for the opinion, that the use of chloroform in operations interferes with the healing of the wound. That chloroform, by preventing pain, saves the system from the shock of the operation, I have no doubt; moreover, the smarting of wounds which, often endured for hours, is scarcely ever complained of after the administration of chloroform, and in amputations, when chloroform has been inhaled, the painful twitchings and jumpings of the stump, so distressing to the patient, scarcely ever occur.

The circumstances of the case which I have related, added to the knowledge of other cases which have been communicated to me, show clearly the line of conduct to be pursued whenever, during an operation under chloroform, the pulse sinks so that it cannot be felt, accompanied by a sudden collapse of the patient, so that he appears to be lifeless,—it is to suspend the operation, and not resume it for several,—say six or nine hours, in order that sufficient time may be allowed for the heart to regain its action so firmly that there would not be danger of its failing again, from the loss of a small quantity of blood, in completing the operation.

ORIGINAL COMMUNICATIONS.

CRIME AND INSANITY;

THEIR

CAUSES, CONNEXION, AND CONSEQUENCES;
HOW DISTINGUISHED AND HOW TREATED BY
HUMAN LEGISLATION.

By C. M. BURNETT, M.D.

[Continued from page 350.]

THE PRIMARY AND SECONDARY CAUSES OF
CRIME AND INSANITY.—LIMITS OF THOSE
CAUSES DEFINED.

In the first place we have to consider the causes that have operated to bring the human mind into that condition that leads to crime and insanity. These causes are to be distinguished as primary and secondary. The primary cause of crime is that which is very commonly, but improperly called the principle of evil, which philosophically has been regarded as inherent in the nature of man. By direct revelation from God we are, however, informed, that this supposed principle is an existent being, or spirit, not inherent in organised bodies, but which exerts a power over the organisation of all created beings, and man more especially, which the ordinary spirit that is in them cannot alone resist. To this spirit of evil we must attribute in man the various secondary causes of crime and insanity, viz., the natural substances, whether designed for food and sustenance or for therapeutic and medicinal or hygienic purposes, the abusive employment of which leads the way to intemperance, dissipation, disease, and finally to death.

The secondary causes of crime are not confined to the abuse of all natural substances, whether dietetically, hygienically, or therapeutically considered; but they divide themselves into two kinds, exciting and predisposing. The exciting causes are confined to the natural productions, or the natural agencies, that constitute or surround our globe; and these, by their excessive or reiterated application to the organic structures in man, lay the foundation of morbid alterations in those structures, which, whether in the structure or the formation of the part, constitute the predisposing cause, which, together with the exciting cause, must be present before crime or insanity can be developed.

The deranged condition of bodily function thus induced, must unavoidably be accompanied with an unhealthy mental gestation, and the natural consequences of applying an undue or excessive quantity of any substance intended to support life into the system, are to be traced not only in the structure and function of those organs that supply the bodily powers, but also in the structure and function of the brain, the consequence of which last condition is seen in the moral deformity and degradation which the mind undergoes.

Our attention will be occupied with advantage, if we here investigate this primary cause of crime and insanity, in its relation to those that are secondary. It is not necessary to enter upon any deep discussion upon the nature and origin of the cause of evil. Assuming Revelation to be the groundwork on which the laws that relate to crime and insanity are supposed to rest in those countries which have been emancipated from paganism, it will be unnecessary to go back to the Platonic philosophy, to the doctrines of the Eons and the Demiurgus, to satisfy the reader that the introduction of evil into this world is a calamity that dates from the fall of man. And whatever may be the tendency of this argument, most men are unwilling to deny that crime is the result of the evil and morbid direction the human mind has taken from the period of that event. Leaving, then, the investigation of the primary cause of evil, I shall not stop here to consider the vital questions of its existence, or of the power it possesses to induce sin and crime, insanity and death, having satisfied my mind, after comparing all that Revelation has affirmed upon this matter, that the principle of evil, the effects of which on the mind of fallen man I am about to investigate, is a real existent being or spirit, most truly without ubiquity, and subject, indeed, to the Spirit of God, but infinitely more powerful than that natural power of man which his spirit alone is able to exert.

It is with the effects produced by this evil spirit, or in

other words, with the actions of the second causes of crime and insanity upon the human mind, which, as an instrument of intellectual and moral thought has been, and is continually injured by its violent assaults, that we are most interested in, after having been assured of its real existence. And that interest is increased in proportion as we are able to apprehend the true remedies that have been provided to counteract it. Failing to discern and so to apply these remedies, we here read the secret cause of the rapid advance of crime and insanity. If we rightly estimate the stupendous power the spirit of evil has upon the mind of the entire race of man, we shall be no longer doubting votaries to such power, whose impetuosity of impulse we can no more conquer in ourselves and by our own unassisted strength, than we can move the worlds, or do impossibilities.

A close attention to the symbols and characters of this awful power, as well as to the province that we shall find has been assigned to it, will not be unprofitably bestowed upon such a subject, so closely bound up as it is with the nature of crime and insanity, and so necessary to be computed in the adaptation of all remedial means which we desire to be successful. In another place I have more fully entered into the true relation the spirit of evil bears to the mind. It is a vast subject, and if determined by the mode of argument I have there adduced, will go far to settle a great question now at stake, and which is dividing and weakening the legislative councils of this and other countries, to an extent that has scarcely been conjectured; viz., how far man in his own natural strength is capable of resisting such a power as that which is the primary cause of crime and insanity, unaided by the moral control propounded in the Divine law, and unguarded by the use of those means appointed by the Divine Lawgiver for its suppression. Out of this question necessarily flows the practical experiment we and other nations are now making how far we can go in the abrogation of those principles embodied in the Divine law, for arresting the progress of crime among all communities of men, without destroying the reciprocal aid each member of society is indispensably bound to afford in maintaining the general weal.

The marks by which the symbols of the spirit of evil are to be detected, may be at all times discovered by observing that its province is singularly bound by that generic principle which is applicable to every naturally created substance around, and which consists in the power to advance beyond the ultimate use and limit which has been assigned to those created substances by that Being who originally made them. The great adversary of man's spirit, the primary cause of evil, has ever sought to affix the evil consequences that proceed from the abusive employment of natural productions, to the substances themselves, or to make these second causes of evil the origin of corruption and of crime; and there are at this time thousands of the human race, even in the most civilised nations, who are more ignorant upon this point than multitudes were in the days of Plato and Pythagoras. But all created substances have in them a principle of good as well as of evil, and there is no argument more powerfully suggestive of the fact, that the principle of good is paramount to that of evil, than that contained in the known properties of therapeutic agents, which properties must have been given to them by a Being whose foreknowledge of the abusive application to which he saw all created substances might be applied, bears an inscrutable relation to those substances. The very use of these agents is contained in the counteracting effects they are capable of exerting upon living bodies that have been injured by the abusive application of natural substances to them, which effects must have been not only known to, but designed by the Creator before the fall of man. By separating the principle of evil not only from the being who is the cause of it, but from the substances on which it is exerted, we shall see it has been permitted for wise but temporary purposes to act generally upon every created substance. Whether that substance, as the natural food or as the therapeutic agent, is taken into the stomach, or whether it is conveyed in the atmosphere, or in other gaseous substances through the lungs, all those who are disposed to regard what is termed "mesmerism" as a natural, lawful agent akin to what is recognised as electricity or as heat, will do well to observe, that it is not confined to human or even to living bodies, but is capable of being exerted upon inorganic structures where, by the aid of man, it produces effects precisely identical with those we witness in the operations of the ancient magicians and

sorcerers. Satan is called "the prince of the power of the air," to remind us that he can exercise his abusive power upon all natural substances, not merely those that have been endowed with life, but also upon the elements of matter; so that, under his agency, man is enabled to accomplish many "signs and wonders" that are thought to belong to natural agents. They may, however, be detected by observing the rule I shall presently lay down. Man may use this power ignorantly, having too readily yielded his personality to it, not suspecting its character, but believing it to be natural; and I must not be understood to imply, that all who practise mesmerism do so under the impression that the signs are otherwise than natural and healthy. But, as this power is being more largely developed in this country, these remarks may not be unworthy of our serious attention.

This property, therefore, is found to extend, not only to the more potent natural productions, such as we term poisons, but also to the very means provided to give man health and strength, to enable him to perform his mental and bodily avocations. It is embodied in the evil desire to extend our inquiries and experiments beyond the rightful application of all natural products, and the lawful boundaries assigned to them, which boundaries are comprehended in the term use. These boundaries call for our most careful scrutiny; and the true knowledge of them comprises the most accurate perfection of hygienic, of dietetic, and of therapeutic science. For, whether as food, or as medicine, or as gaseous elements, they vary, not only in different substances, but in the application of the same substance to different beings and even to different parts of the organisation of the same being. This may be illustrated by many examples. Thus, to cite one from the class of medicinal agents, the same quantity of carbonic acid or of chloroform that could be received into the stomach with advantage, or for a useful therapeutic end, could not be inhaled into the lungs, or brought into immediate contact with the blood, without destroying life; and that quantity which the lungs or the stomach of one animal could receive without danger, would be destructive to the life of another.

The reason of this difference in the useful limit of the same substance to different structures is, physiologically speaking, to prevent the introduction of substances into the living current in that disproportionate degree which would be incompatible with unions there required to carry on the functions of life. This shows at once, that the essence of the principle of evil cannot reside in any particular substance or class of substances, but that that principle is developed whenever and wherever the unalterable laws given to every created thing are sought to be stretched beyond their limits, and so to be defied. This power is exerted by and is attached to a being as really existing, as the power or principle of truth and virtue is known to be affixed to the Supreme Being.

The application, then, of remedial means for the cure of disease, which disease has been caused by the abusive operation of natural products, whether those diseases depend immediately upon the action of natural or of morbid poisons, or are the result of the slower and more insidious influence of such natural productions as are recognised by the title of food,—those productions having been long taken to an abusive extent, must have a boundary beyond which the very remedy becomes more objectionable than the disease it is proposed to cure. Taking this view of medicinal agents, it will be seen that their useful province takes a wide range, over which Satan possesses no more power than he does over the movements of the heavenly bodies, or any other part of the creation to which has been affixed those laws that he cannot alter or suspend. The very fact of such remedies for the cure of disease having been originally endowed with such specific virtues as they are found to possess, is an assurance to us, that Omniscient wisdom, before man was created, had provided and devised certain natural and lawful means capable of counteracting the evil and abusive effects of the satanic spirit upon the mind of man, and which God foresaw would be exerted. Having, then, discovered to us the wonderful fact, that there are substances in nature that have had powers bestowed upon them which are capable of restoring the lost functions that have been marred and destroyed by the tempter of man, it is surely no unimportant inquiry to determine by every legitimate means, where the province of those remedies terminates, beyond which boundary we may be said to reach the confines of the territory of Satan. In this inquiry we do well to observe this important and

coincident fact, viz.:—That there are in all diseases certain signs or symptoms by which they may be known and distinguished; and that while in the natural or useful operation of therapeutic or medicinal agents, an identity of character between the signs of disease and the signs of the counteracting power of their remedies cannot be detected, this identity is to be recognised immediately the remedy has been carried beyond the limit of its useful application. Let us, for example, apply this rule to that symptom of disease we term insensibility, which may proceed from the abusive application of many causes. A blow upon the head, the contact of many natural medicinal substances with the blood, an undue quantity of food, or of any beverage or liquid containing alcohol, or opium, or tobacco, may all be adduced as causes capable of producing this effect. Nor can it be said to proceed from the useful application of anything to the living body. Thus, opium is usefully given to assuage pain or to cause sleep and rest; and its application to an extent that would produce insensibility, places it at once side by side, in the identity of the sign, with those causes which are more plainly and directly to be traced to diseased action. Disease, again, is seen to check or suspend, and finally to destroy, the natural secretion or function of an organ, and in this way it causes pain. And the useful operation of therapeutic agents restores those natural functions or secretions, thereby relieving the part of pain. Now, if those natural agents were employed to such an extent as to produce a suspension of the natural function or secretion, we should again be able to detect the identity in the signs of the disease and the signs of the agent employed. So there is a similarity in the effect produced by chloroform and sulphuric ether upon the blood, when respired by the lungs, in the effect of what is called mesmerism, and in the effect of those diseases that produce insensibility. It is, however, necessary to observe accurately what may possibly be regarded as the useful signs caused by the therapeutic action of chloroform and ether upon the blood; for complete insensibility is not the first effect produced by these applications to the blood through the lungs. Neither do we find the first effects of mesmerism to be those of complete insensibility. While the nerves of general sensation appear to be involved from the first, so as to become temporarily lost, the brain still retains its specific sensations; for the power of consciousness is preserved, though not to the degree of health in which it acts under ordinary circumstances; for some of the qualities and phenomena of natural bodies are not recognised by the mind when under mesmerism. Nevertheless, insensibility having been attained, there is much to prove that here, after we pass the confines of the useful power of the agent, there are degrees of insensibility more or less intense, some of which are so dangerous as to be destructive of life; others are of longer continuance, but less fatal; while others possess various shades of power to produce transient insensibility. We observe these degrees of difference to characterise the signs of the abusive application of tobacco, opium, *cocculus indicus*, alcohol, cannabis indica, camphora, belladonna, prussic acid, and many other substances. The insensibility produced by all these substances, varies, not only in the power they each possess in themselves to produce the first stage of insensibility, or the more prolonged and fatal stage; but also the insensibility is different in all, and in some more incomplete or transient, in others more permanent or more rapidly destructive. The insensibility caused by opium is very peculiar, and quite different from that produced by alcohol; the premonitory signs are quicker in the one than in the other, and the recovery is slower. As, therefore, we admit the axiom, like effects like causes, so must we admit that insensibility is to be referred to the same primary cause that produces disease. And we may trace an analogy in the symptoms arising from the application of the different secondary causes above stated to the human constitution, which proves that they all possess, beyond a certain fixed point peculiar to each, the power to produce the same end. It is this certain fixed point peculiar to each which is so difficult to detect, and on the knowledge of which so much depends; for in approaching it, we find the demarkation between use and abuse is not abrupt but gradual, and almost imperceptible. It is on this account, that we are sometimes led to carry our therapeutic remedies beyond their legitimate bounds, thinking their action has not passed the confines of use, unless they produce permanent injury or death. The loss of the healthy function of an organ may, however, as in

the case of the brain, secure the individual short of death through the stages of dissipation, crime, and insanity, all which may be effected by the long-continued abuse of natural agents, the action of which might not necessarily produce the stage of insensibility. We notice perceptibly the difference between the simple or incipient effect of the application of the secondary causes of evil, and the more confirmed and less transient effect of those causes; and these differences of degree depend on the amount and power of the application. Thus, a slight blow on the head will produce sickness; so will the taking into the stomach an abusive quantity of food; so will the first stage of the abusive application of chloroform to the blood; so will the taking of many animal, vegetable, or mineral substances into the stomach in small doses. But by measuring the power of all these second causes, we pass out of the first stage into the more confirmed stage of insensibility. It follows, then, that the application of chloroform to the blood, when it produces sickness, it has passed the boundary between use and abuse; and therefore the stages beyond are to be classed with those substances that produce insensibility in all its shades of degree, from giddiness or intoxication to complete stupefaction and insensibility. But practically it is found, that many therapeutic agents may be applied to the living body with apparent benefit, even though their effects may be those of insensibility in one or other of its degrees. And, moreover, it is found, that the application of alcohol and other substances to the human constitution, when taken without any therapeutic beneficial intention, but from pure habit of indulgence, which is a degree further on in the direction towards the permanent evil to which I am now pointing, is one that may be often repeated without any more *apparent detriment* than a little temporary inconvenience. And in this is concealed the real danger. Here the old proverb applies,—“*Gutta cavat lapidem non vi sed sæpe cadendo.*” It is the imperceptible character of the assault as contrasted with the awfulness and utter helplessness of the consequence, that urges the necessity of giving more attention to the pathology of the mind in those stages where legislative interference would be attended with the best and happiest results. Chloroform and other therapeutic agents, mesmerism, alcohol, opium, and many other agents, be it remembered, have all been shown to be the immediate cause of crime and of insanity, as they have often been of death. I have been consulted in cases of insanity caused by the use of chloroform, and have heard of the same effect following the use of mesmerism. It is needless to point to the countless cases of mental derangement that follow the abuse of alcohol; and numerous medicinal agents have produced this effect. Is it then wise to place no barrier, whether physiological or legal, to guard the human family from the dangers that await them as they near the unsuspected precipice? And all these stages are more or less eminently calculated to induce that condition of body, and especially of the brain, which eventually leads to crime and insanity; not simply that crime which is restricted to the breach of human laws, but that which is committed against the laws of God, the perpetration of which is in the end far more fatal to society than that of those which relate immediately to man; not simply that insanity which answers to the legal definition affixed to it by the interpretation of our judges or by the expediency of human legislators, but that which is comprised in the weakness of purpose, the loss of control and of voluntary action, the deterioration in the power to exercise sound mental elasticity.

It is to the operation of the primary cause of crime upon the natural food that we have to look for the explanation why crime has advanced so rapidly upon the nations of the world in the present day; for the organic structure of the brain, through which the mind is manifested and the various objects of the outward world are contemplated, is thus made to undergo a morbid alteration in its constituent parts, which eventually leads to abnormal and irregular action. This is a sequence not unreasonable. A brain that is constantly fed by blood, in which the gaseous and mineral elements have unequally preponderated, and so have been unequally joined, as must unavoidably be the case in those individuals who indulge in intemperate habits, is not likely to apprehend, and therefore not likely to act, either truthfully or regularly. And that these elements do preponderate to an excess in many individuals whose nervous systems have undergone different degrees of morbid degeneration, is evident from their presence being so often detected in the urine. If crime has in-

creased, so have the morbid varieties of diseased structure; and we see now our pathological museums contain abnormal specimens which are not to be found in those that were collected at former periods. In the application of food to the body its use will be found to be guarded by the signs and sensations it produces,—ease and comfort to the body, health and vigour to the mind. And when use has terminated, this is marked by the abusive signs, pain, sickness, insensibility, and death. The same phenomena is to be detected in the use and abuse of therapeutic agents, the use of which is found in their power to relieve pain and sickness, and to substitute for them rest and sleep, which would appear to be the useful limit of their application; their abusive operation being marked by the same phenomena as are found to characterise the abusive application of food to the body, viz., insensibility in all its phases, from confusion or giddiness up to death. These very different signs, which both mark and separate the use from the abuse of natural substances, whether applied to the organisation of man as food or as medicine, may not appear to be of that importance these observations have attached to it, in discussing the subject of crime and insanity; but in truth they are all important, as opening up the cause of these direful calamities from that point where crime may strictly be said, to have its origin. And however impossible it may seem, to exercise any legislative restraint upon the abusive application of such agents, in these days of moral liberty and intellectual pride, it will not be difficult to show, that the earliest nations of mankind were fully alive to the secret of human infirmity, if any secret it was, and in the midst of heathen difficulties, and almost insurmountable obstacles, reaped those rewards that followed a more rigid attention and a more careful restriction on these points. We do well to remember that the Egyptians, the Persians, and the Grecians, three nations that lasted longer in a state of prosperity and power, that rose higher than any other nations in knowledge, whose remains are with us to this day as monuments of their successful progress, were all governed by laws that, as respected their food and beverage, extended from the King downwards. It is possible, without returning to the practice of these ancient nations, of eating in common, to place that legal restriction upon the abusive employment of food and beverage which would prevent, to a very great extent, open dissipation and intoxication, crime and insanity. But it is not probable we shall do so. The communism of the present day has a less propitious appearance. It is not the union of all to preserve the welfare of the whole community, but the banding together of different sections of society for the purpose of defeating others that have gained the ascendancy. It has no such end in view as that of exercising a healthy restraint upon the appetites and the feelings; but, on the contrary, has been rather set on foot by those who hold the doctrine, that the mind should be totally unfettered, and made amenable to no human laws. The stream of time, as it rolls on and nears the vast ocean of eternity, is borne down with impetuous force by the cumulative weight of progressive evil. There is no record of any nation, who, having disregarded the importance of protecting the use of food and beverage from the evils that so closely surrounded them, ever recovering the ground that it lost.

But if the signs which were attached to these substances were provided for us as sea-marks to point out the hidden danger that lurked beneath and around,—to act as barriers beyond which, though we might accidentally pass unhurt, there is always, nevertheless, a certain degree of latent danger, it is impossible to disregard them with impunity or to overlook the importance that is attached to them without incurring the penalty. That penalty has mercifully been made to operate leniently at first; but it is not the less certain, in the end, to accomplish its design, in the formation of disease, if often repeated, in laying the foundation of those morbid actions and alteration in the different organisms of the body, which lead the way to the first degrees of unhealthy mental action. Man first becomes selfish and sensual in his habits,—his taste becomes depraved,—his mind is more or less deprived of that healthy balance which once enabled him to use or refuse the various natural productions provided for him by his Creator, as they were either beneficial or hurtful,—before it reaches that state that is attended by acts of higher rebellion against God and man, when self-control and forbearance become practically impossible.

It will be seen, when we come to notice the effects produced upon society by the employment of legislative means

for the suppression of crime, that, instead of anticipating this evil by those preventive laws which the early nations found so successful, we have waited till the morbid results of the abusive employment of our food and beverage, and other agents at our disposal, have been established. At this stage we bring our legal restrictions to bear; and though, from their position, they are unavoidably less successful, and in many cases quite useless, in accomplishing the end, yet if, even in this stage, the remedies had been carried out with justice and rigour, we might have longer averted that judgment which God unwillingly takes into his own hands, when man has refused to execute it.

CASE OF SYME'S AMPUTATION AT THE ANKLE-JOINT.

By Mr. ELIN,

House-Surgeon of the General Hospital, Birmingham, formerly House-Surgeon of King's College Hospital.

In a recent number of the *Lancet*, there appeared a series of cases of Professor Syme's amputation at the ankle, performed by Professor Fergusson, most of which I had the good fortune to witness, some of them to dress. Although sloughing was generally a concomitant, yet the result was a useful stump. If this sloughing could be entirely prevented, I have no hesitation in saying, that the operation in question would be one of the most satisfactory and least mutilating, where disease of an important joint was concerned, requiring amputation, that the surgeon could perform.

I am now about to relate one of the most successful and satisfactory cases of the above operation that ever came under my observation.

Ann Wainwright, aged 24, a milliner, from Wolverhampton, admitted into the General Hospital under Mr. Amphlett, on the 13th August, 1851, with disease of the ankle-joint. Fair complexion, light hair, light blue eyes, and the ordinary characteristics of strumous habit.

Her previous history is shortly the following: About two years ago she sprained her ankle severely, took more exercise at the time than was consistent with the accident, great inflammation set in, which laid her up, and ever since she had been unable to put her foot to the ground. Abscesses formed at different periods, which were severally opened. She has twice previously been an in-patient of this hospital with the same disease, but has received only that benefit which rest and palliatives could give. Subsequently to her leaving the hospital for the second time, she became an in-patient of the Wolverhampton Hospital, and was there recommended to have her leg removed, but left that hospital unwilling to have the operation performed. A short time after this, the pain increasing very much, she came into the hospital with the determination of having the offending member removed.

At present the ankle is much swollen, especially on the inner side; there are four sinuses on the inner and three on the outer side, all leading down to diseased bone; the integuments around these are of a dusky red colour, and the veins of the foot and ankle distended. There has been continual discharge from these sinuses, and she has suffered constant pain. She has had at times slight hæmoptysis. Her chest was carefully examined, and there was found comparative dulness, with feebleness of the vesicular murmur over the right subclavicular region, but nothing sufficiently serious to forbid an operation.

The surgeons having agreed that amputation was necessary, on the 3rd of September, 1851, Mr. Amphlett performed amputation at the ankle-joint, after Professor Syme's method, the patient under the influence of chloroform. About two inches of the integument of the sole of the heel were left; the maleoli being in a carious condition, they were removed within half an inch of the lower ends of the tibia and fibula. The anterior tibial was the only vessel secured while on the operating table. After being in bed about an hour, hæmorrhage came on, and four other vessels were tied in the heel flap.

The heel flap was then brought forward and secured to the anterior by one suture, strips of plaster, and wet lint; the leg was laid between two soft bran pillows, the two lower and adjacent corners being stitched together. By means of this lateral support, pressure was taken off from the posterior part.

The patient progressed favourably, the ligatures coming away in due course; the flaps united partly by the first intention, partly by granulation; there was not a particle of sloughing; in short, she had not a single bad symptom up to the time of her dismissal from the hospital, on October 10th, 1851, with the stump all but healed.

Now, whether the absence of sloughing depended upon the pressure being removed from the posterior part of the limb by the lateral support, or upon the extra vascularity of the stump, may perhaps be a question; nevertheless the above mode of resting the limb may be worthy of trial.

The idea suggested itself to me from the supposition, that sloughing might have been occasioned in some of the previous cases I have seen, from the weight of the limb pressing upon the posterior tibial, and peroneal arteries, and so preventing a due proportion of blood reaching the extremity of the heel flap.

Nov. 8, 1851.—She has come into the hospital to-day to have a foot fitted to the stump. The flaps have perfectly united, and she is able to bear some weight on the stump.

Birmingham.

CASE OF PLACENTA PRÆVIA.

By CHARLES WALLER, M.D.,

Obstetric Physician to St. Thomas's Hospital.

Case 44.—On the 24th of October last, I was requested to visit a lady under the care of Mr. Jones, of Fetter-lane. Mr. Jones informed me his patient was 23 years of age, that she had married early in life, and had been confined with her first child at the age of 17, since which period she has had four living children, and had always enjoyed good health.

She had been walking for about half an hour on the 20th (four days previously), and on her return home noticed a little coloured discharge, which did not cease till after her confinement. Slight but frequent pains supervened, and continued throughout each day, but ceased at night, so that her sleep was not interfered with.

On the 24th, the hæmorrhage increased, and Mr. Jones was sent for. The os uteri was at this time so little dilated, and so high in the pelvis, that the precise nature of the case could not be discovered,—a small projecting portion of the amniotic bag was all that could be felt.

After waiting a few hours, the os uteri was dilated to the size of a crown piece; still nothing but membrane could be felt, no part of the child having as yet descended. The hæmorrhage becoming more alarming, Mr. Jones with some difficulty succeeded in rupturing the bag and discharging the liquor amnii. He then felt a large portion of the placenta attached round the os uteri, and the funis umbilicalis passing down through the ruptured membranes. The formidable nature of the case having been explained to the relatives, and a consultation being desired, I was immediately sent for. The hæmorrhage had been increasing, and was becoming very profuse; the patient was lying in a pool of blood, with scarcely any pain. The pulse was tolerably firm, but rapid; indeed, the general condition of the patient was better than might have been expected after so large a loss of blood. On examination, the vagina was full of coagula; the funis, and a portion of placenta, was felt in the vagina. On carrying the hand above the brim of the pelvis, the breech was discovered to be the presenting part, with the legs bent downwards. In such a position, the child (which had been some time dead) was easily removed; the placenta followed; the uterus contracted, and the flooding immediately ceased.

There was much weakness for a few days; but there was no other unfavourable symptom, and the patient is now perfectly well.

Finsbury-square.

ON TURPENTINE AS A STYPTIC.

By T. WALDRON BRADLEY, Esq., M.R.C.S.

In the *Medical Times* for December 14th, I published the particulars of some half dozen cases, to illustrate the good effects of turpentine in hæmorrhagic diseases. With reference to a similar number then under treatment, I observed

that they were progressing satisfactorily, "a decrease in, if not a cessation of the hæmorrhage, taking place in each case after the administration of the turpentine." Each of those cases, namely, epistaxis, hæmaturia, hæmoptysis, uterine hæmorrhage, and two of menorrhagia, recovered steadily and permanently. In the ten months which have elapsed since that report was published, I have administered the turpentine as a styptic in thirty-nine other cases, the result of which I now send, in the hope that it may, with the recorded experience of other practitioners, serve to furnish data as to the efficacy or non-efficacy of this drug in cases where a powerful styptic is required.

Of the thirty-nine cases so treated, the results are as follow:—

Styptic Action Decisive, and Speedy Recovery, 26.—*Nature of Cases.*—3 epistaxis, 5 hæmatemesis, 4 melæna, 3 hæmorrhage after childbirth, 3 hæmorrhoids fluens, 2 purpura hæmorrhagica, 3 hæmaturia, and 4 menorrhagia.

Styptic Action Gradual, and Imperfect Recovery, 7.—*Nature of Cases.*—2 menorrhagia, 4 hæmoptysis, and 1 hæmaturia.

Styptic Action None, other Means Required, 6.—*Nature of Cases.*—3 melæna, 1 menorrhagia, 1 epistaxis, and 1 hæmatemesis.

Making altogether, with the previous report, a total of 52 hæmorrhagic cases, comprising 38 successful, 8 partially successful, and 6 total failures.

The doses and mode of administration were much the same as detailed in my last report. In 4 cases sickness occurred, and in 9 more or less of strangury ensued; relieved respectively by capsicum and creosote, and the free use of milk and other diluents.

Martley, near Worcester.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

SEAMEN'S HOSPITAL.

By H. L. T. ROOKE, M.D.,

Resident Medical Officer.

ABSCESS OF THE TIBIA, MOST PROBABLY THE RESULT OF A BLOW.—TIBIA TREPHINED.—RECOVERY.

CHARLES HILL, aged 23, was admitted with enlargement of the upper third of the right tibia, accompanied with a constant deep-seated pain in the bone.

He gives the following history of himself. Nine months since, he was a ship's joiner in the Navy, and one day he struck his leg against a gun; at the same time, a plank falling upon his great toe lacerated it. For this he was laid up two months. He had then no pain in the leg, neither did he observe that it was swollen or bruised.

It is now seven months since pain attacked the leg, and last December he for the first time noticed that the right tibia was larger than its fellow. It has gradually increased in size up to the time of his admission. During the past week the pain has been more severe; it is not now limited to one spot, but extends up the thigh to the groin, and is especially severe about the knee.

On admission, the swelling of the upper part of the tibia was very apparent, the right leg measuring an inch more than the left. The pain is worse at night. He says he never had syphilis.

Ordered potassii iodid. gr. v., aquæ piment. ʒi. ter die, opii gr. ss. o. n.

May 11.—Leeches have been applied twice, eighteen the first time, and twelve the second, but the nocturnal pain in the affected part of the tibia, and shooting up the thigh, continues much the same. He has taken the medicine regularly. The dose of potassii iodid. ordered to be increased to gr. viij. Morph. mur. gr. ss. to be substituted for the opium at night. The left leg to be fomented.

May 17. The pain in the leg has never ceased. He gets no sleep; his health is suffering; he is losing his appetite, and becoming emaciated. Mr. Busk suspecting an abscess in the tibia, determined to trephine the bone.

The patient having been placed under the influence of chloroform, a V-shaped incision was made in the integu-

ments over the most painful part of the swelling. Mr. Busk was guided in his choice of the spot for commencing the operation on account of pain being felt there on tapping the bone with the finger. These having been dissected back, the periosteum was separated from the bone by a crucial incision. This membrane was much thickened, and very vascular. A small trephine was now applied, and when the instrument had penetrated an inch into the bone, pus escaped. A small circumscribed abscess was now brought to view, containing about ʒij of healthy pus. The bone removed consisted of two layers, of nearly equal thickness, one of old bone, the other of new. That forming the walls of the cavity was much condensed, and very hard. The integuments were brought together with strapping, room being left for the discharge of pus. A full dose of opium was administered after the operation.

18th. He has passed a good night; the pain in the limb has quite ceased.

23rd.—He has been improving daily since the last report. The wound is filled with healthy granulations; and on removing a loose discoloured coagulum from the perforation in the bone, the bottom of the cavity thus exposed also presents healthy granulations. The interior of the cavity in the bone appears to be exquisitely sensitive, and the gentle injection of warm water produces great pain. The slight inflammatory swelling which supervened in the integuments around the incision has now subsided, and the thickening of the bone seems to be a little diminished. General health good; sleeps well; pulse 100. From this time he continued to improve. His health was soon completely re-established, but the cavity in the bone filled up very slowly. He remained in the hospital until July 12, when there was scarcely any discharge, and the loss of substance was nearly repaired.

PARALYSIS OF THE RIGHT SIDE OF THE FACE, AND OF THE LEFT HALF OF THE BODY.—DEATH.—AUTOPSY.

Thomas Rickets, aged 24, admitted March 14th, with paralysis; very little of his previous history can be obtained. The following particulars were gathered partly from himself and partly from the sailors who brought him:—Eight months ago, when in India, he received a sun-stroke whilst taking an observation; he became a patient in the Singapore hospital, and remained there three months; of his symptoms and treatment whilst in hospital no authentic account can be obtained. At the expiration of that time he was considered sufficiently strong to embark as a passenger on board a homeward bound vessel. From the account given by his shipmates, he had then no paralysis. He was suddenly seized with symptoms of this nature on the 2nd of January, and has continued in a state of hemiplegia up to the present time.

On admission there was paralysis of the right side of the face and left half of the body; but the motory power was alone affected, sensation being perfect in all parts; the right conjunctiva was inflamed and the cornea ulcerated, from constant exposure of the eye, the result of paralysis of the orbicularis palpebrarum; articulation very imperfect; the mouth was drawn to the left side, and the tongue, when protruded, pointed to that side; the right pupil was contracted; the left natural, but sluggish; reflex action was very active in the paralysed limbs. The left arm was rigid, and kept in a semi-flexed position, the thumb being turned inwards across the palm. The patient is very drowsy and stupid; he can with difficulty be made to say more than yes or no, in reply to questions. No difficulty of swallowing; urine and fæces pass involuntarily. He remained in much the same state until the day before his death, March 21; respiration then became stertorous, and coma supervened.

Post-mortem, March 22nd.—The vessels of the scalp were not congested. On removing the calvarium and dura mater, the arachnoid covering the hemispheres was rather opaque, and slightly thickened; that reflected over the base of the brain was quite transparent and healthy; no abnormal effusion into the ventricles; substance of that part of the brain quite healthy. The right vertebral artery was found distended, and its canal obliterated by a dark fibrinous clot, which extended to the commencement of the basilar. The right inferior cerebellar artery was in the same state. On cutting into the right crus cerebri, and right half of the

pons varolii, their substance was observed to be much softened, in fact, pulpy and partially liquefied; a small cavity also existed in the pons varolii. The right crus cerebelli was in a similar condition. The left half of the pons varolii was quite healthy; also the crura, and the vessels of that side. Exudatory corpuscles were seen in the diseased tissue by the aid of the microscope.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Nov. 22.—MEDICAL SOCIETY OF LONDON. *Subject*:—Dr. J. R. BENNETT, "On the Treatment of Rheumatic Pericarditis." Eight o'clock.

Tuesday, November 25.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY. Half past Eight o'clock.

Saturday, November 29.—MEDICAL SOCIETY OF LONDON. *Subject*:—Dr. T. SNOW BECK, F.R.S., "On the Enlargement of the Uterus after Labour or Abortion." Eight o'clock.

We intimate, once for all, that Communications otherwise addressed than to the EDITOR, 46, Princes-street, Soho, will not be noticed.

THE MEDICAL TIMES.

SATURDAY, NOVEMBER 22.

THE PUBLIC HEALTH ACT.

WE have no doubt that many of our readers have been called upon by their fellow-townsmen for their opinions regarding the best means of improving the sanitary condition of the locality in which they reside. In order to effect improvements of any magnitude, it is necessary either that a town should put itself under the Health Act of 1848, or should go to Parliament for a Bill of its own. There are advantages and disadvantages in both plans. The powers obtained under the Public Health Act are not in all cases sufficient, and many of the improvements contemplated by a private bill do not fall within its scope. On the other hand, it is very much cheaper to proceed in this way than to obtain a private bill, and as, under the Health Act, the General Board of Health have powers of surveillance, there is very little fear of local jobbing or mismanagement. Those who are interested in the question will find it worth while to consult a little pamphlet which has just been published by Mr. Wallbridge, and which is entitled "A Popular Exposition of the Advantages and Benefits to be derived from the Adoption of the Public Health Act." Mr. Wallbridge explains with great clearness, that the Public Health Act does not violate the principle of local self-government, but merely renders it more efficient; and, as to any supposed centralizing effect of its provisions, that is shown to be quite erroneous. The executive power remains in the hands of the ratepayers, who cannot, with certain necessary exceptions, be compelled to execute any work, until they themselves deem it advisable, although it has been very wisely determined, that before they proceed to execute any work, they shall obtain the sanction of the General Board of Health to the proposed plan. This has a very beneficial effect in checking the profuse expenditure in which town councils and municipal corporations sometimes indulge.

There is one point, however, in the Health Act, which we should have been glad if Mr. Wallbridge had explained a little more fully. Section 86 enacts, "that the Local Board shall make and levy in respect of the premises situate in the

district for the benefit of which the expenses are incurred, a rate or rates, to be called Special District Rates, of such amount as will be sufficient to discharge the amount of such expenses and interest, within a period not exceeding thirty years."

Section 89 exempts unoccupied property, and section 92 gives a power of redemption.

The effect of these two last clauses is, that as an increase of rate is not likely to be made, and as unoccupied ground, before being built upon, is sure to be redeemed from the rate, there is a loss on every tenement which becomes unoccupied, and it is not very clear how this loss is to be supplied. Consequently, it has been felt that there is a want of security, and the money requisite to carry on the works is not always easily borrowed. A very little alteration would, however, remedy this; and there can be no doubt that the plan of raising money on a special district rate, and spreading the repayment over thirty years, is a very good one, and presses lightly upon the ratepayers.

TREATMENT OF ANEURISM.

THE Professor of Clinical Surgery in the University of Edinburgh, has been lately somewhat sparing of his periodical abuse of London surgery and London surgeons. Either he finds that his friendly (!) admonitions in reference to the practice of surgery have had no effect upon the obdurate understandings and wills of his brethren in this Metropolis; or something has been done or said on the other side of St. George's Channel, which has caused him to show his teeth to the surgeons of Dublin, and endeavour to bite them.

In an article "upon the treatment of aneurism," in the *Edinburgh Monthly Journal* for November, Professor Syme has given his readers a "taste of his quality," a specimen of his amiable temper, and his opinion of the efforts of others to advance surgery. It is well known that Mr. Syme is the uncompromising opponent of the treatment of aneurism by compression; and that, because he has never taken proper trouble to try this method, while he has been as yet unusually successful in the *one* operation of ligaturing the femoral artery. He now parades his twentieth successful case,—prefacing the relation in a pompous and pathetic manner, and ending with a fierce onslaught highly characteristic of his fine and liberal mind, upon the men of Dublin. Here are his opening remarks:—

"Let it be supposed that the Dublin surgeons should at length accomplish what they so ardently desire, and succeed in establishing pressure as the universal remedy for aneurism of the extremities; and let it be further supposed, that through lapse of time the operations of Hunter, Desault, and other surgeons of the present as well as past century, who have perfected the application of ligatures for obstructing arterial trunks, should be buried in the thick obscurity of oblivion, patients labouring under the disease would then have no means of escape from suffering and impending danger except the 'clamps,' with their tedious confinement, averaging in duration a period amply sufficient for crossing the Atlantic, visiting the chief wonders of the Western World, and returning with their prolonged agony of compression, submitted to only through the authority of military discipline, or some equally powerful influence, and tolerated only through the frequent administration of opiates, in addition to careful regulation of the screws, and with all those risks of failure, or worse consequences in the way of mortification, which, if prevented by ignorance of his situation from disturbing the patient, must at all events deprive the attendants of tranquillity, and too frequently reward their anxious solicitude by disappointment or the loss of limb, if not of life. Such a state of things being if possible supposed, let the reader, if he can, imagine with what surprise, delight, and gratitude the following relation from the hospital-book would be received, more especially if the operator were able to say, that upon this

occasion he had tied the femoral artery for the *twentieth* time without any bad effects from the operation."

Here follows, as an antithesis to this dreadful catalogue of ills, the relation of the twentieth case in which the Professor has tied the femoral artery for the cure of aneurism:—

"The reader," says Mr. Syme, "is probably aware, that for persevering in the perpetration of such cruel and unjustifiable acts as the one just related, I have incurred the bitter reprobation of my brethren in Dublin, who, indeed, have not conceived any epithet of scorn, contempt, or indignation too severe for expressing their opinion of my conduct in doing so.

"To such philosophers it would be obviously useless for me to say a single word upon the subject. Indeed, I think it prudent to retire from the field in good time, lest they should resort to the 'argumentum baculinum,' for which figure of speech Irish logicians are alleged to entertain a partiality, and which, judging from the language applied to me, there seems no want of disposition to employ in my own case."

We hope, indeed, that Professor Syme will be as good as his word; not that we think there is any fear of his Dublin brethren putting in force what he appears to dread, but for the credit of our Profession, which is sadly disgraced by such effusions of spleen. Looking upon this communication in a strictly scientific point of view, it is really deplorable to witness the determined obstinacy of the writer to maintain his own views, whether right or wrong, and to give no credit whatever to others who have tended as much as himself to advance surgery. Neither will the reputation of the Dublin surgeons, nor the plan of treating aneurism by compression, which may be looked upon as one of the greatest improvements in modern surgery, suffer in the least by the opposition of Mr. Syme, while it is exhibited in so unworthy a manner.

THE LONDON DISSECTING-ROOMS.

WE have received several communications respecting the present condition of the London Dissecting-Rooms, the lamentable want of subjects in which was noticed in our last Number. Earnestly do we entreat the Lecturers upon Anatomy to endeavour to overcome this evil, which cannot but eventually be destructive to their own classes.

We are aware that most of the Professors of Anatomy in this Metropolis have many calls upon their time. The unhappy "Inspector," too, thwarts them with feeble obstinacy whenever they seem anxious to act. However, for the preservation of the Anatomical Schools, some immediate steps are absolutely necessary.

Generally speaking, there is no want of harmony among the London teachers of anatomy. We would suggest, that there should be an Anatomical Committee formed of deputies from every school, to meet once a month, or once in three months, to arrange the price of subjects, and to examine books and accounts; and that this Committee should appoint an Inspector of Anatomy, to hold office for three years, but to be re-eligible,—the appointment requiring the confirmation of Government. The Inspector should be entrusted with funds, contributed from every school, that he might be in a better position to soothe that affectionate attachment which living relatives so often show to the dead body of one whom they have allowed to starve.

That this is practicable we have authority to pronounce.

Next, subjects should be imported from abroad. By a proper understanding with the Custom House authorities, who, we presume, would not be very inquisitive, the cases could be at once passed, upon landing, to a suitable dépôt. In each foreign city there should be appointed an inspector, whose duty should consist in seeing, that, in every case, death had ensued from natural causes or from accident. He should sign a certificate to that effect, to be delivered to the

Inspector in London. The Foreign Inspector should, of course, be paid by the Schools in the Metropolis; perhaps, in the form of a fee for each subject.

Let there be no more inactivity. Energy and resolution often accomplish that which despair would leave to perish. We hope to hear that a general meeting of the anatomical teachers will be immediately called to discuss this all-important subject.

MR. JEFFREY'S RESPIRATOR.

THE merits of the Respirator, invented by Mr. Jeffreys, have never been fully appreciated by the Profession. Here and there are a few medical men, who having experienced in themselves, or in some member of their family, the advantage to be derived from its use, estimate it at its true value; but these cases are the exception, the rule is for professional men to hold the worth of the respirator cheap, and to place its inventor not far above a tradesman. Now, Mr. Jeffreys is really a highly scientific professional man, and his Respirator a most valuable aid in the treatment of many affections of the chest.

The neglect of this instrument by the Profession has arisen from two causes: first, from a misapprehension of the principle on which it is constructed; and, secondly, from a prejudice against all remedial agents advertised in the public journals.

The object sought to be attained in the invention of the Respirator was the supply of an uniformly warm and moist, and at the same time pure atmosphere for the patient without confining him to the house; in fact, a portable warm climate.

An opinion is widely circulated in the Profession, as well as out of it, that a shawl tied over the mouth will serve all the objects attained by the Respirator; this, however, is an error, for the wrapper heats the air only by entangling in its folds a certain quantity of the heated breath, a portion of which re-enters the chest with the next indraught of air; while the respirator consists of a number of finely-perforated metallic plates, through which the expired air passes; this air gives its warmth to the plates, while it readily makes its escape through them, depositing, however, some of its moisture on its way; the air taken into the chest at the next inspiration is perfectly pure, but warmed and moistened as it enters through the apertures in the plates, themselves just heated and moistened by the outgoing breath.

The woollen wrapper, then, warms the inspired air, but renders it impure just in proportion as it warms it. Mr. Jeffrey's invention supplies a pure, warm, and moist atmosphere,—a really portable warm climate.

None are more opposed to quackery in all its forms than ourselves,—none more jealously expose the tricks of our Profession; but when a man has, as in the case of Mr. Jeffrey, devoted large sums of money and much time to bringing an instrument to perfection, and then lays its construction, its mode of action, and its value honestly before the Profession, we do hold that he is fairly entitled to a reward for his labours, and such reward is only to be reaped by the inventor keeping the manufacture of the article in his own hands.

On this ground, then, none ought to feel prejudiced against Mr. Jeffrey or the respirator.

The low price at which the instruments are now sold will, we have no doubt, greatly increase their employment, by placing them within the reach of all classes. The pecuniary profits arising from their sale has, as yet, it is said, been comparatively trifling.

REVIEWS.

Recherches sur la Phthisie Aigue chez l'Adulte: Thèse pour le Doctorat en Médecine. Par THEODORE EMILE LEUDET, M.D., Lauréat des Hôpitaux (Médaille d'Or), Lauréat de l'Académie Nationale de Médecine, Lauréat de la Faculté de Médecine de Paris (Médailles d'Or), Lauréat de l'Ecole Pratique (1ère Prise) etc., etc. 4to. Pp. 76. Paris. 1851.

Researches on Acute Phthisis in the Adult. By T. E. LEUDET, M.D.

Important as is the disease which forms the subject of Dr. Leudet's thesis, it has received, compared with others of much less moment, but little attention. The anatomical character of phthisis is the presence of tubercles in the lungs,—this fact, first stated by Laennec, is now universally admitted. Ordinarily requiring many months for their development, in rare cases, the tubercles lead to the destruction of the pulmonary tissue in a few weeks; hence one form of acute phthisis. Again, it may be that death ensues when the only lesion discoverable after death is an abundant crop of tubercles in the lungs, and hence a second form of acute phthisis. "During the present year," writes Dr. Leudet, "several cases of acute phthisis have fallen under my observation; others have been communicated to me by my colleague M. Maingault; and finally, I have borrowed largely from writers on this subject." On these materials this thesis is founded.

Pathological Anatomy.—Acute tuberculization in the adult is ordinarily limited to the lungs, in this particular differing from the same affection in children. In acute phthisis tubercles are found in the lungs in all stages of development, from the grey granulations to a cavity. Tubercular infiltration is as infrequent in acute as in chronic phthisis. The ordinary form is that of miliary tubercle; at the same time, it is rare not to find the remains of old tubercles: thus, in 10 of Louis' 13 cases, he found cavities at the apex of the lung, and in 4 of Dr. Leudet's five cases, there were cretaceous or cheesy tubercles in the same situation; adding to these, 3 cases from other sources, M. Leudet says, that in 15 of 21 cases, that is, in nearly three-fourths, remains of tubercles were discovered in the lungs of adults who died from acute phthisis. In only one case were the tubercles more numerous at the base than at the apex of the lung; the exceptional case is one of those recorded by Louis.

Hepaticization of the lung co-existed in half the cases observed and collected by M. Leudet; in one case the pneumonic consolidation had passed into the third stage; and in one case cited from Dr. Waller, of Prague, the hepaticization was lobular; the tubercles bore in that case no relation, in point of seat, to the consolidated lung, here and there tubercles being seated in what otherwise appeared to be healthy pulmonary tissue; a fact, M. Leudet says, that proves the pneumonia to have been secondary to the deposit of tubercles.

In three cases only was engorgement of the pulmonary tissue with bloody aerated serosity absent; but in three-fourths only of the cases did this appear to have occurred during life. Emphysema was observed but rarely by M. Leudet; it is not mentioned as having been seen in M. Louis' cases; while Dr. Waller, of Prague, states that it was frequently present in his cases. In one case only (Louis') was ulceration of the larynx found without the co-existence of a cavity. The larynx and bronchial tubes were healthy in all M. Leudet's observations; in two of his five cases, there were recent adhesions of the pleuræ. Although old adhesions existed in some of M. Leudet's cases, as well as in those he has collected from others, yet in no instance were those cases of cartilaginous consistence so common in chronic phthisis present. The gastro-intestinal mucous membrane rarely offered any deviation from its healthy state. In neither of M. Leudet's cases were there any traces of tubercles in the intestines or mesenteric glands. The peritonæum was also healthy; and, with the exception of occasional slight congestion, the liver retained its normal state. The bile was but slightly coloured, transparent, and not viscid. In two of the five cases that fell under his own observation the spleen was enlarged and softened; in none of them was it the seat of the deposit of tubercles. Waller, of Prague, states, that he often found tubercles in its substance. In one of his five cases, M. Leudet found tubercles in the kidneys. Adding to his own cases those of M. Louis' etc.,

M. Leudet finds that tubercles were found in these organs in two of twenty-one cases.

In one of Louis' cases, in several of Dr. Waller's, tubercles were found in the cerebral meninges; in neither of Dr. Leudet's cases were any detected in those membranes.

Symptoms.—The outset of acute phthisis is marked by more or less violent febrile disturbance, loss of strength, and disorder of the digestive organs. Rigors, followed by heat of skin, are generally among the first symptoms. The face is pale or flushed, and the conjunctivæ sometimes injected. The expression, at first little altered, subsequently is anxious and oppressed. The position, at first unconstrained, at least in one form, at a more advanced period of the disease, is that indicative of extreme dyspnoea. Perspirations are rarely present. Loss of appetite, thirst, sense of weight at the epigastrium, and a disagreeable taste, are often the only symptoms complained of by the patient for the first few days of illness. Vomiting is rarely an early symptom: in the course of the disease it is sometimes observed. Diarrhoea is infrequent, but is now and then troublesome. The enlarged spleen can sometimes be felt below the false ribs. Cough, although present from the outset, is rarely troublesome; it occurs at intervals only. During the later period of the disease, it is most distressing. The sputa are slightly viscid, aerated, and streaked with blood. Copious hæmoptysis is not a common symptom. It was not observed by M. Leudet, in either of his cases.

"Frequency of respiration," he says, "is one of the most striking symptoms of acute phthisis. It is present from almost the outset, and increases as the disease advances."

In one of his cases, the respirations were 50 in the minute. Pain in the side is often present.

The signs elicited by percussion and auscultation throw but little direct light on the diagnosis. Some sonorous, sibilous, and sub-crepitant râles, with roughness of the breath sound, are the only auscultatory phenomena. Sometimes, at an advanced period of the disease, the chest is here and there less resonant than natural. M. Leudet says, that he has not observed one of the signs noted by Dr. Walshe, viz., increased vocal fremitus.

The cerebral symptoms are often marked, although no trace of tubercles is detected within the cranium after death. Complete indifference to all around, actual delirium, and disturbance of hearing and vision are sometimes observed. If, as is occasionally the case, the disease consists in the rapid deposit of tubercles, which quickly experience softening, and so form a cavity, i. e. if the disease differ from chronic phthisis only in the rapidity of its course, the physical signs and the symptoms are those of chronic phthisis. This, however, is not what is ordinarily termed acute phthisis.

Acute phthisis, properly so called, assumes, M. Leudet says, the three following forms:—1st. The typhoid form; 2nd. The form of acute pulmonary catarrh; 3rd. The latent form. The typhoid form is characterised by headache, fever, and delirium, flushing of the face, sordes on the teeth, a brown tongue, and distension of the abdomen, rapid breathing, and quick pulse; *subsultus tendinum* is sometimes present. Dr. Waller says that he has seen rose spots; but of the accuracy of this observation M. Leudet appears to entertain doubt. Epistaxis, tenderness, and gurgling in the right iliac fossa only are wanting to complete the symptoms of typhoid fever. The diagnosis between the two in some cases is clearly impossible in the present state of knowledge.

In the catarrhal form, the prominent symptoms are cough, and rapid, short, and difficult breathing. The typhoid symptoms are absent. The face and lips, at first pale, subsequently become livid. The patient is unable to lie down in consequence of the dyspnoea, and in a few days he dies from "paralysis of the lungs." The symptoms of this form of acute phthisis closely resemble those of capillary bronchitis.

In the latent form the patient first complains of trifling headache, anorexia, nausea, and perhaps a little diarrhoea; the tongue is covered with a whitish fur. The only case pertaining to this form which has fallen under M. Leudet's observation, lasted a month, and terminated suddenly during a fit of dyspnoea, the second the patient had experienced. The disease was not diagnosed during life. The typhoid form is the most common. It doubtless constitutes one of the diseases often termed in this country continued fever. It is important to remember, that an attack of acute phthisis may supervene during the course of chronic phthisis.

Duration.—The average duration of the disease in the cases collected by M. Leudet was thirty-three days; in one case nineteen days only, and in one, two months and a half.

In the two subsequent sections of his thesis, M. Leudet treats of the complications, and the relation between the symptoms and the lesions in acute phthisis.

Etiology.—Acute phthisis seems to be most common between the ages of twenty and thirty years; at the same time, Dr. Waller, of Prague, records one case, the subject of which was 77 years of age. Of 23 cases collected by M. Leudet, in which the sex of the patient is recorded, 14 were men, and 9 women. It does not appear that a weakly constitution predisposes to acute phthisis; thus, of 18 cases, the subjects of 9 were said to have a vigorous, 7 a pretty good, and 2 only a feeble constitution; the fallacy, however, of such statements as this is obvious. Nothing is known as to the influence of hereditary predisposition, of the patient's previous habits, or of moral emotions on the production of acute phthisis. M. Leudet attributes a large share in the causation of acute phthisis to the epidemic constitution; and he founds his opinion on the fact, that while, during 1849, only two cases fell under his own observation, in the first few months of the present year, he observed five cases, and some of his friends also saw several cases. Influenza was prevalent in Paris during these same months. M. Leudet quotes memoirs of M. Vigla and others on the influenza of 1837, to prove that, at that time, phthisis was very fatal. Now, we must say, that on this point M. Leudet's reasoning is not satisfactory; for all that his quotations prove is, that patients labouring under ordinary chronic phthisis are liable to be attacked by influenza, and that when so attacked they rapidly sink. Not one of his quotations proves that acute phthisis, properly so called, occurred more frequently in 1837 than during previous or subsequent years; and the fact, that several cases (five) fell under his observation during the early months of 1851, no more proves that acute phthisis was then epidemic than the fact, that some seven cases of aneurism of the thoracic aorta were accidentally congregated in the wards of one of the smaller London hospitals during the same months, proves that aneurism of the thoracic aorta was then epidemic in London.

The influence of gestation, and of other diseases, as scarlatina, etc., on the causation of acute phthisis, is not yet determined.

Diagnosis.—M. Leudet quotes Sir James Clark's statement, that the persistents of the morbid phenomena, notwithstanding the application of appropriate remedies, especially when the symptoms which characterise the better-known acute diseases of the chest are absent, aids largely in enabling us to form a correct diagnosis. The symptoms which separate the different forms of acute phthisis from typhoid fever, capillary bronchitis, pneumonia, and meningitis, are discussed at some length.

Prognosis.—In a large majority of cases, acute phthisis proves fatal; in rare cases, it seems probable that it passes into chronic phthisis. The occurrence of pneumonia renders the prognosis still more grave. M. Leudet regards such cases as invariably fatal.

Treatment seems to exercise little or no influence on acute phthisis. Dr. Waller, of Prague, recommends cautious bloodletting; and thinks that, in some cases, acetate of lead, (a remedy which, in Germany, enjoys a great reputation in the treatment of pneumonia,) is useful; quinine, tartar emetic, and opiates, he speaks of as adjuvants. Dr. Gull, of Guy's Hospital, from whom M. Leudet has, it appears, received a very valuable unpublished Memoir on this disease, says that he has employed wine and other stimulants without observing the slightest benefit from their use, and advises moderately antiphlogistic treatment. M. Leudet himself has given tonics, wine, quinine, expectorants, revulsives, and applied large blisters, but has seen no advantage accrue from either. The particulars of five cases of acute phthisis, recorded with great care, conclude this very valuable Memoir,—a Memoir that reflects the greatest credit on its young but already distinguished author. M. Leudet belongs to that school, from the labours of which alone we can expect to see the science of Medicine really progress. The men of this school make observation the basis of their conclusions, and let inductive reasoning only guide them to those conclusions. Of this school Louis was the founder, and his immortal works demonstrate what we may expect from it. We rejoice

to hear that the Société Médical d'Observation, of which M. Leudet was lately Vice-president, is about to publish a third volume of Memoirs. If equal to its predecessors, it will be a boon to the science of Medicine.

PROVINCIAL CORRESPONDENCE.

IRELAND.

THE *Dublin Gazette* of Tuesday, the 11th inst., contains the official appointments of Dr. John M'Donnell and Mr. John Ball, as the new Commissioners for the administration of the Poor-law in Ireland, thus confirming the truth of the announcement we were enabled to make at a much earlier period. In accordance with the letter of the Medical Charities Act, all the powers and authorities given to the said Commissioners, take effect from the day subsequent to the official nomination in the *Gazette* of the additional Commissioners, and we trust that speedy measures will be taken to carry out the provisions of the Bill, as many of the dispensaries are now in an extremely anomalous condition, being in fact left without any ostensible means of support during the interval of their transition from the direction of local committees, and the pecuniary aid of grand jury grants, to their new position under the Poor-law system.

Instructions have been already forwarded to the guardians of the several Poor-law Unions, requiring them to divide the districts under their charge, pursuant to the provisions of the Act.

The important office of Surgeon to the Richmond Hospital, vacant by the resignation of Dr. M'Donnell, has been just conferred on Dr. Christopher Fleming, a gentleman already very favourably known by his contributions to medical literature. The election to the Professorship of Surgical and Descriptive Anatomy in the Royal College of Surgeons of Ireland, is fixed for the 15th of December. Candidates are required to lodge their applications and testimonials on the 9th instant.

EDUCATIONAL PROVISIONS.

It is much to be regretted that the *questio vexata* of mutual recognition of certificates by certain of the Irish medical educational institutions still remains in a most unsettled condition; and, indeed, we are not aware that any move is being made towards accomplishing this most desirable object. The student who contemplates becoming a candidate for the license of the Irish College of Surgeons, and who at the same time may be desirous of completing his professional education by taking an Irish degree in medicine, still finds himself under the necessity of either following double courses of lectures, viz., those of the University Professors, and those of the College of Surgeons, or of some school recognised by this body, or of altogether abandoning the idea of possessing himself of both medical and surgical qualifications, unless, after the completion of his surgical education, he becomes an alumnus of some Scotch University. This is a condition of things which certainly should not be allowed to continue one session longer; we have reason to know that propositions of a very comprehensive nature have emanated from more than one of the corporate bodies alluded to, but unhappily they have not been met in an equally liberal spirit.

While these difficulties stood in the way of the Irish student of medicine, it is very little to be wondered at that such large numbers annually presented themselves for examination at the London College of Surgeons, and thence passed to some one of the Scotch Universities to complete their education by taking a medical degree, which it was almost impossible for them, under existing conditions, to obtain at home. We are glad to find that the University of Dublin has, at last, come forward to meet what may be considered one of the greatest requirements of medical education in the present day, and has determined on granting a diploma in surgery in addition to the usual degrees in medicine.

On perusing the recently revised copy of the statutes and bye-laws of the King and Queen's College of Physicians in Ireland, we were glad to find that the College had taken a step which well deserves imitation by other institutions. From chap. vi., sec. 42, we quote the following paragraphs:—

"Candidates who, on having performed the full acts, have graduated in medicine in one of the Universities of Great Britain or Ireland, or who have been admitted as licentiates of either of the Royal Colleges of Physicians of London or Edinburgh, shall be admissible to examination on such qualification."

"Candidates who have been licentiates of a College of Surgeons in the United Kingdom for four years or upwards, or who, in addi-

tion to their diploma as such, shall produce certificates of attendance on a course of lectures on botany and the institutes of medicine, and on the practice of a recognised Lying-in Hospital for six months, shall be admissible to examination on such qualifications."

If our Colleges of Surgeons would come forward in a similar liberal spirit, the present obstacles to the possession of a joint medico-chirurgical qualification, which we have no hesitation in stating should now a days be required from every candidate for any medical post of trust, would be in a very great measure removed. The Irish College of Physicians holds its examination on two separate days, except in the case of candidates who are possessed of a degree in Arts. The following paragraph explains the conditions under which such aspirants are examined:—

"Candidates who are graduates in medicine of one of the Universities in Great Britain or Ireland, licentiates of either of the Royal Colleges of Physicians of London or Edinburgh, or members of a Royal College of Surgeons in the United Kingdom, being graduates in arts of the Universities of Dublin, Oxford, or Cambridge, shall be required to undergo the second day's examination alone." (Acute diseases, chronic diseases, the institutes of medicine and midwifery. "Botany, and materia in the case of members of a College of Surgeons being added thereto.")

The curriculum for the licence of the College has been considerably enlarged, and, like all the acts of the College under the direction of its late distinguished President, Dr. William Stokes, exhibits, on the part of this institution, enlarged and judicious views as to the requirements of medical education in the present day. The course of education now required of candidates for the license of the College who do not come under the above regulations, comprises attendance on one or more courses of six months' duration, on anatomy and physiology, chemistry, institutes of medicine, materia medica and pharmacy, midwifery and diseases of women and children, practice of medicine and surgery, botany, practical chemistry, and medical jurisprudence, for at least three months each, and the performance of a course of dissections, with attendance on the accompanying demonstrations, during six months. The term of hospital attendance has been extended to a period of two years and six months, including clinical instruction. Attendance on the practice of a lying-in hospital recognised by the College, during a period of six months, is also required.

PROVISIONS AGAINST UNPROFESSIONAL PRACTICES AND CONDUCT.

We observe with extreme pleasure that the regulations on this important subject, which have been introduced into the present edition of the statutes and bye-laws of the Irish College of Physicians, are of the most stringent kind. We regret that in the sister country the evil practices of certain members of the Profession at this side of the Channel have met with ready imitators; and, indeed, it has become lamentably notorious, that the disciples of homœopathy and hydropathy are reaping rich harvests from the credulity of many of our Irish fellow-subjects, amongst whom may be prominently ranked many eminent members both of the legal and clerical professions, with wealthy individuals of the mercantile classes. These, however, are not the only professional sins which stain the character of certain members of the Profession in Ireland. More than one instance can be pointed out of parties having recourse to the low expedient of continued newspaper puffing.

The Irish College of Physicians has come forward in a most earnest manner to discountenance and suppress such malpractices. Every licentiate is required to subscribe and promise the due fulfilment of a solemn declaration which contains the following passages:—

"I, A.B., do hereby solemnly and sincerely promise that I will observe the statutes and bye-laws of this College, and to my power endeavour that the honour of the College be preserved entire; and in all things that belong to the honour or profit thereof, I shall be ready to give my advice and assistance.

"I engage not to practise any system or method (so called) for the cure or alleviation of disease, of which the College has disapproved; nor to endeavour to obtain practice, or to attract public notice, by advertising or by any other unworthy means. I also engage that I will neither permit nor sanction the use of my name by any other party for such purposes, nor in connexion with any secret or other remedy; and in case of any doubt relative to the true meaning or application of this engagement, I promise to submit to the judgment of the College."

This must be regarded as a deliberate, honourable engagement of the most binding kind; and, to our minds, any one breaking it, either as to its letter or spirit, ceases to be entitled to the rank or consideration due to a gentleman.

The seventh chapter of the bye-laws is devoted to the regulation of the professional conduct of members of the College. The three

concluding sections make special provisions, which, if acted on by the Profession at large, would soon give a serious check to quackery of all kinds. These provisions are as follow:—

"Any member of this College who is guilty of unprofessional conduct, either by advertising or other practices unbecoming the honourable profession of physic, shall be placed under the censure of the College.

"No member of this College shall consult with or otherwise sanction any other member who is under censure; nor consult with or sanction professionally any person who by advertisement or other unworthy means, endeavours to obtain practice or to attract public notice.

"No member of the College shall consult with any person who, for the cure or alleviation of disease, uses any secret remedy, or adopts and practises any system or method of which the College has disapproved."

We only hope that these provisions will be enforced fully and energetically, without fear or favour, and that our other medical corporations will imitate the example set them by the Irish College of Physicians. Independent of those who are separated from the legitimate practitioner of medicine by such a broad line of demarcation as that of adopting such systems as homœopathy, hydropathy, etc., it is to be lamented that the number of those who endeavour by unworthy means, such as advertisement, to attract public attention, is gradually on the increase, and perhaps there is no kind of professional delinquency which requires to be put down with a stronger hand. The advertising system may be divided into the ordinary newspaper dodge, and the more covert and insidious form, or the book dodge, both equally unworthy; but, of the two, the latter is by far the more dangerous. It falls to the province of the reviewer to give a check to this pernicious practice; but it depends more on individual exertion to repress the former. We look upon the publication of a newspaper advertisement, with scale of charges and other attractive incidentals, as setting a mark on the individual guilty of such a flagrant breach of professional etiquette, which should at once bring on him the censure of his brethren, who, in justice to themselves, are called upon in the most distinct manner to discountenance such conduct by refusing to meet or consult with the advertiser. We are glad to be able to state that there are men in the Profession who act fully up to this rule. We have authority for saying, that the distinguished ex-President of the College of Physicians of Ireland has declined meeting, not only the homœopathic quacks, but also a well-known newspaper puffer. A little exhibition of such firmness from our leading men would give a decided tone to the Profession, especially to juniors, and is the only efficient method for meeting the evils which now unhappily are so largely to be met with in the practice of the Medical Profession.

GENERAL CORRESPONDENCE.

DR. ROUTH IN REPLY TO DR. DUDGEON.

[To the Editor of the Medical Times.]

SIR,—I have read Dr. Dudgeon's communication in your Number of the 1st November. For once, I am bound to congratulate this gentleman upon having spoken lucidly, and am happy to find that he has taken my paper, as it was intended, in good part, and also, in his turn, abstained from abuse. I am sorry, however, still to differ from him materially; and I cannot look upon his answer in any way as a refutation of my paper. I shall endeavour to prove this. At the same time, I feel bound to add, that my observations were not addressed to the disciples of Hahnemann, but rather to the practitioners in the legitimate school, with whom only I am professionally connected. To have addressed the disciples of Hahnemann in your Journal, would scarcely have been thought decorous in me,—that could only be done in one of their own journals. Moreover, not being so devoted a controversialist, nor so ready a writer, as Dr. Dudgeon, I could not undertake to dispute at length with him or any other believer in homœopathy; neither having the time to give to such disputes myself, nor believing it would be right to trespass on your kindness in doing so. At least, I think I have the right to abstain from doing so until I have stated all I have to state, and I may, therefore, take this opportunity to say, in answer to Dr. Dudgeon, and to such other anonymous correspondents in homœopathic publications as have thought fit to attack me, that it is not fair to call into question opinions as yet expressed only in part, nor to find fault with me for not stating what I fully intend hereafter to say. Such was always my wish; and my last paper was but the first of a series,—the consideration of the theory of

homœopathy abstractedly considered as theory ; and, with your permission, the rest and the much-desired stubborn facts will follow. If, therefore, I object to a paper war at present, it is because I do not wish to fatigue either your readers or myself till all my views are known, when I shall be delighted to substantiate them. As you have, however, admitted Dr. Dudgeon's communication, I presume I am bound at once to reply.

Now, Sir, it appears to me Dr. Dudgeon's letter is remarkably ingenious, and replete with special pleading ; but I think with a very little trouble I shall be able to discover to you in it a few misrepresentations, several contradictions, and some few omissions.

I purposely abstained in my communication from much discussion on the law—*similia similibus curantur*. I adopted Hahnemann's definition, and that which I presumed was generally adopted in England, namely, that, to cure in a mild, prompt, safe, and durable manner, it is necessary to choose in each case a medicine that will excite an affection similar (*ὁμοιον πάθος*) to that against which it is employed.—(*Organon*.) I gave a short summary of the origin of the alleged discovery. I purposely excluded the present views of homœopaths on the law, as frequently at variance with Hahnemann's, as I shall show in the sequel. Dr. Dudgeon, however, denies my version of the story, alleges I have no authority for it, and then favours us with his own version, which is alone to be believed. It is true, Dr. Dudgeon's account agrees perfectly with what we find in the *British Journal of Homœopathy*,—the same journal he edits. It differs, however, slightly from what is given in the preface, or introduction, in the Latin edition, published at Dresden and Leipsic, 1826, by Drs. E. Staaf, W. Gross, and E. G. Brunnow, the editors. It was in 1790, that when translating Cullen's "*Materia Medica*," he first entertained the suspicion of his law. The editors add, that after very many experiments made by himself and others, (I give the Latin, lest Dr. Dudgeon might esteem my translation as a partial one,) "*Et idem semper extitit eventus. Medicamentum exploratum genuina pollere vi, eadem symptomata in corpore sano excitandi quibus in corpore aegroti mederi soleat.*" The editors go on to add that, comparing these experiments with those accidentally and at different times occurring, or which had been made by others before his time, he found they agreed with his experiments, and they add, "*Jam nunc in clarissima luce egregiam illam conspexit legem,*" "*Morbum dynamicum quemcumque optime sanari medicamento tali, quod simillimum symptomatum complexum eoque ipso similem affectionem (ὁμοιον πάθος) sponte sua in corpore sano excitare valeat.*" (P. VII. c. 1.) And then they add, he published his famous Dissertation in 1796, in *Hufeland's Journal*, entitled, "*An Inquiry in Relation to a New Method of finding out the Remedial Powers of Medicinal Substances; together with a Recapitulation of what had already been made out therein.*" It will be seen, Sir, that these three distinguished editors before-named did not understand that Hahnemann had at all limited the application of this law. Thus, it appears, six years were the number occupied in the discovery of this law, not fifteen, as Dr. Dudgeon would have us believe. The experiments, I stated, were few, about forty. It happens, the names of about forty-five medicines are given on which experiments were performed, in that paper ; (a) and besides I can give no credit to Hahnemann for those made by the more ancient authors. I purposely abstained from dwelling upon his experiments subsequent to this period. First, since these experiments are doubted by homœopaths themselves, since a new periodical has been established at Vienna to re-prove all the medicines, called the *Oesterreichische Zeitschrift für Homœopathie* ; because Hahnemann's views are not to be depended upon, (1 Band, 1 Heft. sec. 4 et 5) ; nay, Isensec ("*Geischichte der Medecin*," Vol. VI., p. 169) goes so far as to say that in no case are the peculiar and characteristic symptoms of a medicine to be found except in such cases as Hahnemann borrowed from the allopaths for want of original observations, and that his own symptoms may be all referred to sobriety, fasting, ill-humour, and sleepiness, caused by continual attention to *nothing*, mixed with those innumerable sensations which crowd every hour of our life. ("Dr. Balfour's Report on Homœopathic Treatment in Vienna." *Brit. and For. Review*, P. 588. Vol. XXII.)

Secondly, because as far as regards these subsequent experiments brought forward by Hahnemann, we have no evidence of increased mental powers and ability, but rather of the reverse. The same experiments that proved the value of infinitesimal doses, were the means by which he discovered the great increase of power given by the *succussion of liquids*. For Dr. Dudgeon cannot deny, that his great master also said, that the length of time a powder is rubbed, or the number of shakes given to a mixture, in-

fluences the effect on the body ; and that rubbing or shaking is so energetic in developing the inherent virtues of medicines, that latterly he had been forced, by experience, to reduce the number of shakes to two, where he formerly had prescribed ten to each dilution. And, again, the same experiments were the means through which he discovered the psoric theory, all of which serve certainly rather to prove a weakness brought on by age in his intellectual powers, or that much learning had made him mad. I might, however, go further, and distrust still more the value of these experiments, by reminding Dr. Dudgeon, that there is evidence to show that Hahnemann began life by inventing a certain nostrum as a cure for all diseases. (*Medical Times*, March, 1851.) And that there are those who have stated, that Hahnemann being a very shrewd man in early life, saw the abuse to which the drugging system was carried on in his time in Germany, and coupling this with the love of the marvellous so common to mankind, and the love for the good things of this world so general in his country, he invented a severe system of diet on which he exclusively relied, and only amused his dupes by pretended virtues in the globules he presented. These tales, probably resting on equally good foundation as those propounded by his own disciples, led me to limit my notice of his experiments. Dr. Dudgeon will probably do well in giving to the world a translation of this essay in Hufeland's journal ; for, if I am wrong, it will be the best disproof of my views.

Dr. Dudgeon, however, has again, unwittingly no doubt, misrepresented me. I never said, Hahnemann had concluded, from his few experiments herein alluded to, that infinitesimal doses were the proper doses. At most this might have been inferred, but it was never said. Dr. Dudgeon states, that he is not aware that infinitesimal doses have been altogether discarded by any homœopaths of the present day. I can only say, that my evidence here was taken from the observations of some gentlemen of the Homœopathic Society in Bloomsbury-square, where I was once very courteously, I will say, admitted as a visiter : and that, in the discussion which ensued after the meeting, about the merits of the science, I was distinctly told, that infinitesimal doses were not a *sine qua non* in homœopathy, provided the law "*similia similibus curantur*" was admitted as of universal application. Moreover, Dr. Schmid in his work (*Ueber Die Arzneibereitung und Gaben grösse*. Wien, 1846) contends, that small doses are worse than useless, and that one drop of the mother tincture, or a larger dose, should be employed. (P. 60.) Dr. A. Mühre tells us, that a drop of the mother tincture is frequently given by the homœopaths in Germany. Dr. Dudgeon will also probably remember, that when I brought, last session, the subject of homœopathy before the Medical Society of London, he himself instanced Dr. Fleischmann as a slovenly homœopathic practitioner, and one who gave single drop doses of the mother tincture. And, lastly, Dr. Dudgeon must be aware, that in the paper war alluded to by me in my last communication between himself and the Editor of the *Homœopathic Times*, the Editor chiefly opposes the pilules as countenancing deceit in those who practised homœopathy, and because they were capable of absorbing a much larger quantity of a remedy than could certainly be called infinitesimal. Dr. Dudgeon will probably explain away these statements ; but they are evidently, I presume, the sentiments of some homœopaths ; and I may at the same time remind Dr. Dudgeon, that he has quite overlooked my demonstration of the impurities of the sugar, sugar of milk, starch, and water employed.

In giving instances of medicines which cured a disease, and yet could not produce it in health, I gave three examples. To one of these Dr. Dudgeon replies by pleading ignorance of the effects homœopathically produced. To another—turpentine—he replies by alleging, that hæmaturia, which is capable of production by turpentine, is likewise cured by that remedy when it occurs as a disease. This is *isopathy*—no longer homœopathy ; and so is the example given by him a little lower down of the inoculation of primary syphilitic matter to cure syphilis. And yet Dr. Dudgeon tells us he discards isopathy ; and so I thought ; but I see he only does so when it suits his purpose. For to my argument, that oil of turpentine given in health does not produce tape-worm, he replies, this would be isopathy ; and yet a very few lines beyond he rejects the example given of the effects of cinchona in that variety of otitis accompanied with inflammation of the dura mater, and paroxysms like intermittent fever, because cinchona, when given in health, does not give rise to such inflammation. My reply must therefore be again,—if it did, this would be isopathy, which homœopaths discard. But it certainly produces symptoms, as alleged by themselves, very like those of ague ; in addition, intense headache, all the symptoms of cerebral congestion, eruption in the concha (Jahr), &c., and deafness. Dr. Dudgeon's refutation of what he is pleased to call my "*brilliant argument*," comes thus to be a tissue of contradiction. Dr. Dudgeon will excuse me if,

(a) The account of some of these is so meagre as scarcely to deserve the name of an experiment ; thus fully proving my right in using the term "*few*."

although he alleges that I "do not understand homœopathy," I venture to teach him, that what is *similar* is not necessarily *identical*.

I come next to the wonderful discovery of the magnetoscope, by which, he informs us, that the "minutest" portion of medicine, even a long way beyond the *ultima thule* of homœopathic arithmeticians, the decillionth, is detectable. Here, Sir, I confess, was a discovery—one that could not fail completely to stagger me; but, *O, miserabile dictu!* Dr. Madden has now recanted! He sinks beneath the mighty arguments of "J. H.," (*Homœopathic Times*, November 8.) Dr. Madden himself now admits, in a letter published in the same journal, "that he fears he is bound to conclude, that Mr. Rutter's magnetoscope in its present form is *not applicable to experiments with homœopathic doses, the motions produced being the result of every slight motion of the operator's hands.*" What a falling off is here! It may be wrong to crow over a fallen foe; I shall, therefore, rest satisfied in instancing this *mauvais pas* on the part of homœopathic professors, as another proof of their tendency to universalize from a few non-conclusive experiments; and, as regards the allegations made by Dr. Dudgeon against the veracity of Dr. Glover, I think few of those cognizant with that gentleman's high professional character can be disposed to believe Dr. Dudgeon, when Dr. Glover, in refusing to give up the name of the authority who made him a confidential statement, (a power a court of law alone could exercise,) is only acting as every man of honour should.

Dr. Dudgeon next calls into question my statement in regard to the different effects of medicines, according as they are taken one way or another, by asserting, that I do not consider that medicines may act chemically, mechanically, irritatingly, and specifically. It is precisely because I believe that medicines do act in these several ways that I dispute the conclusions of Hahnemann, that medicines only act *specifically*. I gave seven instances of inhalation. To these Dr. Dudgeon replies by giving us a case, where a lady who could never open a letter scented with musk without fainting, and who took one grain of musk, and was, in consequence, ill for three months after, and nearly died. I am at a loss to see the force of this argument. Did the symptom of fainting produced by inhalation resemble the illness of three months' duration which followed the ingestion of the musk? On this point Dr. Dudgeon adduces no evidence. But, even if the resemblance was detectable, of what weight is such an argument in favour of the dogma, that the ingestion of an infinitesimal dose taken by the mouth will produce the same symptoms as a dose taken by the process of inhalation? The dose taken by the mouth was certainly not infinitesimal, and that inspired, if less in quantity, was still not infinitesimal as appreciable to the senses. Besides, the case at most is one of extraordinary idiosyncrasy, an isolated fact, not capable of universal application. Was this case, moreover, cured by musk or any agent *like* it? This would be an interesting point; but Dr. Dudgeon must excuse me if I am rather incredulous. It may have been a *post hoc*, and not a *propter hoc*.

Dr. Dudgeon, I regret to say, if I am unfortunate in the example given of black vomit, is equally unfortunate in his refutation of it. I never said that the black vomited matter itself contained any of the poisonous miasma that generated that plague. It may be so, as the discharges of females affected with puerperal fever are; but I did not say so. I said: "The black vomit of patients affected with malignant fever in Africa has been swallowed with impunity, but the miasma from *patients affected with this disorder* is highly poisonous." In other words, the fever is highly infectious, in proof of which I must refer Dr. Dudgeon to a circular addressed by Sir Gilbert Blane to the army, dated 23rd December, 1843, in reference to the importation of a malignant fever, accompanied with black vomit, to Ascension Island, by the crew of the Bann vessel, and ask him to compare this account with Sir W. Pym's letter to the Lords of the Council, relative to a report on the Boa Vista fever by Dr. McWilliam, and its transportation there by the Eclair steamer. Here he will find ample evidence, I am sure, of its infectious nature, as contradistinguishing it from yellow fever, provided the three elements necessary for contagion be present, viz., an infecting agent, a communicating medium, and a fit recipient.

In speaking of inoculation, I instanced erysipelas, porrigo, scabies, syphilis, and measles. To the last two only has Dr. Dudgeon referred. He adduces Dr. Home as evidence of the advantage to be derived thereby in measles. Dr. Watson, an eminent medical authority, states it is a useless procedure, and does not render the disease milder. In regard to the inoculation of primary syphilitic matter in the cure of syphilis, I have not seen the article referred to by Dr. Dudgeon. It is, however, opposed to the views entertained by all the eminent writers of the day. I have frequently seen persons inoculated with primary syphilitic matter

already affected, especially in those cases where a chancre in urethra was suspected, and in no case did I see it cure the disease. This argument, at most, is favourable to isopathy, which Dr. Dudgeon professes to discard. The other examples given are not even alluded to, and therefore unanswered.

I may add lastly, Sir, that Dr. Dudgeon is wrong again in stating, that the calculations given by me have been hackneyed before. So far as I know, they are original: but I can comprehend Dr. Dudgeon's dislike to these. He will, I trust, pardon me, but authentic figures must make all homœopaths "look infinitely small" themselves. There is no subverting cyphers. Perhaps also Dr. Dudgeon will show us that a grain of matter is really capable of division to a decillionth, and that the atom is not in reality much larger, in which case such a division were impossible. Dr. Thomson, I believe, has stated it does not exceed a billionth.

I am, &c.

C. H. F. ROUTH, M.D.

19, Dorset-square.

RETAINED PLACENTA.

[To the Editor of the Medical Times.]

SIR,—In reference to your report of the inquest at Hardings-stone, in your Journal of the 25th of last month, I beg to hand you the history of a case of retained placenta which came under my charge about twelve months ago.

I was summoned, on Nov. 18th, 1850, at 1 a.m., to attend Mrs. Carne, of Carlisle-street, Waterloo-town, a poor woman, of spare and delicate habit. Upon my arrival, I was informed, that she was taken in labour, with her sixth child, about six o'clock the night previous, (about four days subsequent to receiving a severe mental shock from a sudden domestic affliction,) when her midwife was sent for, who delivered her, about twelve o'clock, of a full-grown child, which, however, had evidently been dead some days. The placenta not being removed by natural efforts, the midwife adopted such proceedings as she considered likely to effect such object, yet without success.

Upon making an examination *per vaginam*, I found the os uteri firmly closed; with much difficulty I ultimately introduced three fingers, and, although I steadily persevered for half an hour to complete the introduction of the hand, every effort totally failed.

The pulse was 120, and weak; I resolved to give a dose of opium, and wait. At my next visit I was informed my patient had slept, was free from discharge, and comparatively comfortable. On examination, the condition was as before described. I renewed my efforts at the introduction of the hand, but could not succeed.

I then called in my friend Mr. Bower, who was equally unsuccessful with myself in introducing the hand. We then determined to exhibit decoct. secale every three hours. This was continued for three days, but without any manifest effect. Now, however, every symptom of mild puerperal fever became developed; fetid discharge; pulse fluctuating from 110 to 130; tenderness of abdomen, etc., etc. Calomel and opium was administered in conjunction with salines.

On the fourth day, the cord separated and came away. The symptoms of fever continued with some severity after this for about a fortnight, when subsidence of this condition was very evident, and she continued steadily to improve until finally restored to health. She menstruated about two months after, and continued regular until three months since, when she became pregnant.

The result of this case clearly proves, that, although Dr. Robertson may be a well-skilled man, and on extremely good terms with himself, still he is not to be viewed as an oracle in the Profession, not even when assisted by a co-partner in error in the person of an "Olive."

The opinions given by Dr. Robertson, he may rely upon it, will not be received by the Profession, because not supported, as you well remark, Sir, by the opinions of the best accoucheurs.

I am, &c.

Bethnal-green.

THOMAS SARVIS.

[To the Editor of the Medical Times.]

SIR,—Will you allow me to point out that your Correspondents, who have supplied so complete a refutation of the strongly-expressed opinion of Dr. Robertson, would greatly add to their already important communications by stating the period of time, after the labour, at which the portion of placenta was expelled. For, in addition to the valuable clinical fact, that a portion of placenta may, in exceptional cases, be left in the uterus without injury to the female, it is important to ascertain when this retained placenta is usually expelled, and how long it may remain without serious consequences.

Mr. Barron has omitted all notice of this point on both occasions, in the case he describes. Mr. Beale says of the first case,—“on the second day the remainder of the placenta came away;” but forgets to give the same information with regard to the other. He certainly says, “in one case it was not removed at all, a few shreds only escaping;” and afterwards speaks of “profuse fetid sweats,” as if he meant to infer that the retained placenta was never expelled, but absorbed, and thrown out of the system by these “profuse fetid sweats.” I would be unwilling to think that this was his meaning. He also says of the first case, that he frequently “syringed the uterus with water.” How was this done? What syringe was employed, and how far was the tube introduced? Did it go into the uterus, or was it only passed into the vagina?

I am, &c. PHYSICIAN ACCOUCHEUR.

MR. HILTON'S CASE OF LITHOTRITY, AND HIS LITHOTRITE.

[To the Editor of the Medical Times.]

SIR,—I was much surprised at finding Mr. Hilton's case of lithotrity inserted in your Number of the 8th inst., as I had not received the proof before Thursday evening, and, consequently, had not time to return it corrected. There are a few typographical errors, of insufficient importance, however, to advert to; but having made some alterations, for the sake of perspicuity, in the description of the lithotrite used by Mr. Hilton, I must request you will allow me space for their insertion in your next week's *Medical Times*.

The lithotrite itself does not differ from those ordinarily in use; but the handle (which has been constructed expressly for Mr. Hilton) will be observed to differ greatly. It is made of ebony, has grooves cut for the fingers on one side, and one for the thumb on the other, and is of such a size as completely to fill the hand, allowing a large and firm grasp for the operator, and giving thus, according to Mr. Hilton's opinion, a degree of steadiness to the lithotrite, and, therefore, increased security to the patient against any bruising of the bladder, which he has not experienced with any other instrument he has used. The handle is furnished with a concealed screw and triangular key, so that it may be easily and quickly removed; but when applied and screwed tight, it is as firmly fixed to the lithotrite as though it were a solid portion of it.

I stated that cases of stone were of comparative rarity in our hospitals to what they were even a few years back, and attributed it, in part, to the more general use of the operation of lithotrity in private practice. This, I find, is quite in accordance with the observation of others; but it is a curious fact, that during the last two or three months we have had no less than fourteen cases of stone in the hospital. Mr. Cock alone, a few weeks since, had five cases under his care at one time.

I am, Sir, &c.

Guy's Hospital.

F. W. PAVY.

[It is not the general habit of journalists to send proofs to their correspondents. Indeed, the many corrections gentlemen for the most part make, renders it very inconvenient to do so,—a point well illustrated by Mr. Pavy's letter. In this case, however, we find from the bookkeeper's report, that a proof was posted to Mr. Pavy on the morning of Wednesday. The paper itself appeared in our pages according to copy.—ED. *Medical Times*.]

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. HODGSON, Esq., F.R.S., President, in the Chair.

The meetings of this Society for the present session commenced on the 12th instant. The rooms were so well filled, that it was very difficult for those who came but a few minutes past the hour to gain admission into the library, or to hear the paper read.

STATISTICAL REPORT UPON CASES OF DISEASES OF THE HEART,

OCCURRING IN ST. GEORGE'S HOSPITAL,

ESPECIALLY IN RELATION TO RHEUMATISM AND ALBUMINURIA.

By Dr. BARCLAY.

The author first mentioned eight cases of acute rheumatism fatal during the rheumatic attack, among which he particularly

called attention to a case of very severe pericarditis, in which no friction-sound was ever heard; and to a case in which no inflammation existed either in the heart or pericardium, in which a systolic murmur was distinctly heard. He next referred to sixteen cases of recent pericarditis, and four in which it was not quite recent, occurring independent of acute rheumatism; two of which were traced to recent peritonitis, and one to recent pleurisy; a large proportion of the remainder were associated with albuminuria, but it seemed to him that in many of these instances, tumultuous action of the heart during life had very much to do with the traces of pericarditis found after death. He detailed one case in which this action of the heart seemed to be its only cause. Eleven cases were then mentioned, in which recent lymph was found on the valves, and two in which it was not quite recent. Two were traced to malformation, and two to diseases of the kidney; seven were accompanied by old disease. In six of these the old disease was probably due to bygone attacks of rheumatism; and he remarked it as a curious fact, that this condition was so much more frequently than any other associated with recent inflammatory action. Twenty-six cases of old pericarditis were then considered, including six of adherent pericardium, and three in which the adhesions were nearly universal; besides a great many not mentioned, in which white spots were found. He believed these cases indicated that universal adhesion is not the common result of rheumatic pericarditis; and, considering the age of the patient at death, and the condition of the heart, that it is not the most favourable termination of the attack. More than half the cases which had at some period or other suffered from acute rheumatism indicated old pericarditis. Twenty cases of old valvular lesion were probably caused by acute rheumatism; twenty-six occurred in persons who had never suffered from rheumatism at all; sixteen were regarded as doubtful cases. Among the rheumatic cases there is a great preponderance of simultaneous lesion of aortic and mitral valves; next of the mitral alone, and scarcely any of the aortic alone. It seemed probable, in most of these cases, that during the first attack of rheumatism, the mitral valves alone were inflamed, and at some future period also the aortic secondarily. Valvular lesion was found associated in twenty-two instances with diseased kidney and albuminous urine; in twenty-six instances the kidney was healthy, and in thirteen, the evidences of disease were more or less obscure. The tricuspid valves were also affected in ten cases, and the pulmonary once. It was stated that among these cases disease of the aortic valves was most frequently found associated with hypertrophy, and in aortic regurgitation also with dilatation; disease of the mitral valves mostly with dilatation; adhesions of the pericardium more generally with dilatation; atheroma of the aorta and disease of the kidney were found accompanying a large majority of the cases of simple hypertrophy. In 141 cases of diseased kidney taken indiscriminately, hypertrophy occurred 55 times, and dilatation 36 times, together or separately in 63 individuals, and in 78 the heart was healthy. The author then detailed his observations in regard to rheumatism, made upon cases in the hospital which did not prove fatal. He found the heart diseased in 44 per cent. of acute cases, in 11 per cent. of subacute, and 4 per cent. of chronic cases; in all the chronic cases, and many of the subacute, the individual had experienced a more severe attack of rheumatism at some former period; some of the acute cases were also examples of a second or subsequent attack. Taking those cases only which were admitted with a first attack of acute rheumatism, he found cardiac inflammation occur more frequently in females than in males, and in the largest proportion between ten and fifteen years of age, after which it gradually declined to forty. The majority of the acute cases are found under twenty-five years of age, and after that there is a much larger proportion of subacute cases. There was a larger proportion of males than females admitted with confirmed disease of the heart; but the difference is less striking if those of rheumatic origin alone be considered. At the earlier ages almost all cases of confirmed disease of the heart owed their origin to acute rheumatism, while at more advanced ages it almost ceased to be found among the causes.

The Paper was accompanied by a Table, exhibiting the principal lesions found, on *post-mortem* examination, in the cases on which the report was based.

Dr. C. J. B. Williams considered the paper just read, one of very great value, and that such inquiries would tend to clear up disputed points respecting the diseases of the heart and of other organs. Dr. Barclay's paper did not give an opportunity for discussion; but there were one or two facts mentioned, respecting which he would say something, as he (Dr. Williams) had met with similar instances. The first of these was, the connexion between albuminuria and hypertrophy of the heart. Of this he had seen several examples, the valves of the heart being free from disease. He had been accustomed to look upon such cases as being of a very serious

nature; but experience had shown, that remedies which relieved the renal complaint also more or less lessened or removed the symptoms and physical signs of the cardiac disease. In these cases, there was at first a strong, heavy impulse of the heart, a muffled systolic sound, and the character of pulse usually met with in cardiac hypertrophy. Dr. Barclay had not mentioned another variety of sound, *i. e.*, a reduplication of the first, as if the action of the two ventricles were not altogether synchronous. All these sounds and the attendant symptoms indicated organic mischief at the heart; but the results of treatment had shown, that, as the quantity of albumen in the urine was diminished by medication, so the action of the heart lessened, and the evidences of hypertrophy disappeared. From this he was led to conclude, that the occurrence of hypertrophy of the heart was secondary to the renal disease; and this, he thought, was readily intelligible, because, the kidneys not acting efficiently, the heart would be unhealthily stimulated and irritated by diseased blood, and hypertrophy would follow, as was the case with other muscles unnaturally excited. He could not say that such cases could be cured, but the albuminuria and the hypertrophy might be so diminished as to lead to comparative health. They might, however, pursue the usual course of diseases of the heart in spite of medication. He (Dr. Williams) also desired to refer to the presence of an endocardial murmur in rheumatism, uncomplicated with endocarditis. This, he was of opinion, was a statement to be received with caution, as a cardiac murmur, must, he supposed, have a physical cause for its existence, and it is necessary to ascertain that the examination had been most carefully made, and to be acquainted with all the attendant circumstances, before such a statement be admitted. He had himself found an endocardial murmur early in rheumatism, which had afterwards disappeared, and had supposed it owing to rheumatic inflammation of the lining membrane at the origin of the aorta interfering with the valves. This may be cured, and no trace of the disease left.

Dr. Mayo remarked that the author, in speaking of this murmur, merely said it did not depend on endocarditis: he did not say there was no physical cause for its occurrence.

Dr. C. J. B. Williams had precisely the same impression.

Dr. Barclay said, that he had paid especial attention to the observations he had made respecting this endocardial murmur, which he had found in rheumatism, the valves of the heart being uninjured. He attributed it to some cause unconnected with structural change. He had met with it for several days together, and even within forty-eight hours of death, and yet no sign of disease could be found to account for it. He had thus been led to attribute it to functional disorder, just as the sounds indicative of anæmia arise without any alteration of structure in the parts.

In answer to a question from the President,

Dr. Barclay said, his records did not yet enable him to say at what stage in rheumatism the complication of heart disease generally occurred.

Dr. C. J. B. Williams had met with cardiac inflammation as the primary disease, the rheumatic affection of the joints coming on afterwards. He could not admit, that Dr. Barclay had proved the endocardiac murmur was caused by the state of the blood. He had repeatedly found that murmur in rheumatism, when of recent date, and had attributed it to the cause he had already spoken of. If the mitral valves became inflamed, then the adjoining muscular tissue would be subject to increased irritability, and perhaps to irregular contraction, causing regurgitation at the mitral orifice; and, in the same way, if the aortic orifice were inflamed, the endocardial murmur might be heard, without any change in the character of the blood. If the latter were the cause, it would be heard not only in the heart, but in the different blood-vessels all over the body; but that was not the case.

Dr. Webster alluded to the greater frequency of disease of the heart among females than in males, as spoken of by Dr. Barclay, and said he fully agreed therein, attributing it partly to the neck and chest of females being much more exposed to the influences of atmospheric vicissitudes, and also in part to the consequences of tight-lacing, by which the action of the heart was greatly impeded. The author had not mentioned the average age when disease of the heart occurred. His (Dr. Webster's) own experience would point to the middle period of life; and he further thought that the general results confirmed his belief. Of 1600 deaths from cardiac disease since last Jan., nearly two-thirds, or 966, occurred between 15 and 60 years of age, 500 having exceeded the greater period, and only 134 being under 15. Dr. Webster concluded by asking Dr. Barclay to give his opinion on this matter, and also as to the cause of the greater frequency of heart disease in women than in men.

Dr. Fuller was of opinion, that the more favourable termination

of pericarditis occurred when adhesion of the pericardium to the heart took place generally. Such cases were rarely fatal.

Dr. Black had seen, in a hospital at Paris, an instance of those rare cases in which the rheumatic inflammation of the heart precedes the appearance of the disease in other parts of the body; and Bouillaud, he added, had, in his work on Diseases of the Heart, admitted that such cases are sometimes met with. With reference to the endocardial murmur without endocarditis, alluded to by the author, and of which Dr. Williams had offered an explanation, that it was owing to a partial occlusion of the ventricle, he (Dr. Black) thought that such might certainly happen, and would explain the cause of the sound; but it was too hypothetical and unphilosophical to be received; for the heart could not be regarded as any other muscle, one part of it being in action without injury to any other; and he thought that such a contracted state of the ventricle would probably cause a rupture of the mitral valve, or of some of its tendinous cords, which would be a very serious result.

Dr. Barclay, with reference to the greater liability to heart disease in women, said they were more liable to rheumatism, men more subject to its recurrence. There were more instances of endocarditis and of pericarditis in the female, but again more cases of secondary rheumatism were met with in the male sex. The reason of this he could not tell. In reply to Dr. Fuller's remark, he said that his (Dr. Barclay's) view was the result of inquiry, based on cases: it had been a matter of surprise to him, and was contrary to Dr. Latham's opinion, as announced in his work on Diseases of the Heart; but such was the fact according to his (Dr. Barclay's) experience.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. P. M. LATHAM, President.

Dr. Risdon Bennett presented a specimen of FIBROUS DEGENERATION OF, AND DEPOSITS IN THE SUBSTANCE OF THE HEART.

A married woman, aged 50, was admitted into St Thomas' Hospital, on the 14th October, under the care of Dr. Bennett. From the age of six months she has been the subject of imperfect hemiplegia of the left side; for some time she had occasionally suffered from dyspnoea, and for two months had had anasarca of the lower extremities with increasing general debility. She did not confess to any palpitation or other local symptom having direct reference to the heart. She had some cough, but no evidence of pulmonary congestion; the liver was not enlarged, nor the urine albuminous; the countenance was tolerably healthy, the skin soft, and the tongue moist; pulse very small and feeble. The systole of the heart was attended by a loud prolonged bruit, loudest over the mitral valves, followed by a distinct, natural second sound, to which succeeded a remarkably prolonged interval of rest; the rhythm was frequently irregular. On the 17th she became suddenly more feeble, and this state increased, notwithstanding the use of stimuli, till the 18th, the day of her death.

Post-mortem.—The pericardium was found extensively and firmly adherent. The heart was enlarged, both the right and left ventricles being dilated, and their walls hypertrophied. All the valves were healthy, excepting, perhaps, the aortic, which were somewhat thickened, but not to such an extent as to interfere with their functions. A vertical section through the left ventricle and aorta showed the walls of the ventricle to be increased in thickness and encroached on, and in parts replaced by some adventitious product. Towards the base, the muscular tissue gradually disappeared, at the expense of its outer part; so that, at the distance of three quarters of an inch from the aortic valves, and from that point upwards, it was entirely wanting, and was replaced by a firm, dense, slightly translucent fibrous tissue, which extended some little way upwards on to the aorta, and downwards on the exterior of the muscle, gradually losing itself in the substance of the pericardium; opposite the aortic valves it was an inch in thickness; about two inches below the valves, was an irregular, opaque, yellowish, somewhat firm, circumscribed patch, which extended some little way into the substance of the muscle. On cutting further into the walls of the ventricle, several of these masses were found about as large as peas or a little larger, having a yellowish-buff colour, tough and firm, and very much the appearance of the fibrinous deposit found in the spleen, etc. Some of these masses were circumscribed; in other spots, the substance seemed diffused through the tissue of the heart. One mass projected into the right ventricle from the septum. The lining membrane over the septum ventriculorum was considerably thickened and roughened, and around the base of the left ventricle were several large irregular un-

organised coagula; one larger than the rest occupied the cavity of a commencing aneurism about an inch in diameter, situated on the left side of the ventricle close to its base. The aneurism did not project externally. The walls of the right ventricle were also thickened; and here the muscular tissue was absent for a space of an inch and a quarter below the pulmonary valves, and was replaced by dense fibrous tissue. The lining membrane of the conus arteriosus was much thickened, and a thick cicatrix-like band extended round it immediately below the pulmonary valves, constricting this part to such a degree that the orifice was less than that of the pulmonary artery. The thickening of the lining membrane extended beyond the conus arteriosus, and especially on the septum and anterior wall of the ventricle. The upper part corresponded to a fibrous degeneration of the muscular tissue. The thickened membrane over the septum presented numerous opaque yellow patches, which had the appearance of atheroma. Some of these were of considerable size, and corresponded to elevations, on section of which it was seen that the muscular tissue beneath was converted into a yellowish material, much resembling that found in the walls of the left ventricle. The masses were, however, larger, softer, less distinctly circumscribed; and one of them was softened in the interior, and contained a drop of a puriform fluid (in which, however, microscopically, no pus cells were seen). The lungs were more congested than natural, but not otherwise unhealthy. Nothing worthy of notice was found in the other organs.

Dr. Quain, to whom this specimen was referred for report on the microscopic characters of this deposit, said, that the yellow, tough substance taken from different portions of the ventricle, including the walls of the aneurismal depression, which itself seemed to be formed by a softening and yielding of this substance, was found to consist of cells, of fatty particles, and of degenerated muscular fibres. These cells were generally spherical, in size from 1-4000th to 1-2000th of an inch in diameter, having very thin walls, easily broken down, and containing a few granules. There were also some, but not many, larger cells, with equally thin walls, oval or elongated in form, and showing nuclei in their interior. The structure and arrangement of the cells are rendered distinct by the action of acetic acid. The cells are generally so placed in lines, as to give the appearance of fibres, which have then a kind of concentric disposition. The fibrous, dense tissue in the right ventricle presents a structure very similar to that just described. There is nothing sufficiently decided in the structure to justify a decided opinion as to its nature. The specimen has been examined by several accurate observers, and very different opinions have been expressed, though none very positively, as to its nature. Thus, it has been thought to have some of the characters of malignant disease, of tubercle, of concrete pus, and of fibrin or fibrinous deposit, such as is frequently observed in the spleen. This latter view of the nature of the deposit, (that of Dr. Bennet and Mr. Simon) seems to be the most correct; and, if so, the specimen resembles one figured by Dr. Carswell, in the fourth fasciculus of his *Morbid Anatomy*, (Plate 3,) and which is there described as illustrative of the conversion of the fibrin of the blood into fibrous tissue.

The President complimented the author of the preceding (Dr. Peacock) and of this Report on the value of their investigations, and said that the Society was deeply indebted to gentlemen who thus gave their time, and brought their special accomplishments to the further investigation of these subjects.

Dr. James Bird presented a specimen of

ABSCESS OF THE MIDDLE AND POSTERIOR LOBES OF THE LEFT HEMISPHERE OF THE BRAIN, ASSOCIATED WITH RHEUMATIC SYMPTOMS.

A female, aged 17, of a lymphatic temperament and anæmic constitution, who had suffered from dysmenorrhœa, complained of headache on the 11th October, 1851, accompanied by stiff neck, tenderness of the cervical muscles, and undefined febrile symptoms, supposed to be those of incipient typhus. The symptoms continued to increase, notwithstanding the operation of a purgative, followed by some diaphoretic and diuretic draughts. On the 17th she had a cold fit, followed by copious perspiration. On the 18th Dr. Bird saw her, with Mr. Fennell, and found her lying on the right side, complaining of extreme tenderness of the epigastrium, particularly when pressure was made upwards against the diaphragm; also tenderness of the præcordial interspaces, much neuralgic tenderness and stiffness of the muscles of the left arm and leg, and of similar tenderness of the right side, but in a minor degree. There was epigastric pulsation, also vomiting and gastric irritability; short, quick respiration, and wandering delirium. The patient retained consciousness, and gave rational answers when roused. She had extreme tenderness at the nape of the

neck, extending over the whole of the epicranial region, with much headache, and some degree of sore throat. She lay with her eyes quite open, and in a semi-comatose state, the pupils unnaturally dilated, and the countenance pale and languid; pulse 100, full but soft; temperature of the skin not greatly increased. Having taken some mercury and chalk, with James' powder and opium, followed next morning by a purgative draught containing vinum colchici, she had one copious dark stool; and had a turpentine and pyroligneous acid liniment applied to the epigastrium. She felt somewhat easier on the 19th. She was then cupped on the nape of the neck to six ounces, with marked relief. On examining the heart, there was heard a harsh, irregular, endocardial, systolic murmur on the right side, which was audible also at the epigastrium. On the 20th, there was less muscular tenderness of both sides; and on this day a large patch of erythema papulatum situated on the right hip and thigh, was first pointed out to Dr. Bird. The delirium continued to increase, followed by deep coma on the 22nd; and death took place on the morning of the 23rd. *Examination after Death.*—The examination was made by Mr. Bullock, of St. Mary's Hospital. The body was rather thin and pallid. *Head.*—The pia mater presented, on the upper part, much dark venous congestion, unaccompanied by any serous effusion under the arachnoid; but at the base of the left hemisphere it presented a state of bright red vascularity, as seen in active inflammation of this membrane. There was no abnormal redness of the substance of the cerebrum, as far down as the corpus callosum; but, on cutting into the left ventricle, a gush of yellow purulent matter, mixed with clear flakes of lymph, to the amount of about 3 oz., took place. There was an effusion of about an ounce of clear serum in the right ventricle. On removing the left hemisphere of the cerebrum, the abscess was laid open from the base. It was found occupying the ventricle, its cornu, and both the middle and posterior lobes of the hemisphere. It was partly lined by a soft flocculent vascular membrane, presenting somewhat of the villous vascular appearance of a mucous surface, and composed seemingly of the ventricular lining membrane. The cerebral substance in the neighbourhood was softened, but was not abnormally vascular. The pia mater covering the inferior surface of the middle and posterior lobes was of a bright red vascularity. *Chest.*—The lungs were healthy. The pericardium presented no signs of inflammation. In the right auricle and ventricle there were several firm carnified coagula; those in the ventricle adhering firmly to the cordæ tendinæ. There was no valvular disease on either side. *Abdomen.*—The mucous coat of the stomach on its great curvature, from the cardiac to the pyloric orifice, was uniformly red and vascular. The liver was spread over a somewhat larger space than usual. The peritonæum and intestines presented appearances of venous congestion; as did the right kidney, which was examined, and found to be natural in structure. The uterus was small, but normal.

Morgagni, from Valsalva, describes a somewhat similar case of a woman, in whom the ventricle of the left hemisphere contained a large quantity of pus, without any discoverable lesion of the cerebral substance. The menstrual discharges had greatly decreased, and a tumour arose on the left leg, for which the limb was amputated. The healing of the stump proved tedious, and, after the completion of the cicatrization, the characters which the case assumed were fever, apoplectic symptoms, delirium, convulsions, and palsy of the right side. In the present instance, the dysmenorrhœa, eruption of erythema papulatum, and fibrinous coagula in the heart of some standing, are all so many proofs warranting the inference that the patient was of a rheumatic diathesis, and owed many of the symptoms of her last illness to a rheumatic condition of the blood; which was not, Dr. Bird regretted to say, subjected to a chemical examination. The connexion between the chronic cardiac disease, which was of an obstructive kind, and the structural change in the cerebrum must not be overlooked; for, according to the statement of the patient's mother, she had been ailing for some short time previous to the illness which terminated her existence. In how far the neuralgic rheumatism was the result of diseased irritation propagated from the central nervous organ is a question of interest which Dr. Bird did not try to determine.

MEDICAL SOCIETY OF LONDON.

DR. MURPHY, President, in the Chair.

NEW OPERATION ON DISEASED JOINTS.

Mr. Gay commenced his paper by observing, that up to the present time there is no department of surgery in which the powers of

art have been comparatively so feeble as that applied to the relief of those diseases of the joints which, from their results, might be termed destructive. Hence, if the articular surfaces of the joints be bereft of their cartilages, a sinus or two be formed around it, and the health of the patient show symptoms of exhaustion, the joint, and probably the whole limb, is doomed to amputation. He adverted to the causes of the removal of the cartilages from joints, and gave it as his opinion, that in addition to primary synovial and osseous disease, the cartilages were sometimes removed by absorption, in consequence of degeneration of their own tissue, without any traceable affection of the contiguous textures. In all cases of removal of cartilage, the tissue degenerates into a kind of fibrous texture, antecedent to the final process; and as portions of cartilage were sometimes observed to be removed without any apparent disorder of either the synovial or osseous surface, and, moreover, as cartilage was known to be inadequate to its own repair, Mr. Gay thought it most probable that the portions of cartilage so removed had first spontaneously degenerated, and then were absorbed. He went on to remark, that if a series of joints be examined in which the removal of the cartilages is taking place, the appearances will be as follow:—"If it follow disease of the synovial capsule, the cartilage will be found in some to maintain its connexion with the bone, while it is thinned by absorption at its free surface; in others, however, the bone is found inflamed at various points of its connexion with the cartilage; and at these the cartilage is loose, and may be peeled off, so that portions of thin attached and unattached cartilages are found in the same joint. When almost or entirely denuded, the surfaces of the bones may exhibit simply a state of increased vascularity, preceding the effusion of plastic lymph for the purposes of reparation by ankylosis, or they may be in a state of ulceration. This ulceration may exist as a simple abrasion, or may be of considerable depth, but there is generally a uniformity in this respect over the whole surface. With this state of ulceration there is also a softening of the osseous structure, and frequently disintegration; the contents of the joint consisting of broken-up cartilage and osseous and other debris together, or of osseous matter with ichorous or sanious discharge. When the disease originates in the bone, as in by far the greater number of cases it does, in Mr. Gay's opinion, the separation of the cartilage is effected by another process, which he terms "shedding;" the cartilage is then reduced to the condition of a foreign body within the joint. Shreds of cartilage thus situated in a joint may be observed after months and even years of disease; and, as on the other hand, its separation from the articular extremity of the bones may be accomplished in an almost incredibly short period of time, it is fair to infer that the time thus passed must have been occupied in the process of its extrusion from the joint, and that this is accomplished, neither by ulceration nor absorption, but disintegration by, and solution in, the discharges of the joint. The bone itself, being diseased, adds its exfoliated or disintegrated particles to the cartilaginous debris, which, with its own discharges, constitute generally the contents of a joint in which the disease commenced in the bony elements. The result of these discharges is to set up inflammation in the sound textures contiguous to the joint, and to cause general systemic irritation. Sinuses form around the joint; the disease extends; the ligaments become ulcerated; the spongy tissue of the bones is infiltrated with pus, and broken down; osteophytes form around the heads of the bones; abscesses extend into the surrounding soft parts, separating the different structures, and setting up unhealthy and destructive action among them; and, in short, a climax is arrived at in which the local mischief reacts upon the constitution, and life is only to be preserved at the sacrifice of the joint or of the limb. Mr. Gay inferred from his remarks, of which only an imperfect abstract has been given:—

1. That there appears to be no reason why diseases affecting the constituents of a joint should be slower in their course of reparation than diseases of any other part or structure.
2. That the removal of cartilage from its osseous connexion in a joint is occasionally effected by absorption, but most frequently by a process of "shedding," or exfoliation.
3. That cartilages thus shed become, by their being pent up in a joint, sources of local and constitutional irritation, and thus promote disease in the osseous and other structures appertaining to it, supposing that such affections do not exist primarily; and if they do, these cartilages, by the same influence, maintain and extend these diseases also.
4. That the natural outlets for these discharges, the sinuses, are inadequate for that purpose.
5. That therefore the exfoliated contents of a diseased joint have to be minutely broken up by, or dissolved in, the discharges of the joint, in order that they may be removed; processes which are

necessarily of a very protracted duration, and which account for the tardiness generally characteristic of joint diseases.

6. That the exfoliated contents of a joint, after its cartilages have been removed, and even after extensive disease has been set up in the bones and other textures, have only to be completely removed, and the process of reparation will, in the majority of instances, immediately commence.

Mr. Gay then alluded to the usual modes of treatment, and remarked, that the operation of re-section of a joint is not only a useless but an unphilosophical mode of treatment for diseased joints. In the first place, primary disease is generally limited to one of the articular extremities of the joint; it is therefore a needless mutilation to remove more than that disease, supposing the operation were for a moment admissible. Dissections show that disease originating in bone, when arrived at that stage at which the operation of resection is generally employed, has extended itself far beneath the surface, and frequently along the shaft for a third of its whole length, so that resection cannot accomplish its purpose, which ought manifestly to be the removal of all disease. The plan Mr. Gay recommends, is free and deep incisions made along each side of a joint, so as freely to lay open its cavity, and not to allow any discharges being retained within it. They should be made of such a length, and so treated, that they may not degenerate into sinuses. They should be made, if possible, one on either side of the joint, in the direction of the long axis of the limb. They should extend into the abscesses in the soft parts so as to lay them open. If sinuses already exist, the incisions should be carried through them, if this can be done without departing from a slight curve. If either of the bones be carious or necrosed, the incisions should be carried deep into such bones, so as to allow the dead particles of bone to escape. Ligaments which stand in the way of a free discharge from the joint should be cut through. Of course important vessels should be avoided. The wounds should be kept open by pledgets of lint, and free suppuration encouraged. The constitutional powers in each case, have, when this operation has been performed, rallied immediately afterwards; and as the discharges from the joint have altered in character and become healthy, which they in general do in the course of two or three weeks, these become invigorated, and improve with the improving joint. Mr. Gay then narrated some cases in corroboration of his views:—Peter D—, aged 38, admitted into the Royal Free Hospital in 1842, for diseased elbow-joint of three years' standing, with ulceration of the cartilages and sinuses. The joint was opened on both sides, and healed in eleven weeks. The next was a case of disease in the articulation between the first and second phalanges of the thumb of eighteen months' standing. Cured in six weeks. The third case was that of a man with "long-standing" disease of the tarsal articulation. One sinus led to the interior of the joint. Incisions were made on each side of the foot, and complete repair by ankylosis followed. The fourth case was that of a little boy of strumous diathesis, with disease of the knee-joint consequent upon suppuration of the bursa behind it. The little fellow was reduced by fever to a very low ebb, so that bed-sores formed on parts of his body. The joint was opened, and ankylosis took place at the end of four months, the knee being bent on the thigh. The fifth case was that of a German, with disease of the wrist-joint, which had resisted treatment. One sinus led into it. One incision was made at the back of the joint, and ankylosis followed, but was not observed to be perfect for six months. The sixth case was that of a young Irishwoman, with disease of the tarsal articulation, following upon traumatic erysipelas of the leg and foot. She was reduced to an exceedingly low condition, and from cough with bloody sputa, night sweats, the physical symptoms of the chest, and extreme emaciation, she was supposed to be phthisical, (according to Dr. Heale,) and so diseased, that amputation, which was considered to be the only remedy for the disease, as far as the joint was concerned, was forbidden by medical authority. Mr. Gay made an incision on either side of the foot in this case, and the change both in the joint and constitution was remarkable. Her health rallied from that moment, and the joint assumed a more healthy aspect. In a fortnight the joint was fixed by the exudation of lymph between the bony surfaces, and in five weeks perfect ankylosis had taken place, and the wounds had healed. She soon after left the hospital, and was, a week or two since, to Mr. Gay's knowledge, in perfect health. The seventh case was that of Highley, already reported in the Medical Journals. The eighth case was that of a little boy with disease of the articulation of the first and second phalanges of the thumb. In this case the cure was not accomplished. The incisions formed sinuses, and after several months the necrosed phalanx came away.

THE PERSIAN TAMBAC AND ITS PREPARATIONS.

This well-known eastern narcotic was brought before the notice

of the Fellows of the Society by Dr. J. B. Thompson. The preparations were as follows:—

- No. 1. The dried leaf.
- No. 2. The powder.
- No. 3. The infusion with hot water.
- No. 4. The infusion with cold water.
- No. 5. The tincture with proof spirit.
- No. 6. The ethereal tincture.
- No. 7. The alcoholic tincture.

Dr. Thompson was indebted to the Persian Ambassador for the dried leaf, and Mr. Hooper, chemist, Pall-mall East, kindly prepared the other specimens of this valuable therapeutic agent now on the table. Dr. Thompson had some considerable experience of the remedy himself, and found it most useful in all the affections in which tobacco has been recommended; it does not produce the bad effects that sometimes result from the continued use of the latter. It is used in various forms, and smoked in the narghili or hookah, and is most useful in chest affections. It is a remedy of much value in the estimation of European physicians in the East: and the ancient and modern native practitioners speak most favourably of it in many diseases. In asthma it is very useful with other remedies; and by inhalation it is found very beneficial in catarrhal affections, and even in relaxations of the uvula. Clergymen and travellers in Egypt speak highly of it. Dr. Thompson found it very useful in dropsical affections in combination with squill and digitalis, and tried it as an antispasmodic in cases of strangulated hernia. It produces the same results in these cases that tobacco is known to do, but does not affect the nervous or circulating system, nor produce the dangerous effects of that plant. It is most valuable in cases of tape-worm, and in all worm affections, either used as an enema by infusion, or in the form of powder internally. It is given in cases of epilepsy in the latter form, and may be employed as a substitute for opiates, as a sedative in most cases—as it acts rather as an antibilious remedy, and does not derange the stomach or bowels as opium or its preparations are known to do. This tambac, though a mild kind of tobacco, is in its use in all cases found far safer than any preparation of the latter; and it is shortly about to be tried very extensively at some of the public institutions; for Dr. Thompson hopes to be able to get it in such quantity as to be able to supply it, and Mr. Hooper has kindly proffered his services in its preparation. The tinctures, it is expected, will prove a valuable acquisition to our *materia medica*, and a neat form for introducing this safe but efficacious narcotic into general use. It is also employed as an endermic remedy. The tambac is so mild when inhaled through the narghili, that several European ladies who travel in the East, have recourse to it with much advantage, and feel benefited by its use. It acts as a mild antibilious remedy when thus employed, and relieves nervous headache, and other kindred and anomalous symptoms arising from the stomach. All travellers derive benefit from it as a soothing sedative after a fatiguing caravan tour, and it does not affect the stomach, as preparations of tobacco generally do. Smoking it through rose or violet-water gives it a new and agreeable property, and gets rid of the small portion of acrid oily property which exists in most vegetables of this class.

INFLAMMATION AND ULCERATION OF THE RECTUM.

Mr. Coulson said, that in September last he saw, with Mr. Haden, of Sloane-street, a patient, aged 34, who passed a semi-solid, feculent motion once in twenty-four hours, tinged with mucus and blood, and in addition to this, within the same time, four or five evacuations, consisting of small quantities of mucus and blood. On examining the bowel with the speculum, it was found that the mucous membrane was destroyed to the extent of two inches from the anus, and pus and blood were seen exuding from the ulcerated surface. Various local and constitutional remedies were employed with little relief, except a slight diminution of the discharge. It was then suggested, that the decoction of tormentilla should be tried. Three ounces of this root in a pint and a half of boiling water were boiled down to a pint, and four ounces of the decoction were thrown up the rectum twice a day, and retained each time a quarter of an hour. Under the use of this remedy the pus and mucus gradually diminished, and within five weeks the ulceration had completely healed. The only medicine taken during this time was a little castor oil to keep the bowels open. Mr. Coulson believed the rectum to be occasionally the seat of inflammation, attended with muco-purulent discharge, which, if unchecked, proceeds to the destruction of the mucous membrane of the bowel, and to the formation of abscesses in the neighbourhood of the anus. A frequent desire to go to stool exists in these cases, and un-

less this be yielded to at once, the motions came away of their own accord, loose and mixed with blood and mucus; at last the patient's health gives way, and he is worn out by continued suffering. Mr. Coulson showed a preparation taken from a patient who had died of this complaint; the cellular tissue round the anus was hardened, the mucous membrane of the rectum completely destroyed, and the internal surface of the bowel presented elevated hypertrophied muscular fibres, between which there were several openings communicating with the external abscesses, so that these, in fact, were the result of the disease of the interior of the gut, the diseased action without being continuous with that within. The ulceration of which he had been speaking was not to be confounded with the fissured rectum which often occurs from mechanical causes, or the ulcerated rectum, which is sometimes found in persons labouring under a syphilitic taint; these conditions of the bowel were very painful and the source of great distress to the sufferer, but they easily yielded to remedies, as the black oxide of mercury ointment, (3j. of the black oxide to an ounce of lard,) or, if this failed, to a division of the surface of the ulcer, and, when left to themselves, did not destroy the patient. Mr. Coulson said it was most desirable in all diseases of the rectum to make an examination with the speculum, and he would take this opportunity of showing one which was a modification of Mr. Hilton's and Mr. Curling's; the difference consisted in the handle being loose, so that the same instrument could be used for any part of the bowel; which was not the case where the handle is fixed. This alteration was suggested by Mr. Ferguson, of Giltspur-street.

CLOSURE OF THE FISSURES IN THE BONY PALATE. REDUCTION OF A DISLOCATED FEMUR.

Dr. Baer, a German physician and surgeon, brought before the Society two important improvements in operative surgery, which had been communicated to him by Dr. Buchring, the nephew of the late illustrious Dieffenbach. The first is an operation to effect an organic closure of the fissura palati dura; and it has been successfully performed, more than once, by Dr. Buchring, who appears to be its inventor. Dr. Mason Warren, of Boston, has proposed an operation for the same purpose, to be effected by transplanting a portion of the mucous membrane of the roof of the mouth across the fissure, and mentions some successful cases; but the operation has failed when tried in England, Germany, and in other countries. Up to the present time, only mechanical appliances by means of obturators have been used, to prevent the communication between the cavities of the mouth and nose, and the consequent diffusion of sound in speaking. Useful though the obturators may be, yet they are attended with many inconveniences to the patient. In this respect, Dr. Buchring's operation deserves high consideration. It may be remarked, that he does not operate before the tenth, nor after the twentieth year, the bones being at that time of life in a comparatively elastic condition. The operation is particularly intended for fissures in the median line of the palate, the vomer not being in connexion with either of the edges of the fissure; but modifications may be easily introduced hereafter, to meet those cases where this connexion does exist. A pair of forceps of a peculiar form are required to perform the operation. The patient is to be seated in a chair; the forceps are then introduced into the open mouth, and one branch being passed into the nasal cavity, as near as possible to the alveolar process, while the other is to occupy a corresponding position in the mouth, so as to embrace the palate between the two cutting edges of the forceps. The palate is then to be cut entirely through, the opening made being of a corresponding length to the fissure. It ought not to extend beyond the hard palate posteriorly, and ought to leave its anterior portion entire. This opening is to be made on both sides of the fissure. A piece of leaden wire is then to be passed through one of the wounds into the nasal cavity, and so on, through the other, into the mouth again, where the two ends are to be bent upwards. The wire is to be gradually drawn together, the effect being that, as the edges of the fissure approach each other, the space between the margins of the wounds will become wider. Or wedges of soft wood may be introduced into the wounds for extending them, instead of the leaden wire. When the edges of the fissure are near to each other they are to be cut, in order that they may unite as in hare-lip, or, caustic may be used to effect the same purpose by granulation. Of course, while this is being done, the same pressure is to be kept up until a complete consolidation of the cicatrix takes place; the pressure being afterwards gradually decreased. The wounds will soon fill up with callus, and close.

The second is an entirely new apparatus for immovably fixing the pelvis, while a luxated femur is being reduced. In cases of recent and sudden luxations this apparatus may not be absolutely requisite, but in chronic luxations, where the reduction of the caput

femoris can only be effected in the course of weeks or months, especially in those luxations arising from coxalgia, this apparatus will be found invaluable. The present method of establishing counter-extension is not only insufficient in regard to fixing the pelvis, but is intolerable to the patient when he has to endure it for a length of time, whereas Dr. Buchring's invention not only perfectly fixes the pelvis, but may be used for any length of time without causing any inconvenience whatever. While the apparatus is in use, and the femur is being extended, this invention throws the whole force of the counter-extension upon those parts of the body best calculated to bear a great amount of pressure without inconvenience, namely upon the tubera ischii. The apparatus is made in the following manner:—First a model is taken with plaster of Paris of the posterior surface of the pelvis, extending so far inferiorly as to include the tubera ischii. From this model an exact impression is to be taken in cast iron, so that it will fit exactly to the corresponding parts without any undue pressure on any portion of the surface. From the superior ridge of the plate of iron two strong curved pieces of iron are to be brought round the pelvis as far as the anterior superior spine of the ilium, keeping at a distance of about two inches from the body. At each of the two ends there is to be a screw, capable of being turned by the hand, armed with a well-bolstered pelote, and the screw is thus to be turned until it becomes firmly fixed upon the anterior superior spine. The apparatus is to be fixed to the bed, and the extension may then begin.

Mr. B. W. Richardson read a paper on

THE FIBRINOUS ELEMENT OF THE BLOOD IN RELATION TO DISEASE.

The author took for the standard of the amount of fibrin in healthy blood the figure derived from the mean analyses of Lecanu, viz., 3 parts in the 1000. During health, fibrin is held in solution by the serum, and perhaps by the salts of the blood, and is associated with a rather constant quantity of albumen. Even in health it is always undergoing slight changes in quantity: sometimes a real change, by virtue of an increase or decrease in itself; and at others, a relative change only, from corresponding alterations in the other constituents of the blood. The fibrinous element of the blood during disease may be—1. Increased; 2. Decreased; 3. Altered in character.

Increase of fibrin never occurs without a diminution of some other constituent of the blood. In inflammations, the increase of fibrin is accompanied with decrease of blood corpuscle, and so on. Still, the fibrin is capable of undergoing increase. What, then, are the circumstances which lead to such increase? The respiratory act is intimately concerned in the formation of fibrin, and the proportion of this element varies with the amount of oxygen imbibed in the respiratory act. Thus, the beautiful series of experiments lately performed by Dr. Gairdner prove, that the blood of animals which have been exposed to an oxygenized atmosphere becomes highly charged with fibrin; and the experiments of Prevost, and Dumas, and Nasse, show, that in those animals in which respiration is most active, such as birds, the amount of fibrin is greater than in other creatures; while, on the contrary, the observations of Dr. John Davy prove, that in all cases where death is induced by any process which deprives the lungs of atmospheric air, the blood remains destitute of the property of coagulation, either from deficiency of fibrin, or alteration in its quality. From these facts, then, it is by no means difficult to discover how it is that in some diseases fibrin shall be in excess. In no diseases is the fibrinous element so increased as in pulmonary inflammations. Bronchitis affords positive and negative evidence of the fact in question, since, in the first stages of this disease, the fibrin is greatly increased; while, in the later stages, when a mucous secretion is poured out upon the bronchial membrane, cutting off the direct action of the atmosphere on the blood, the fibrin falls to its natural standard, or even below it. With reference to the question, What is the true cause of increase of fibrin, and of the accompanying fever? the author remarked, that to him it appeared that the inflammation gave rise to the increase of fibrin, and this to the accompanying excitement which we call fever; and he related, in corroboration of this view, that in some experiments on rabbits, recently conducted by himself, he had not only found fibrin increase after respiration of oxygen, but had observed, also, that in proportion with this increase there came on quickened circulation, arterial tonic, great heat of skin, and other of those symptoms which would indicate inflammatory fever in the human subject. In some diseases, the increased amount of fibrin may be relative only, owing to a diminution in the other blood constituents. Scurvy would seem to hold an anomalous position in this matter, inasmuch as it is induced by the very causes which lead to a decrease of fibrin;

and yet in the experiments of Busk on scorbutic blood, it was found buffed, and rich in the fibrinous element. Was it possible that the patients on whose blood these experiments were performed, were suffering at the time from slight inflammation?

Decrease of Fibrin.—The causes which lead to decrease of fibrin are those which arrest the process of fibrination, or overwhelm the blood with its other constituents. Excessive fatigue also leads to this result. In these cases, the muscles are for a long time worked, and the demand for fibrin is very great, and at the same time the respiration gets impaired from the exercise; hence such blood is found deficient in fibrin. From seventy reports of cases of death by ardent spirits, by three American physicians, Drs. Peters, Goldsmith, and Moses, it would seem that alcoholic drinks lessened the fibrinous element. Mr. Richardson here took occasion to criticise the present habit of calling that excitement of the system which follows an inflammation, and that state of prostration which arises from polluted air or from contagion, by the one name, fever. He also condemned the use of saline medicines and alcoholic and profuse watery drinks, in true typhus fever, arguing that these substances tended to lessen the consistence of the plastic element, which was already deficient.

Change of Character.—In this section of the subject the author confined himself to the consideration of fibrin, as undergoing coagulation in the living body. That fibrin could coagulate in the heart and vessels during life, was now capable of being fully established, the circumstances which lead to such a state being super-fibrination of blood, reduction of the ordinary diluents of fibrin, and slowness of motion in the vessels. The formation of solid masses of fibrin in the heart is a subject of great interest. Mr. Richardson not only believes in the deposition of such masses, but opines that in cases where the blood is surcharged with fibrin, and where an indurated valve exists, there may be suddenly left upon that valve a deposit of fibrin of sufficient size to block up the orifice, and cause death. According to some old writers, the tendency to coagulation of fibrin during life has sometimes occurred in an epidemic form. Two epidemics of this kind were described. In cases of asthenia, where fibrinous concretions exist in the heart, the very cessation of the act of life may be owing to their presence and gradual increase, the central organ of the circulation becoming literally choked by them. The author concluded, by observing, that in the construction of his paper he had tried to combine pathological and practical observation with physiological fact, and therefrom only to draw conclusions.

Dr. Handfield Jones said, that there was a difference in the effects of alcohol upon habitual drunkards, or when taken in large quantities at once by an indolent person. In the former, there was a tendency to fibrinous deposits; in the latter, it was the reverse. There was, moreover, a disease noticed by a German writer in which fibrine was largely deposited on the serous surfaces, accompanied with symptoms generally of phthisis. These patients recovered from the acute attack, but generally died afterwards from cardiac disease, due to contraction of orifices by fibrinous deposits.

Mr. Chippendale thought it important to decide whether fibrine was an *effete* matter or the reverse. He thought there were facts against the former supposition. Thus, fibrine existed in larger quantities in arterial blood, which was intended for nutrition, than in venous. Arterial fibrine, which was eliminated therefore in a more perfect state, was not soluble in nitrate of potash; venous fibrine was. Fibrine did not exist in the lacteals till after the transit through the glands. Local inflammations were proofs of increased local nutrition or activity—in these fibrine was deposited. In cases of erysipelas and purpura there was less fibrine. It was an attempt at inflammation, without the power to carry it on. In cases of phlegmon, where fibrine was more abundant, it was deposited in large quantities around the inflammation. All these were examples favouring the supposition, that it was a matter intended for nutritive, not *effete* purposes.

Mr. Henry Lee remarked, that in those cases instanced by Dr. H. Jones, the fibrine, by very reason of the excess of deposit in the serous membranes, might be diminished in the blood. He mentioned the case of a female, aged 26, in whom this fibrinous disease existed, with concretion of fibrine in the vessels. In her case, as in Mr. Richardson's, there was violent palpitation of the heart, which could be heard at a distance of two or three yards from the chest. A *post-mortem* revealed the existence of a firm coagulum in the aorta, but no valvular disease. Pus, moreover, mixed with blood increased the coagulation of fibrine, as instanced by experiments out of the body.

Dr. H. Jones stated in his cases the fibrine was not diminished in the blood. He believed the reverse was the case.

Dr. Glück asked, if Mr. Richardson really meant that in one of his cases occurring among negroes, the palpitation could be heard in the next room?

Mr. Richardson explained, that such was stated to be the case in the account given by Dr. Chisholm.

Mr. Hinton observed, that this might really be the case, as the rooms in negro countries were very small, and the partition-walls very thin.

The President said, the chief point of difference not be lost sight of was this:—1st. There were cases where fibrine existed in larger quantities in the blood, owing to its high oxygenation. 2nd. There were cases in which there was a tendency to its deposit in large quantities. And he instanced, as examples, cases of puerperal fever, in which large quantities of fibrine had been thrown out on the peritoneum and elsewhere, and yet in which no inflammation had been made out during life.

Dr. James Bird stated, that fibrine was certainly often deposited from undue oxygenation of the blood, as in inflammatory fever; but it also was deposited in a very different state, the increase being only relative. The liquor sanguinis from a diseased condition could not dissolve the fibrine which was deposited. In diphtheritic croup and some forms of diphtheritic dysentery this was the case.

Dr. Crisps said it had been lately shown by Dr. Hom, that fibrine did not exist in a state of solution in the living blood. In his case, quoted by Mr. Richardson, he had stated the fibrine had been deposited, because of the injury, just as in ordinary injuries we have local increase in the fibrine. He asked Mr. Richardson why it was, the cadaveric rigidity came on so speedily in cases of animals hunted to death, as in the hare, in which the blood, nevertheless, did not coagulate?

Mr. Richardson, in reply, remarked, that fibrine was certainly increased in erysipelas, thus disproving Mr. Chippendale's supposition. The experiments of Mr. Lee he rejected as inconclusive; the experiments made with dead blood did not often agree with those made with living blood. Fibrine was also increased in puerperal fever and scurvy. Litmann said, vegetable diet diminished it, while animal diet increased it. In the dysenteric patients of tropical climates there were always fibrinous concretions in the heart. He disagreed in Dr. Crisps' view of his own case, believing the concretion was due to the ruptured valve entangling the fibrine of the blood, just as a pin would, if introduced into an artery. He could not answer the last question in relation to the hare.

Dr. C. J. Hare said, that in University College Hospital the blood of scorbutic patients had been analysed, and the fibrine found to be decidedly increased.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 14th inst.:—

CHIBNALL, CHARLES, Tothill-street, Westminster.

COLLIER, JAMES, Aberdeen.

DAY, WILLIAM EDWARD, Bristol.

EASTWOOD, JOSEPH WILLIAM, Chesterfield, Derbyshire.

FRANCE, EDWARD ROSS, East Stonehouse, Devon.

ROCHE, JAMES MARTIN, Fermoy, County Cork.

TURFORD, JAMES EDWARD, Boston, Lincolnshire.

At the same meeting of the Court, Mr. JAMES WILKINSON ELLIOTT passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date November 19, 1847.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, November 13:—

CREGREN, JAMES JOSEPH, Ramsey, Isle of Man.

WILKINSON, ROBERT, Bradford, Yorkshire.

UNIVERSITY OF CAMBRIDGE.—Lectures on subjects connected with the study of Medicine for the ensuing year:—*Michaelmas Term.*—Comparative Anatomy and Physiology, by the Professor of Anatomy, on Mondays, Wednesdays, and Fridays. Begin Oct. 22. Human Anatomy and Physiology, by the Professor of Anatomy, on Tuesdays, Thursdays, and Saturdays, at 1 o'clock. Begin on Tuesday, Oct. 28. Institutes of Medicine and Preservation of Health, by the Downing Professor of Medicine, on Mondays, Wednesdays, and Fridays, at 12 a.m. Begin Oct. 27. Medical Clinical Lectures, by the Regius Professor of Physic, at the Hospital, on Fridays, at 10 a.m. Begin Nov. 7. *Lent Term.*—General Pathology, by the Regius Professor of Physic, on Mon-

days, Wednesdays, and Fridays, at 10 a.m. Begin Feb. 9. Human Anatomy and Physiology. Course continued on Tuesday, Feb. 3. Chemistry, by the Professor of Chemistry, on Mondays, Tuesdays, Thursdays, and Fridays, at 12 a.m. Begin Feb. 24. Medical Clinical Lectures, by the Linacre Lecturer, at the Hospital, on Thursdays, at 10 a.m. Begin Jan. 15. Materia Medica and Pharmacy, by the Downing Professor of Medicine, on Tuesdays and Saturdays, at 10 a.m. Begin Jan. 27. *Easter Term.*—Special Pathology, by the Regius Professor of Physic, on Mondays, Wednesdays, and Fridays, at 10 a.m. Begin April 21. Botany, by the Professor of Botany, on Tuesdays, Wednesdays, Thursdays, and Fridays, at 1 p.m. Begin April 27. General Therapeutics and Clinical Medicine, by the Downing Professor of Medicine, on Tuesdays, Thursdays, and Saturdays, at 10 a.m. Begin April 22. Surgery, a course of lectures, by Mr. Humphry, in the Christmas and Easter vacations. Attendance on medical and surgical practice at the hospital daily, at 11 a.m. Attendance on the lectures on Human Anatomy and Physiology and on General Pathology and Dissections, are recognised by the Royal College of Surgeons, London, as one of the sessional courses required by the regulations of the Council of that College. Students entered to the practice of the hospital are admitted to the clinical lectures and the lectures on surgery without any additional fee.

UNIVERSITY OF GLASGOW.—Mr. Sheriff Alison has been re-elected the Lord Rector of this University. An attempt was made to obtain the election of Lord Palmerston, but it proved a failure.

THE MEDICAL BENEVOLENT COLLEGE.—At a meeting of medical men, held at Kentish Town, on the 11th inst., it was resolved, "That every effort ought to be made by the Profession to support Mr. Probert in his noble undertaking of establishing a Medical Benevolent College. That a Committee of medical men be at once formed, to aid him in that good work. And that the best thanks of the meeting be given to Mr. Probert, for his generous efforts for the good of the Profession. The following donations and subscriptions were entered into:—

	Donations.	Subscriptions.
Chas. Smith, Esq.	£5 0 0	£1 1 0
H. A. Rawlins, Esq.	5 0 0	1 1 0
T. S. Baly, Esq.	2 2 0	1 1 0
S. Sandys, Esq.	5 0 0	1 1 0

OBITUARY.—On the 15th inst., at Craddock House, Uffculme, Devon, John New, M.D., in the 83rd year of his age.

NAVAL APPOINTMENTS.—Assistant-surgeons, Ernest Elliott, (1841,) to Portsmouth Dockyard; William L. Gordon, M.D., (1846,) to the Woolwich Division of Royal Marines; Robert P. R. Sparrow, (1845,) to the Portsmouth Division of Royal Marines; J. C. Austen, M.D., (1846,) to the Victory, flag ship at Portsmouth; William W. Wildey, (1845,) to the Portsmouth Division of Royal Marines; Narcissus C. Hatherly, (1845,) to the Victory; Charles M'Shane, (1844,) to Greenwich Hospital; Robert C. Scott, (1847,) to the Excellent, gunnery-ship, at Portsmouth; Richard D. Pritchard, (1841,) to the Impregnable, flag-ship, at Devonport; Edmund Lawless, (1845,) to the Dragon, on the Mediterranean station.

MILITARY APPOINTMENTS.—1st Dragoons, assistant-surgeon Richard Francis Valpy De Lisle, from the 96th Foot, to be assistant-surgeon, vice Grogan, promoted in the 26th Foot; 26th Foot, assistant-surgeon John Grogan, M.B., from the 1st Dragoons, to be surgeon, vice Ferguson, appointed to the Staff; 40th Foot, acting assistant-surgeon Thomas Ligertwood, M.B., to be assistant-surgeon, vice Haverly, appointed to the 96th Foot; 87th Foot, staff-surgeon of the 2nd class, Walter George Leonard Staunton, to be surgeon, vice Wood, appointed to the staff; 96th Foot, assistant-surgeon John Coghlan Haverly, from the 40th Foot, to be assistant-surgeon, vice De Lisle, appointed to the 1st Dragoons; Hospital staff-surgeon Robert Wood, from the 87th Foot, to be staff-surgeon of the 2nd class, vice Staunton, appointed to the 87th Foot; surgeon Andrew Ferguson, M.D., from the 26th Foot, to be staff-surgeon of 2nd class, vice Millingen, deceased.

COMMISSION SIGNED BY THE LORD LIEUTENANT OF THE COUNTY OF MIDDLESEX.—Royal Westminster Regt. of Middlesex Militia, Ebenezer David Silver, M.D., to be surgeon, vice William Ralfe, deceased.

MEDICAL APPOINTMENTS AND VACANCIES.—A house-surgeon is wanted for the Liverpool Dispensary; he must be legally-qualified, and single. Salary 105*l.* a-year, with coals, candles, furnished apartments, and attendance. Election on the 26th inst. There is a vacancy in the office of physician to the Royal Free Hospital, by the resignation of Dr. Heale. Candidates must be licentiates of the London College of Physicians, and testimonials to be sent on or before the 25th. The election rests with the committee.

LONDON HOSPITAL.—Dr. Nicholas Parker, of Finsbury-square, lecturer on pathology at the Medical School, has been appointed one of the Assistant Physicians to the London Hospital. The election took place on Nov. 11. Dr. Parker possesses the full qualification of the London University, and is a licentiate of the College of Physicians. His admirable lectures on pathology have fully established his title to a scientific practitioner, and he will form a very valuable acquisition in so large a field of observation as is offered by the London Hospital. Dr. Parker's election was unopposed.

The funds of the Royal Free Hospital have been increased by the anonymous donation of 300*l.* from E. T. and S. W., trustees of a charity fund.

CITY ORTHOPÆDIC HOSPITAL.—This Institution is rapidly progressing. The museum, it is said, is formed, and Mr. Chance, the Senior Surgeon, is about to deliver a course of lectures on orthopædic deformities and their treatment. The number of patients at present under care exceeds 300. The premises were once in possession of the notorious Sir Christopher Hatton, who danced himself into the favour of Queen Elizabeth.

DR. HENRY DAVIES.—It gives us much pleasure to learn that our worthy professional brother, Dr. Henry Davies, has returned to London in perfect health, and once more resumed the active duties of his profession. Our readers will remember, that Dr. Davies was obliged, on account of severe illness, last year, to retire to Brighton; on which occasion a public testimonial was addressed to him by his friends.

PROGRESS OF EPIDEMICS.—The yellow fever has broken out at Mobile, Alabama, United States, where it has caused much alarm. It was not increasing at the date of the last Report. The accounts from Bagdad announce that the cholera is raging there in a fearful manner. At the date of September 23, 100 persons were carried off daily on an average. Loodianah, which has been so fatal to our soldiery ever since troops were located there, is to be forthwith abandoned as a military station. Endemic fever of a serious character is almost always prevalent there. The invalids among the troops in China are rapidly recovering, and, as the hot weather may now be considered over, sickness generally is likely to decrease.

DR. GLUCK, of Maddox street, has recently received the following acknowledgment of his professional services to his unfortunate countrymen:—"I acknowledge your rare zeal in attending the Hungarian refugees, and request you to continue your unremitting exertions in behalf of our unfortunate fellow-countrymen for the future.—LOUIS KOSSUTH, Governor."

DR. BRANDRETH, the proprietor of some quack vegetable pills has been defeated in his candidature for the senatorship for the seventh district in Albany, U.S., and is very sore on the matter. The American papers jokingly say he intends to physic all his constituents with doses of his vegetable pills, warranted to be without any mineral.

DEATH BY OPIUM.—An inquest was held lately in Rotherhithe, on a female infant, five days old, who was destroyed by an over dose of Godfrey's cordial, given in mistake. The surgeon attending the child had ordered a little dill water; but the father, when at the chemist's, having forgotten the name, the chemist, when told the medicine was wanted for an infant, gave some Godfrey's cordial, and death followed its use. This "cordial" should be called the "infant's murderer," being so fatal a drug to them.

CHRONIC HYDROCEPHALUS.—The *Elgin Courier* records the death of a man, 41 years of age, the subject of chronic hydrocephalus. The size of the head was extraordinary. In height the man stood, or rather measured, (for he never could walk from his birth,) 3 feet 11 inches, while the length of his head and face was 11½ inches, being about 1-4th of his entire length. The girth of the head was 27½ inches; over the crown, from ear to ear, it measured 15 inches; from the occipital spine to the insertion of the nose, 20 inches; the length of face from the insertion of the nose to the extremity of the chin, 4¾ inches. The particulars of such a case, and of the autopsy, would be interesting. The quantity of serum in the brain must have been enormous. The condition of the mental faculty is not mentioned. This unhappy victim of cerebral disease was an inmate of the poorhouse, and bore the name of James Scott.

MORTALITY NOTABILIA.—*Cold Weather.*—The effect of increased cold in the weather is now perceptible in the weekly returns of mortality. In October the number of deaths registered in London did not in any week exceed 981, and in the fourth it fell to 861, while the weekly mean temperature during the greater part of the month was more than 52°. In the week ending Nov. 8, the

mean temperature was only 40°; last week it was 40·2°; and contemporaneously with this fall, the deaths rose in the former week to 989, and in the last to 1022. The 1022 deaths registered in the week ending last Saturday, show a decrease of 69 on the estimated average of ten years.

Zymotic Diseases.—Last week the number of deaths ascribed to diseases of the zymotic or epidemic class was 236, showing no important difference from the usual amount at this season. Eighteen young persons, and five adults of 15 years and upwards, were carried off by small-pox. In four of the 23 cases it is stated that the patients had received vaccination. On the 14th November, at 6, George-street, Grosvenor-square, the daughter of a stableman, aged 8 years, died of "variola confluent (6 weeks), ulcers in various parts, irritative fever, asthenia." On the medical certificate it is stated, that "the deceased had not been vaccinated, and assistance was not sought till the pustules had desquamated universally." Mr. Jay, the Registrar, adds that "this is an instance of the prejudice against vaccination, which prevails in too many instances among the poorer classes."

Scarlatina and Nuisances.—In the preceding week, the deaths caused by scarlatina were 59; last week exhibited a decline in this disease, the number being reduced to 43. It seems to prevail considerably in the district of Stepney, where seven deaths were registered. The daughter of a journeyman bricklayer, aged one year, died at 2, Thomas-street, Grosvenor-square, of "scarlatina, cynanche maligna (14 days)." The ventilation of the house is described as defective. On the 12th November, at 67, Eagle-street, Red-lion-square, the son of a boot-maker, aged 2 years, died of scarlatina (6 days)." Mr. Good-hugh, the Registrar, adds, that the family in which this death occurred was mentioned in the Report for week ending November 8th, and the house which they occupy was then described. The child now registered is the second that has died of the same disease, their illness probably having been produced or aggravated by the foul state of the premises. The father of the children states, that he has spoken to the landlord several times, but without receiving any attention. It is generally admitted, that nearly all the houses on the north side of Eagle-street are in a very defective condition as regards drainage. The houses, which are let out in single rooms, are in a dirty state, while the ventilation is very insufficient. In the sub-districts of Hackney-road, at 40, Turville-street, the son of a beerseller, aged 1 year, died of "scarlatina (8 days), convulsions (8 hours)." Mr. Murray reports, that "the house stands in a close and crowded neighbourhood, immediately opposite two gully-holes, the exhalations from which are very offensive." In Ratcliff, at 3, Bere-street, on 6th and 7th November, the daughter and son of a tobacco-pipe maker, aged 10 months and 4 years respectively, died of scarlatina anginosa, after 5 days' illness; and at 14, China-walk, Lambeth, the son of a painter and glazier, aged 1 year, died of "scarlatina maligna (14 days);" two other members of the family having been carried off by the same disease within fourteen days.

Whooping Cough.—At 17, Seven-step-alley, Aldgate, the son of a tailor, aged 20 months, died of "pertussis, asphyxia." The surgeon of the parish and medical attendant of this case writes on his certificate, that "the place where the child died is unfit for human habitation, and fatal to all children."

Measles.—Last week measles was fatal to 15 children, whooping-cough to 22, croup to 10; diarrhoea to 26 persons, dysentery to 4, influenza to 2, purpura to one, and scurvy to one, remittent fever to 3, puerperal fever to 5 (besides 4 other cases of women dying after childbirth), rheumatic fever to 3, and erysipelas to 16. Four children died of syphilis.

Typhus.—The fatal cases enumerated under typhus amount to 58, exactly the same number as in the previous week. The son of a carpenter, aged 4 years, died at 29, Colonnade, Bloomsbury, of typhus, after 15 days' illness. Mr. Yardley, the registrar, mentions that "the yard at the back of this house is very small, and there is a privy in it which is very offensive at times. A drain leading from the privy passes immediately under the cistern which supplies the house with water, and which is consequently impregnated with the stench. The unhealthy character of the dwellings in the colonnade has attracted the attention of the parochial authorities, who are taking steps to improve it." On the Lower-common, Putney, a traveller, aged 52 years, died on the 9th November, of "typhoid fever, aggravated by intemperance and exposure to damp and cold on an open common (14 days), effusion on the brain (12 hours)." Mr. Miller, the registrar, adds: "The medical officer informed me that the removal of this patient to the Union Infirmary was repeatedly urged to no purpose; he would not be removed from the tent away from his tribe."

Miscellaneous.—Amongst other causes of death, 123 persons, of whom 105 were in middle life, died of phthisis, or consumption, 66

of bronchitis, 68 of pneumonia, 18 of asthma, 4 of pleurisy, 3 of laryngitis. Two lives were destroyed by intemperance; a child died in 7 hours of "irritation of the air passages caused by swallowing a piece of walnut;" and on the 12th November, in Bethnal-green, a gas-stoker, aged 45 years, died, according to the verdict of a Coroner's jury, from "the deleterious effects of mussels eaten on the previous night."

The mean temperature of this week was below the average of corresponding days in ten years on every day of the week. The mean temperature of the week was 40.2°, which is 3.4° below the average. The daily mean fell from about 40° on Thursday and Friday to 31.3° on Saturday. The wind blew generally from the north.—*Registrar-General.*

DEATHS in the Metropolis for the week ending
Saturday, November 15, 1851.

CAUSES OF DEATH.	Nov. 15.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	446	346	207	1022	9917
SPECIFIED CAUSES	462	346	207	1015	9880
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	168	51	17	236	2320
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	28	21	55	482
3. Tubercular Diseases. ...	67	107	5	179	1646
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses, ...	44	30	36	110	1130
5. Diseases of the Heart and Blood- vessels	1	25	19	45	328
6. Diseases of the Lungs, and of the other Organs of Respiration ...	83	41	44	168	1721
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	24	29	0	62	604
8. Diseases of the Kidneys, &c. ...	■	7	4	14	85
9. Childbirth, Diseases of the Uterus ...	...	5	...	5	117
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	■	1	■	77
11. Diseases of the Skin, Cellular Tis- sue, &c.	2	1	...	3	18
12. Malformations	3	...	...	■	27
13. Premature Birth and Debility ...	33	...	...	33	208
14. Atrophy	18	...	...	18	156
15. Age ... ..	...	...	47	47	567
16. Sudden	1	...	2	■	114
17. Violence, Privation, Cold, and In- temperance	8	16	2	26	210
Causes not Specified	4	...	...	7	37

TO CORRESPONDENTS.

[To the Editor of the Medical Times.]

SIR,—A great deal has been written about the relative position of insurance offices and medical referees; but I really do not think much consideration is required to settle the true bearings of the question; and if the view which I entertain were tacitly adopted by the Profession generally, I think the insurance offices would not be slow to appreciate their real interest. No one can deny that the medical referee ought to be paid for the trouble and responsibility which he incurs in filling up the office schedule. From the medical man's personal knowledge of the party insuring, he has a peculiar facility of doing this accurately; and if the examination be made thoroughly and conscientiously, some little time must be employed, and some amount of judgment must be exercised in the matter. Now, if the fee even comes through the Office, we may affirm, that it comes out of the assurer's pocket ultimately, inasmuch as really capital and current expenses are cared for before the assuring fund is taken into account, especially where profits by increase of amount insured, or by diminution of premium, are promised to the assuring party. The Office, therefore, is but the medium of the payment of the medical fee, and in consideration of their securing it to me, I furnish them with a fair and accurate report, to the best of my ability. But if they refuse to pay me, the case is altered. I take my fee from my patient, and I consider myself as specially retained on his behalf to act as his counsel, and put the best face I can on his case. In this I consider myself perfectly justified if the Office choose to lay themselves open to seek special pleading, for which there is plenty of room, in answering any of the Office schedules which have ever come under my notice, and that without any falsification whatever. In this respect Insurance Offices are at our mercy, if they treat us unjustly in endeavouring to exact our gratuitous services.

I am, &c.

SUUM CUIQUE.

W. B., Newcastle.—A very wide question. Read Dr. Walshe's late work.

M. D., Clonmel.—We had doubts at the time. The letter was disregarded.

A. B.—We regret we shall not be able to comply with our Correspondent's proposal.

Students.—Clerkenwell. We discovered the mistake when too late for remedy.

An Old Subscriber and General Practitioner.—Accidents will happen, even among the best intentioned.

M. D.—Much as we regret the case, we regret more our inability to assist.

Dr. Brown, Iron Acton, is referred to a Notice to Correspondents headed "Seneca," in our last Number.

Mr. Gutteridge, Birmingham.—We have received a letter from this gentleman requesting us to intimate "that the surgeon who instigated a non-medical Board to pronounce judgment on the accusations" brought against Mr. Baker, of Birmingham, was Mr. Baker himself! Much as we disapprove of lay investigations of matters medical, yet, considering the state of medical party at Birmingham, we can scarcely wonder at Mr. Baker's procedure; and that more especially, when we observe the absence of all kindly feeling manifested on the occasion towards Mr. Baker by his colleagues. We do, however, wonder that Mr. Gutteridge should find fault. If it was unbecoming in Mr. Baker to appeal to a non-medical Board, it was ten thousand times worse in Mr. Gutteridge to circulate his pamphlet among the laity. Again, after Mr. Gutteridge's charge had been made to the Governors of the Hospital, what could Mr. Baker do but appeal for an inquiry by the Governors? It is our duty as journalists—a painful one indeed, to comment on matters such as the late investigation at Birmingham,—but it is not the duty of a medical man to expose to public odium his brother practitioner, as did Mr. Gutteridge in his most ill-advised and ill-judged pamphlet. We must decline all communication with Mr. Gutteridge on the subject.

M.R.C.S.—The trouble into which our Correspondent has fallen is due, as the Dutch say of all their bankrupts, to his not having kept his books well,—we do not mean his cash, but his case books. A brief record of every case that comes under observation should be taken and preserved. Had "M.R.C.S." done thus, he would not have lost his patient from the cause stated.

[To the Editor of the Medical Times.]

IMPROMPTU, ON RECEIVING A CHALLENGE FROM A HOMOEOPATHIC
PHYSICIAN TO FIGHT A DUEL.

Your challenge gladly I accept;

For it never shall be said,

That Allopaths refused to try

A Hahnemannian dose of lead.

So powder take, of number eight,

And lead, of number three;

Let seconds measure distance straight,

And surgeons ready be.

If globule should my body pierce

The treatment,—it is plain,

To heal the wound, you, in a trice,

Must fire at me again.

And as the like will cure the like,

If globule hit your scone,

Knock heads with Dr. Curle,

And you are cured at once!

CONCLUSION.

If sulphur, charcoal, nitre,

And lead in atoms small,

Will do such execution,—

(I mean do none at all!)

Hurrah! for Rhus and Arnica;

And, pray forgive the joke—

Your atoms, like our duel,

Can only end—in smoke!

Parliament-street.

E. C.

One who Loves the Weed.—Give up smoking. It is a bad habit. A young friend of ours lately commenced practice. He was called in to see an upper servant, at the house of a man of rank; then he attended several of the children, and, as all the cases did very well, he thought that he had secured a good patient. By-and-bye he found that my Lady herself had been taken ill, and had sent for another practitioner. He told us of his vexation, and railed, as young men will, at fortune and the fickleness of patients, scanned his conduct o'er and o'er again, but could detect no flaw: he was a man of gentlemanly address, and had been attentive and successful. From the nurse he subsequently learned, that when my Lady was urged to send for a medical man for herself, she answered, "I don't like to have a stranger till I am obliged, and I cannot see Mr. ———; for, though I think that he is clever, he has several times smelt of smoke when he has visited the children, and in my present state I am sure I could not endure that odour." A stranger was ultimately sent for. We need not tell our Correspondent that our young friend never touched the weed again. The horror of the smell of smoke is by no means limited to the lady above referred to.

COMMUNICATIONS have been received from—

MR. ELIN, of the General Hospital, Birmingham; MR. MICHEL CLARKE, of the General Hospital, Bristol; SECRETARY OF THE STATISTICAL SOCIETY OF LONDON; MR. N. WARD, of Broad street-buildings, and the London Hospital; W. B., of Newcastle; AN OLD SUBSCRIBER AND MEDICAL PRACTITIONER, Surrey; M. D.; DR. WALLER, of Finsbury-square; E. C., Parliament-street; MR. HUMPHREY, of the University of Cambridge; DR. ROUTH, of Dorset-square; DR. BROWN, of Iron Acton, Gloucestershire; DR. GLUCK, of Maddox-street, Bond-street; SUUM CUIQUE; MR. HUMPHREY, of Cambridge; DR. WATSON, of Glasgow; MR. TYLOR, of Charterhouse-square; STUDENS; W. B., of Newcastle; A. B.; M.R.C.S.; ONE WHO LOVES THE WEED; AN ENEMY TO QUACKERY; A STUDENT; A LOOKER-ON; TIMON; A SUBSCRIBER; MR. JAMES.

THE NEW EQUITABLE LIFE ASSURANCE COMPANY.

INCORPORATED BY ACT OF PARLIAMENT, 7 AND 8 VIC., CAP. 110.

Trustees.

SIR JAMES DUKE, Bart., Alderman, M.P. for the City of London.
JAMES WYLD, Esq., M.P. for Bodmin.
WILLIAM FERGUSSON, Esq., F.R.S., Surgeon in Ordinary to H.R.H.
Prince Albert; Professor of Surgery to King's College, London.

GEORGE JAMES GUTHRIE, Esq., F.R.S., late President of the
Royal College of Surgeons; Consulting-Surgeon to the Westminster
Hospital.
SIR CHARLES HASTINGS, M.D., Founder of the Provincial Medical
and Surgical Association of England, and President of the Council.

Directors.

Chairman of the Board.

ROBERT LEE, M.D., F.R.S., Savile-row, Burlington-gardens.

Deputy Chairman.

GEORGE BEAMAN, Esq., M.R.C.S., King-street, Covent-garden, and Hampton Wick.

Consulting Physicians.

MARSHALL HALL, M.D., F.R.S.,
Grosvenor-street, Grosvenor-square.

CHARLES J. B. WILLIAMS, M.D., F.R.S.,
Holles-street, Cavendish-square.

JAS. ARTHUR WILSON, M.D.,
Dover-street, Piccadilly.

Consulting Surgeons.

WILLIAM FERGUSSON, Esq., F.R.S.,
George-street, Hanover-square.

J. RANALD MARTIN, Esq., F.R.S.,
Grosvenor-street, Grosvenor-square.

SAMUEL SOLLY, Esq., F.R.S.,
St. Helen's-place, City.

Surgeon and Medical Examiner.

THOMAS WAKLEY, Esq., F.R.C.S., Guilford-street, Russell-square.

Standing Counsel.

SIR ALEXANDER COCKBURN, Her Majesty's Attorney General.
GEORGE WOODYATT HASTINGS, Esq., Paper-buildings, Temple.

Solicitors.

MESSRS. BELL, STEWARD, & LLOYD, 59, Lincoln's-inn-fields.

Bankers.

THE COMMERCIAL BANK OF LONDON.

Secretary.

H. BARBER BEAUMONT, Esq.

CONSTITUTION AND REGULATIONS OF THE COMPANY.

CAPITAL.—MUTUAL ASSURANCE.

The "New Equitable" embraces all the advantages of a strictly *Mutual Office*, with the addition of an ample subscribed paid-up capital, forming a *bond fide* security for its policy holders.

POLICIES INDISPUTABLE.

The Policies of this Company being indisputable, they become as readily negotiable, in monetary transactions, as any other description of personal property.

MARRIAGE SETTLEMENTS SECURED BY LIFE ASSURANCE.

Often does it happen that the Junior Members of the learned Professions, and also gentlemen engaged in the higher departments of Commerce and Trade, who possess only small fixed or uncertain professional incomes, are prevented from entering into beneficial Matrimonial Alliances, in consequence of their inability to offer adequate protection for their Widows and Children by means of Marriage Settlements; the regulations of the NEW EQUITABLE COMPANY furnish unprecedented facilities for surmounting such difficulties.

DEPOSIT AND FLUCTUATING ASSURANCES.

Policies are granted to persons making cash deposits, the value of such Policies fluctuating as the amounts of the deposits may vary; the Assurers being at liberty to withdraw the whole or any portion of their deposits after the deduction of trifling incidental expenses. These fluctuating Policies, sustained by varying deposits, yield far greater advantages than investments in Savings' banks, and in case of death afford to the families of Assurers a much larger return than deposits in Savings' banks can produce.

POLICIES PAYABLE TO ASSURERS AT STATED AGES.

Assurances for fixed sums may be effected, payable to the Assurers themselves at any specified age, or, in case of death before the time named has expired, to their executors or assigns. Thus, by the appropriation annually of a small portion of an income, a person may secure a provision for himself in his old age, or, in the event of his death, may afford succour to his dependent relatives.

INVALID LIVES

Are assured at rates adapted to the circumstances of each case. Every circumstance affecting the health impartially considered.

HALF-CREDIT PREMIUMS.

Policies for Life are granted on the payment of only *one-half the Premiums annually during the first five years*, the remaining half being charged to the Assured at five per cent. interest, and the total amount so left on credit to be deducted from the Policy, should the death of the assured person happen before the expiration of the five years.

DIVISION AND APPROPRIATION OF PROFITS.

The whole of the Profits will be Equitably Divided amongst the holders of Policies issued on the participating scale, a deduction being made, in the mean time, towards a Fund for paying off the Subscribed Capital. The sums apportioned as profits may be received in Cash, or they may be applied to the reduction of Premiums, or to their ultimate extinction, or they may be added to the Policies, at the option of the holders, thus increasing the amounts to be received when the Policies become payable.

MEDICAL PRACTITIONERS.

The Directors feel strongly that Medical Practitioners have not hitherto received that recognition, by Assurance Companies, which their professional knowledge, position, and valuable services, entitle them to expect. They have determined, therefore, to frankly acknowledge and consult all duly-qualified *Medical Referees* as THE MEDICAL ADVISERS OF THE COMPANY, and uniformly transmit, with the Questions intended to be made the basis of every Official Medical Report, a Consultation Fee of *Two Guineas*.

ANNUITIES.

Immediate and Deferred Annuities are granted amounting to £20 and upwards. Survivorship Annuities may also be secured by equitable rates of payment.

ENDOWMENTS.

Every description of Endowment granted both for Infants and Adults.

Any further information may be had on applying personally, or by letter, to the Resident Director or Secretary, at the

CHIEF OFFICES, WEST STRAND, CHARING-CROSS, LONDON.

ORIGINAL LECTURES.

LECTURES ON HISTOLOGY.

DELIVERED AT THE

ROYAL COLLEGE OF SURGEONS, LONDON.

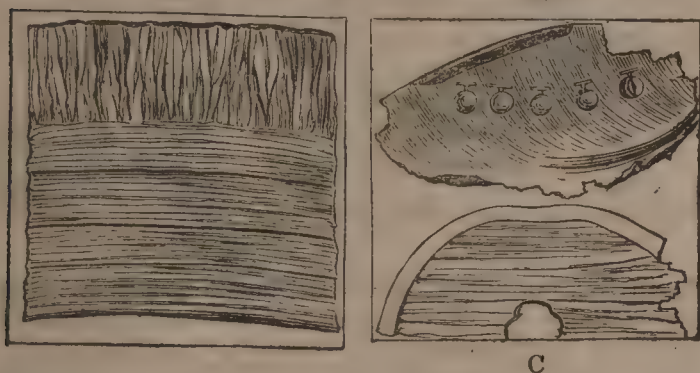
By J. T. QUEKETT, Esq.,

Assistant-Conservator of the Hunterian Museum.

(Concluded from page 453.)

HAVING in my last lecture shown you, that the calcareous material forming the skeleton of Zoophytes, Echinoderms, and Mollusca, was deposited within an animal or organic basis, having a cell as its primitive or secreting form, I now proceed to point out that the same principle holds good of the inorganic element, not only of the skeleton, but of other parts of the bodies of higher animals, under certain states of disease; and in order to place this subject before you in its most intelligible form, I will commence with a description of certain substances which are formed either in the soft parts of the animal, or in connexion with the shell of Conchiferous Mollusca, and which from the earliest times have been known by the name of pearls. These are more or less globular portions of the same material as that composing the shell; if they be developed from the outer layers of the shell they have a prismatic, if from the inner, a more or less nacreous structure; they derive their origin generally either from the presence of foreign bodies, or from injury to some portion of the edge of the shell, or they are formed so as to resist the intrusion of boring animals. Before entering further into this subject I will show you a vertical section of the shell of *Mya margaritifera*, or true Pearl Oyster, Fig. 74, A, and you will notice that the outer dark-coloured

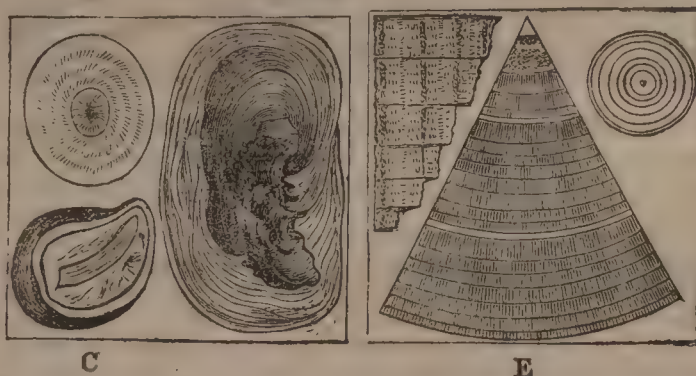
A Fig. 74. B



layer is composed of large transversely striated prisms, and the inner or nacreous layer, which is of great thickness, is made up of a series of laminae of an almost structureless material, but which presents even under a lower power, traces of iridescence; the outer layer of the prismatic structure, as before stated, is covered by the periostracum, but the inner is in immediate contact with the mantle of the animal; on the edge of the valves a brown, horny material is found, in this the cells are developed, from which the prisms are derived; but the cells of the nacre are formed between the shell and the mantle. If, therefore, from injury, or from the presence of foreign bodies, a portion of the periostracum on the edge have cells developed, these will go on to form a pearl; if the same thing happen in the interior of the shell, a mass of pearly substance will be formed. The first pearl, however, will be of little or no value, because it is sure to be more or less dull; but the last, according to its roundness and brilliancy, will be highly prized. I now show you the shell of a mussel in which there appears to have been some injury on the edge, and from this a pearl has been developed. This pearl has grown inwards towards the mantle, and you will notice, that on the very centre of its inner surface there is a spot about 1-12th of an inch in diameter, which is coated with nacre. Here is a most interesting and valuable specimen (Fig. 74 B), a portion of one of the valves of a mussel, on the internal surface of which are no less than five pearls, each about the size of a pea. These were produced artificially by the introduction by the Chinese of a corresponding number of anchor-shaped pieces of silver wire, which no doubt irritated the mantle, and, in order to protect it from further injury, the points were soon coated with nacre, which in process of de-

velopment has assumed a globular form. One of these pearls has been divided, and in the section shown at C you may see the hole in the centre through which the wire passed. It must not be understood, however, that the formation of pearls is confined to the pearl oysters and mussels; they are more or less common in all bivalves, and it is well known that in our edible oysters and mussels they often occur; but these are not of any value: it is only where the nacre is of the highest brilliancy that the pearl is of much worth. I here show you a large pearl from a mussel; it is of a purple colour, and not brilliant; here is a section of another, also of large size, from a common oyster (Fig. 75 C), the nucleus of which, curiously enough, is a piece of steel, looking like the end of a knife, which no doubt was employed to open the oyster; but, the operation having failed, it was again committed to the deep, and in process of time the pearly mass was formed upon the steel. I have the opportunity, through the kindness of my friend Mr. Tucker, of Trematon Castle, of showing you a pearl of large size and pink colour. The shell in which it was developed was probably a species of Conch, was dredged up from a great depth at his brother-in-law's, Captain Sullivan, and, from its size and rarity, is of considerable value. I now show you another pearl, which at first sight appears of large size, but, if carefully examined, it will be found that the greater part of it is made up of the ordinary shell structure, and that the true brilliant nacreous material is only a thin coating upon its surface. Similar masses projecting from the interior of shells are exceedingly common in all our fresh-water anodons, as in the specimen I now send round; but, as you will readily see, although the mode of formation is the same in most of the examples I have exhibited, yet the value of the pearl depends upon the brilliancy of the nacreous lining of the shell. The most perfect pearls are those formed in the mantle, (Fig. 75 A), all

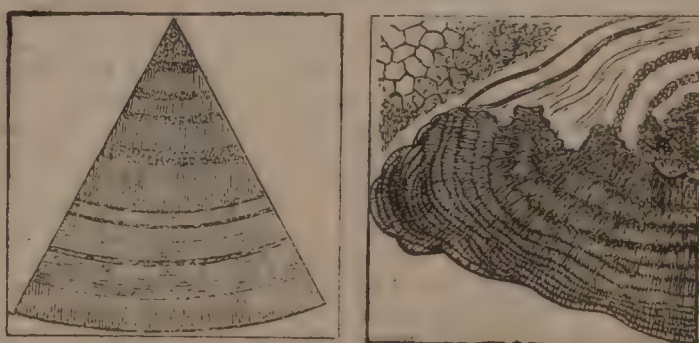
A B Fig. 75. D



C E

others are more or less irregular in figure. Here is the animal of a small pearl oyster, and within the folds of the mantle an oval pearl is situated. Generally speaking, such pearls have the side next the shell more or less flattened; this has been the case with the large mussel pearl I just now sent round; the pearl was formed in the mantle, and the flattened side was next the shell. I now exhibit a vertical section of a pearl, developed from the outer layer of a mussel, and you will notice that it is made up of concentric zones of small prisms, but such a pearl has no brilliancy. The pearl itself is shown in section at D, in Fig. 75, and a segment of the same highly magnified at E. I next submit to you a section of another pearl, in which the centre is prismatic in structure, but its external surface is coated with two belts of nacre. The brown horny-looking substance between the layers is that portion of the periostracum or organic basis in which the growth of cells took place. A segment of this pearl is represented in Fig. 76 A. I now show you another

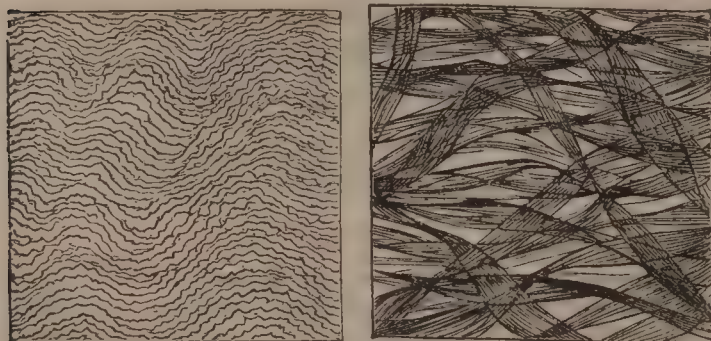
A Fig. 76. C



B

pearl in which this brown matter is very abundant, and in it you may see a number of cells more or less completely formed, and in one or more spots even the commencement of the formation of other pearls is well seen; this specimen, therefore, is one of great interest. I next exhibit a section of a true nacreous or genuine pearl, and you will find that it shows no trace of cellular structure, but rather a laminated arrangement (Fig. 77 A), and in its centre is a large nucleus (Fig. 75 B), around which a beautiful play of colour is very evident; but if I were to decalcify this pearl, as was done by Cleopatra of old, its organic basis, in the form of a plicated membrane (Fig. 77 B), is readily seen, but no trace of cells would be found; these, from the earliest stages, have coalesced to form membrane. I now show you a section of a pearl, which was first developed in the edge of the shell of an anodon, and in its growth it protruded itself within the valves of the shell, and this part is coated with nacre. A portion of this pearl is shown in Fig. 76 B; the lower part is prismatic, the upper nacreous, and in the latter, as at C, are seen cells in process of development in a layer of horn. The organic basis of shell, as before stated, is not a modern discovery; many of the specimens before you were prepared by Hunter, others by the late Mr. Hatchett, who investigated the subject with great care, and published an account of it

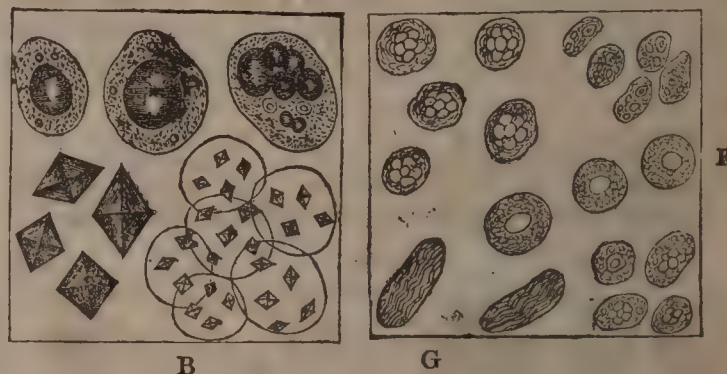
A Fig. 77. B



in the *Philosophical Transactions*, for 1800; the cellular structure of the basis, and the function of the cells is however a recent discovery, and for it we are mainly indebted to the labours of Mr. Bowerbank and Dr. Carpenter; for very lately, I may say even at the present time, the term "crystalline structure" is applied by conchologists to certain univalve shells which are well known to have a cellular origin. The function of secretion of carbonate of lime by the cell is most strikingly exemplified in the rudimentary shell of our common garden slug; in the specimen I now show you, you will notice in some parts a series of transparent cells, in others, similar cells full of calcareous material, and in one particular spot there has been a crystalline arrangement of the lime as in the tooth of *Mya arenaria* before mentioned, Fig. 73 A. Shell, like the spines of Echinoderms, possesses within itself the power of repair; here is one of the valves of an anodon, which was put up by Hunter to illustrate this fact, it now stands in the Pathological Museum, in the series of repair after injury; and a pearl is often the result of the repair of the shell after the attack of a boring animal. I will now pass on to the structure of the skeleton of vertebrate animals; but I shall not dwell upon this subject, as I have already, when speaking of cartilage, described to you the organic basis of bone. I have now on the table several specimens that will show that bone also possesses powers of repair. Here is a femur of a once rickety subject; the bone you see was bent, and new bone has been thrown out to act as a buttress to support the arch. Here is a specimen of comminuted fracture of the femur, in which portions of bone of considerable size, with their periosteal surfaces turned inwards, have been employed as splints, and, as you will see, are firmly united to the other parts of the shaft. After amputation, it is well known that the parts of the bone not supplied with the vessels of the periosteum or medullary membrane, undergo a considerable change. Teeth, again, are formed of cells, and the tubes of the ivory, as shown in the diagram before you, are formed by the coalescence of cells; and when sections of teeth are decalcified, perfect models of the original are left, which are composed solely of the organic basis. Teeth also, like bone, as shown in this tusk of a hippopotamus, can be repaired. I have now spoken only of cells entering into the formation of tissues; but we find in all the higher animals

that there are certain laboratories or manufactories termed glands; in these, cells are developed within which the secretion is formed; the cells are known as epithelium, and from their shape and function have received the name of the spheroidal or glandular; it has been distinctly shown by Mr. Bowman and Mr. Goodsir, that the secretion is for a longer or shorter period contained within the cell; in the progress of the cells through the ducts of the gland, the cell-wall is most frequently dissolved, and the secretion escapes. If we examine a portion of the liver of a person who has died of jaundice, we shall find that the secreting cells are in most cases gorged with bile, as was first pointed out by Mr. Gulliver; it has also been shown by Mr. Bowman that in cases of fatty liver, the secreting cells contain globules of oil, as represented in Fig. 78 A; the same may be said of the cells of the kidney in certain forms of Bright's disease, which, as first pointed out by Dr. George Johnson, are full of globules of oil. Glands, like other parts of the body, are liable to disease, and we most frequently have this commencing in the secreting cells; and instead of a liquid secretion, masses of hard matter are found. In the portion of liver I now show you, many of the cells are full of a dark brown substance, as solid and firm as a biliary calculus, which no doubt it would form, if congregated in sufficient quantity; this substance has a resinous appearance; but that cannot be its nature, for it is insoluble in alcohol. In the human kidney we often have earthy matter secreted, and this also is first formed in the cells. I show you a specimen in which uric acid occurs in the tubes; this was originally a cell formation. I have mentioned before, that crystals of oxalate of lime (Fig. 78, B,) and of triple phosphate, have been occasionally met with in

A Fig. 78. E C D



and of triple phosphate, have been occasionally met with in the secreting cells, as shown in this diagram; but the best examples I could adduce of secretion of earthy matter by cells, are found in the kidneys of reptiles and birds, in which classes of animals the urine is solid; so also is it in the common snail. In this mollusc the first rudiment of a kidney occurs, as was pointed out by Hunter many years ago, and in it, as shown by Goodsir, (Fig. 78, A,) the solid uric acid exists in the secreting cells; the same is true of the cells of the kidney in the reptile and bird. In the diagram (Fig. 78, C,) from Goodsir's "Anatomical and Pathological Observations," the secreting cells of various glands are represented, in all of which, the product of the secretion is contained within the cells. The first, D, are five cells from the ink-bag of a sepia; the second, E, cells containing bile from the liver of a patella; the third, F, three cells of the kidney of a snail; and the fourth, G, two cells full of spermatozoa, from the testicle of a shark.

I here show you a most interesting specimen of the kidney of the alligator, in which the tubes of both glands are so full of solid urine, that they appear as if they had been injected artificially with some white material.

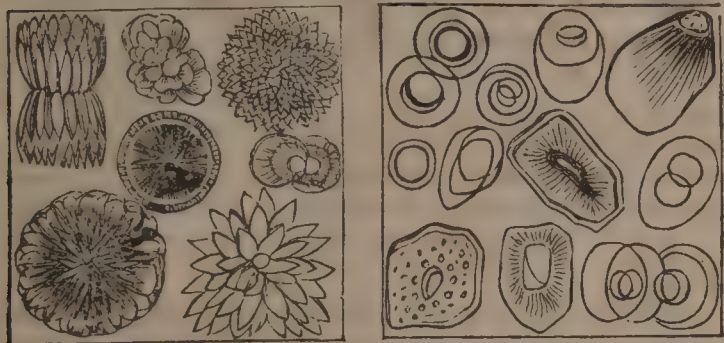
A somewhat similar case was discovered by me in the stomach of the rhinoceros, which died about two years since in the gardens of the Zoological Society; on dividing the mucous membrane of the digestive portion of the stomach, I found that my scalpel encountered a quantity of some gritty substance; and, on looking at the cut edge, I saw very plainly a series of white lines occurring in the direction of the tubes; these I examined by the microscope, and found that they were tubes blocked up by earthy matter, which, on chemical examination, turned out to be the phosphate of ammonia and magnesia, being, in fact, of the same composition as most of the large intestinal calculi contained in the Museum, and originally developed in cells;

this led me to suppose, that had there been a nucleus, such a calculus as the one I now hold in my hand might have been formed.

Having shown, that inorganic substances like those of which calculi are composed, are in most cases, if not in all first developed in cells, let us now treat calculi in the same way as we have done the calcareous element of the skeleton of animals, and we shall find that they, one and all, have an organic basis. This, however, is not a new discovery; the animal matter of calculi has been known for many years; and you will find a most excellent account of it in the Second Volume of the Catalogue of the Calculi contained in the Museum, which was written by Mr. Thomas Taylor, in 1845. I, however, would venture to go one step further than has, I believe, yet been done; and show that this, like the organic basis of shell and bone, has its origin in cells. In proof of this, I will take a portion of a urinary calculus which, to the naked eye, has a crystalline appearance, and when this is examined, either as an opaque or as a transparent object, you may notice that the crystalline appearance is more or less evident. If I now add a small quantity of dilute hydrochloric acid to another portion of the same calculus, you will find that the inorganic element disappears, and an organic basis, similar in shape to the original masses, and sometimes exhibiting a cellular structure, remains behind.

In conclusion, I will show you some small calculi very frequently found in the urine of the horse. These, you may notice, are made up either of smaller calculi or of concentric laminæ, being, in fact, urinary calculi in miniature, (*Fig. 79, A.*) I will now add some dilute acid to another portion of the same specimen, and, as the carbonate of lime disappears, you will distinctly see the cellular nature of the organic basis, (*Fig. 79, B.*) My belief, therefore, is, that these masses are not, as has been supposed, mere sediments from the urine, which, like lithic acid and oxalate of lime, become evident after the urine has stood for a time, but that they are passed from the kidney, for they give to the urine a turbid appearance as it is being voided. If I take a portion of a large calculus found in the pelvis of the kidney of a horse, I find precisely the same structure,—the secreting cells remain after the calcareous element has been dissolved.

A *Fig. 79.* B



Had my time permitted, I could have shown you distinct cells in many other calculi from the human bladder; but as the subject is one better fitted for the laboratory than for the mode of illustration adopted with inclined microscopes in this theatre, I must get you to accept my statements in place of exhibiting to you the facts themselves; should, however, any person here present wish to prosecute the subject for himself, I shall be happy to render him such assistance as he may require.

The specimens, therefore, which I have last shown you, would go a great way to prove that a calculus found in connexion with the body is not a simple mass of inorganic substance containing organic matter as an accidental constituent, but that a calculus, when in contact with living tissues, may, like shell, have life, and with it the power of growth or development, the secretion serving as the blastema, or pabulum, from which the cell-contents are derived; I would not assert positively that such is the case; but, when the subject is carefully considered, it has all the appearance of truth on its side.

I cannot but imagine that we may have two kinds of calculous formations,—the one, which is usually termed a sediment, and may be deposited upon any foreign substance existing in the bladder; whilst the other commences in the secreting-cells of the kidney, as takes place naturally in the kidneys of reptiles and birds, or in the higher animals and

man as a disease. That the presence of cells containing the earthy material may not always be recognised is no argument against the truth of my supposition; for they cannot even in shell, as before stated, always be detected, having assumed a membranous form, which is caused by the coalescence and partial absorption of the walls of adjoining cells.

Having now arrived at the period when my labours, for the present session, must be brought to a close, it only remains for me to thank you most sincerely for your kind attention, and to thank my colleagues Mr. Skinner and Mr. Monckton for their very valuable assistance. Had I one-tenth part of the powers of oratory possessed by the two distinguished professors who succeed me in this theatre, I might have rendered my subject more easy of comprehension; but if, in spite of all difficulties, I have in any way succeeded in imparting to you such knowledge as may be useful in the practice of your Profession, I have accomplished one of the great objects for which this Institution was established, viz., the advancement of those sciences conducive to the alleviation of human suffering and the good of mankind.

LECTURES ON PUBLIC HEALTH.

ADDRESSED TO THE STUDENTS OF THE THEOLOGICAL DEPARTMENT OF KING'S COLLEGE.

By WILLIAM A. GUY, M.B. Cantab.,

Dean of the Medical Department of King's College, Professor of Forensic Medicine, and Physician to King's College Hospital, &c.

CONTENTS.—Asiatic Cholera.—Its Symptoms.—Coincidence of Diarrhoea.—Treatment of Diarrhoea.—Treatment of the Stage of Collapse.—Cause of Cholera.—Question of Contagion.—Difference of Opinion among Medical Men.—Analogies of Cholera and Typhus Fever.—Fulfilment of Predictions based upon the Experience of the first Epidemic of Cholera.—History and Course of the Disease in the first Epidemic: In the second Epidemic.—Mortality of the Two Epidemics.—Increased Mortality in 1848-9.—Birth-place of the Cholera in the Swamps of India—Its Preference for Low-lying and Damp Situations.—The North and South Banks of the Thames Contrasted.—Ravages of the Cholera in Rotherhithe and Bermondsey; in Jacob's Island; at Greenwich.—The Cholera Promoted by Defective Sewerage.—Testimony of the Registrars of Portsea Island and Windsor.—Occurrence of the Cholera in Swamps in Elevated Situations.—Testimony of the Registrar of Huddersfield.—Cholera from Drinking Impure Water.—Facts collected by Dr. Snow.—Influence of Overcrowding in Promoting Cholera.—The Tooting Tragedy.—Immunity of well-conducted Schools; of Model Lodging-houses.

THE last subject of this short course of lectures is Asiatic Cholera,—the latest pestilence with which it has pleased Providence to visit this, in common with almost every other part of the habitable globe. With some of the leading characteristics of this formidable malady you are all of you, doubtless, more or less familiar. You know that two of its leading symptoms, in almost every case, were vomiting and purging,—the same symptoms which characterise the so-called English cholera, but carried to a greater extent. You have, probably, also heard that the matters discharged from the bowels, from their peculiar appearance, were familiarly known as rice-water evacuations, and that the occurrence of this particular discharge was looked upon as conclusive evidence of the presence of the disease in its developed and characteristic form. The cold, blue surface, the hoarse, whispering voice, the suppression of the secretion of urine, the painful cramps of the extremities, and the utter prostration of strength, are other leading symptoms, of which you are likely to have heard something in the course of conversation. In this state of collapse, as it is termed, most cholera patients died; but many who survived this stage of the disease perished of a low fever, nearly allied to the typhus fever, of which I spoke at such length in former lectures. You have probably heard, that when the cholera had once attained this stage of collapse, the chances of recovery, under the best treatment, and the most assiduous nursing, were but slight. Perhaps one-half of all the patients who had either from the first fallen into this state, or had arrived at it by the gradual development of the disease, died. But you have also heard, in all probability, that at the same time that cholera, in this its worst form, was prevalent, a milder disease of an analogous character was rife among all classes of the population, but especially among the

poorest. I mean diarrhoea or looseness of the bowels. Now, as this disorder is of very common occurrence every year during the months of summer and autumn, and yields to very simple treatment, or passes away of itself, even in those years in which Asiatic cholera does not prevail, it is but reasonable to suppose that irrespective altogether of the true cholera, diarrhoea of the same harmless character would be very prevalent. But, over and above the cases of diarrhoea which occur in ordinary years, there were, in the year of the cholera, many additional cases; and further, it was ascertained by careful inquiry of patients suffering from cholera in its worst form, or of their friends, that for several days, and often for two or three weeks previously, they had been suffering from this milder malady. The Board of Health, therefore, were justified in inferring, that if this diarrhoea or looseness of the bowels, which was often overlooked by the poor, or neglected, could be sought out, and at once submitted to treatment, it might be prevented from ripening into cholera in its worst and most fatal form. The Board of Health accordingly took steps to have medical inspectors appointed who should visit daily from house to house, ascertain by personal inquiry the existence of diarrhoea, and check it at once by the use of appropriate remedies. To this wise measure of precaution, together with the vigilant observation and suppression of nuisances which went hand-in-hand with it, we may fairly attribute, under Providence, the saving of a great number of lives. The appropriate remedies of which I speak were mostly medicines containing opium as their chief ingredient. Some medical men gave the opium in the form of powder; some in the form of tincture of opium, or laudanum. The powder most in use for the treatment of diarrhoea, or looseness of the bowels, whether it be the common diarrhoea of the summer and autumn, or that which, when cholera is prevailing, ushers in that frightful disease, is one known as the compound chalk and opium powder, known technically as the "*pulvis cretæ compositus cum opio*." This powder contains a grain of opium in every forty grains, or two scruples, the other ingredients being chalk and certain aromatic substances. Now, in common cases of diarrhoea, in adult persons of either sex, the usual and proper dose of this powder is ten grains, which may be given three or four times a day. During the prevalence of the cholera it is expedient to double this dose, so as to give a scruple (containing half a grain of opium) three or four times in the twenty-four hours. This medicine is a very useful one for the country clergyman, who happens to live at a distance from any medical man, to have by him. At King's College Hospital, during the prevalence of the cholera, scruple doses of this compound chalk and opium powder were in very great demand.

This is all that the narrow limits of a lecture will allow me to say on the treatment of this very common disorder—diarrhoea. Of other common measures of precaution in times of cholera, it will suffice to observe, that there is no necessity whatever for the avoidance of fish, fruit, or vegetables, provided those grateful and useful articles of diet be used in a sound state, and in moderation. On the proper treatment of the cholera in its stage of collapse there is much difference of opinion; and a great variety of remedies (some very useless, others very harmless, others perhaps positively mischievous,) have been recommended. Should the cholera again visit this country, and you should be called upon as clergymen, in the absence of medical aid, to point out the best course to adopt, you can do no harm, but at least some good, by insisting on the prompt use of measures for restoring the heat of the surface, especially of the trunk of the body, and by allowing the patient to drink as much cold water as he pleases. You might also, with great advantage administer a series of emetics, consisting of draughts of salt water, made by dissolving three table spoonfuls of common salt in a quart of water. This was the treatment adopted at King's College Hospital in a large number of cholera cases in the stage of collapse, and certainly with good effect. In throwing out these hints for the treatment of cholera, I am assuming that medical aid is not immediately accessible, and that, as clergymen, you are called upon to tender the best advice you can upon the emergency.

During the prevalence of severe epidemics, when panic is so apt to prevail, it is always most desirable that men of education, and especially the clergy, should be furnished with at least so much information as may enable them not to stand with their hands folded. Provided

they do no harm by the measures they adopt, they do great good by active sympathy with the sufferers, and the courageous performance of their duty as neighbours. Happily, in the case of the cholera, the courage of the attendant at the bedside, whether nurse, physician, or clergyman, was not put to a very severe test; for the disease, though in all probability it was contagious under peculiar circumstances, was not so communicable from person to person as small-pox, or scarlet-fever, or measles, or typhus-fever. Indeed, the medical world was greatly divided in opinion as to whether the disease was or was not contagious. In large towns, where it is not easy to trace the spread of disease from person to person, the majority of medical men perhaps inclined to the opinion that the disease was not communicable; while, in the country, where the march of a disease is more easily followed, and all the cases that occur fall under the care and observation of one or two persons, I have reason to believe that the balance of opinion inclined rather the other way. Be this, however, as it may, it is now well known, that the mortality among clergymen and medical men, and the immediate attendants on the sick, was not to be compared with the mortality from typhus-fever during the late severe epidemic. In the metropolis, for instance, I have ascertained that the mortality among medical men and clergymen was not so high as among persons entered as of independent means; while it was about on a par with that of other professional men taken one with another.

But I must not allow either the treatment of cholera, or the interesting question of its contagious or non-contagious nature, to keep me from those important practical considerations which relate to its prevention. Those of you who were present at my first lecture, will recollect that it was of the cholera that the Bishop of London spoke in that remarkable passage of his pastoral address, in which he avowed his belief, that the ravages of that pestilence were in great part due to our neglect of the means of preservation which have been mercifully placed within our reach. After the conclusive evidence which I have already brought forward, of the dependence of other fatal and pestilential maladies on causes admitting of prevention, you will not be surprised that I should be able to demonstrate the truth of the Bishop of London's proposition, as applied to the Asiatic cholera. All that you have heard of the history of the disease in other parts of the world, and in this country, must have prepared you for such a demonstration. The cholera seems to have set its seal on almost every great sanitary doctrine for which men have been of late contending; proving, to the satisfaction of all men who would attend to its teachings, that though it was not in man's power to keep it off by quarantine arrangements, or by the utmost vigilance of troops and police, it was in his power to prepare himself for its inevitable advent by the same simple measures of precaution of which the experience of many generations, and the analogy of more than one pestilence ought to have taught us the efficacy.

Amidst all the obscurity which hangs over the true nature, proximate cause, and appropriate treatment of this formidable malady, a few truths of great practical import stand out in bold relief,—the same truths which, in former lectures, I demonstrated as applicable to the prevention of typhus fever.

I proved to you, if you recollect, that typhus-fever haunted, year after year, epidemic after epidemic, the same spots; that it raged chiefly, though by no means exclusively, among the poorer classes of the population; that it was fostered and promoted by defective drainage, want of cleanliness, and overcrowding, and generally by every cause tending to render the air impure; and that it was conveyed from place to place by those members of the population whose habits are the most irregular, and least amenable to the laws of decency and health.

Now, though the cholera has only paid us two short visits, and we have had but scanty opportunities of observing it, we have seen enough to be able to affirm of it almost all that we can affirm of typhus-fever. Those who had witnessed its first visitation in 1831-32, were able to foretell with confidence, that the very places which were most severely visited on that occasion, having been suffered to remain in the same unwholesome state, would not escape a second attack in 1848-9. And those who had observed the analogy existing between the predisposing causes of fever and cholera, were equally confident in their predictions that the more notorious haunts of typhus fever would not fail to sus-

tain an attack of cholera. These predictions were generally justified by the event. A few quotations from the records of the late epidemic will serve to establish the analogy between these two diseases, and the influence of the unwholesome conditions to which I have just referred, on the prevalence and extension of the cholera.

The history of the outbreak of the epidemic of cholera, which reached this country in the autumn of 1831, will alone suffice to establish one or two points of that analogy, and to prove the destructive influence of more than one of those unwholesome conditions. It was in the year 1817 that the Asiatic cholera, which, in 1781, among the troops at Ganjam, in 1782 among the army at Madras, and in 1783 among the pilgrims at Hurdwar, had committed dreadful ravages, re-appeared at an interval of thirty-four years, among the Sunderbunds of Bengal, either generated *de novo*, or warmed into life by favourable circumstances. These Sunderbunds, as they are called, are the low grounds in the Delta of the Ganges, converted by frequent inundations into steaming swamps. In the midst of these swamps, and in the city of Jessore, containing 60,000 inhabitants, (many of them, as it would seem, belonging to the very poorest class) the pestilence first made its appearance. It soon spread to Calcutta, and to all the towns and villages situated among the low lands, watered by the Ganges and the Jumna. From this *cholera district*, as a centre, cholera soon spread to the south-west and south-east, along the opposite coasts of the Bay of Bengal, the south-western stream attacking Madras, Bombay, Ceylon, and the Mauritius, spreading along the coasts of the Arabian Sea, visiting the principal ports in the Persian Gulf, and thence extending its ravages to Syria and Asia Minor. The south-eastern stream, coasting the opposite shore of the Bay of Bengal, visited in succession, Arracan, the Malay Peninsula, Sumatra, Java, and the Spice Islands, Timor, the Phillippine Islands, the Western Coast of Borneo, Canton, Pekin, and other principal cities of China, and thence, passing the Great Wall, entered Mongolia. The northern stream, passing through Persia, and skirting the western shores of the Caspian, carried the infection into Russia and Poland, attacking Moscow, Warsaw, and St. Petersburg, the ports on the Baltic, the capitals and chief cities of Austria and Prussia, reaching Hamburgh, whence it travelled to England, first appearing at Sunderland, and visiting successively Edinburgh, London, and Dublin. Calais and Paris were attacked somewhat later; Spain later still; and the principal cities of Italy nearly last in order. The island of Malta was reserved till the very last. America was visited in the summer of the same year in which cholera reached England. Algiers and the northern coast of Africa escaped until about the same period at which the disease attacked Malta.

The object of this very rude and imperfect sketch of the origin and spread of cholera during the great epidemic of 1817-1837, or, as it is more commonly termed, the epidemic of 1832, is to give you some idea of the great extent to which this formidable pestilence prevailed. To have given you a complete sketch, with all the details of dates and mortality, would have occupied an entire lecture, and would not have answered any practical purpose. Even if it were practically useful to take up your time with details of this kind, it would be still more to the purpose to establish a few leading truths relating to the prevention of the disease. Before, however, I enter upon this part of my subject, I may state in general terms, that the mortality from cholera, during this first epidemic of 1832, whether taken absolutely, or by comparison with the attacks, was very frightful. There is reason to believe that about half the number of persons who were seized with the disease died. A faint idea may be formed of the amount of the mortality, when I tell you that it has been estimated from official returns, that between the 18th of June and the 18th of October, 1831, the cholera had destroyed, in different parts of Europe, upwards of 150,000 persons. The deaths in England and Wales, in 1831-32, were about 21,000; in Scotland nearly 11,000; in Ireland upwards of 21,000. In London there were upwards of 11,000 cases, and 5,275 deaths. Of the recent epidemic, it may suffice to state that it spread more rapidly from place to place; that it visited nearly the same countries and cities which it attacked in 1831-32; and that it occasioned almost every where a much higher mortality. The returns for England and Wales are not yet complete; but it is probable that the number of deaths was nearly three times as great as in the first epidemic. In London, without making any allowance for increase of

population, the mortality in the two epidemics was nearly as 1 to 3. The deaths in 1832 were, as I have stated, 5,275; in 1848-9, they have exceeded 14,500. In 1832 one person died out of 282 living; but in 1848-9, one person died in every 151 living. I am indebted to the courtesy of the Registrar-General for a very interesting table of curves, contrasting the number of deaths during each week of the two epidemics. You will observe that both the mortality from cholera and the mortality from all causes, was higher in 1848-9 than in 1831-2.

From this short digression, let us return to a consideration of the circumstances which marked the first outbreak of cholera in India in the year 1817. The disease first showed itself among a poor population inhabiting a town situate in the very midst of one vast swamp. Let us first inquire, whether in our own more temperate climate, the cholera manifested the same preference for low lying, damp, undrained districts? A few facts will suffice to prove to you that it did.

Perhaps the most conclusive evidence of the baneful influence of damp marshy situations in promoting the spread and increasing the virulence of cholera, is afforded by the Metropolis itself. The Thames, as you are aware, divides it into two parts, most strikingly contrasted in the leading feature of elevation. The districts on the *south side* are, for the most part, low and swampy, those on the *north side* chiefly elevated and dry. On the *south side* the level of the land varies from two feet below high water mark, to thirty feet above it; on the *north side*, with the exception of parts of Westminster on the west, and Poplar in the east, the level of the land varies from ten feet above high water mark to upwards of seventy feet above it. As a general rule, the mass of the south side lies flat on the banks of the Thames, while the whole central district on the north side, rises in a gradual slope from the level of the river. Now, the mortality on the two sides of the river, corresponds in a very striking manner with this difference of level; for, while the mortality in the districts lying to the north of the Thames varied from 1 death in 284 to 1 death in 620 inhabitants in 1832, and from 1 death in 141 to 1 death in 471 inhabitants in 1848-9, the mortality on the south side of the river reached the much higher point of 1 death in 188 inhabitants in 1832, and 1 death in 80 inhabitants in 1848-9. The contrast between low and high situations is still more striking if we take the lowest spots on the south side, and compare them with the highest grounds on the north side. The districts of Rotherhithe, Bermondsey, St. George Southwark, and Newington, on the south side of the Thames, have an elevation of from two feet below high water mark, to the level of high water, while the districts of St. Pancras, Islington, Marylebone, and Hampstead, are raised to upwards of seventy feet above the river. The first districts, (those on the south side), lost, one with another, 189 inhabitants in 10,000; the elevated districts on the north side, only 18 in the 10,000, or about 1-10th of the mortality in the lowest districts on the south side of the Thames! You see then, that cholera showed itself true to its origin (or first starting point in 1817) among the Sunderbunds of India, by attacking with great comparative severity the low lying, ill-drained, districts south of the Thames. But, if these districts have some title to be considered as our Metropolitan Sunderbunds, the two districts lying to the extreme east of London on the south side of the river, Rotherhithe and Bermondsey, demand especial notice, as superadding to the evil of a low situation, the great nuisance of certain tidal ditches communicating with the Thames. It is in one of those two districts, (Bermondsey), that that now notorious plague-spot, Jacob's Island, is to be found,—a spot in which the cholera committed frightful ravages,—a spot combining with all the repulsive features of the worst districts of London, certain loathsome and disgusting attributes peculiar to itself,—a spot not inaptly christened by an able writer in the *Morning Chronicle*, the "*Capital of Cholera*," "*the Venice of drains*," "*the Jessore of London*." You have probably not forgotten the description I gave you, from actual inspection, of Church-lane, St. Giles. You have only to suppose every dark feature of that sketch deepened, with the additional trait of the poor inhabitants drawing their supply of water for every domestic purpose from the very ditch, and near the very spots, into which the most offensive offscourings of the population are being discharged, to acknowledge the perfect justice with which these not very complimentary epithets have been bestowed upon it.

An apt illustration, on a smaller scale, of the influence of damp, ill-drained districts in promoting the spread of cholera, is supplied in the Report of the Registrar of Greenwich East, in these words:—"North side of the district, chiefly below high-water mark, and, (Greenwich Hospital excepted,) badly drained, 102 cholera, 12 diarrhoea. South side of the district, a rising ground, and healthy; 28 cholera, 21 diarrhoea." These swampy districts possess one feature which does not belong to the marshes of Bengal; like them, they are damp, but, unlike them, the moisture they contain is blended with the refuse of a large population. They are not simply undrained, they are also unsewered. This leads me to speak of another cause which has been found to promote the spread of cholera—I mean, neglected or defective sewerage, which in some districts has been carried so far as to confer, even upon elevated spots, all the characters of swamps. I will give you one or two examples in point. The Registrar of Portsea Island, speaking of Fountain-street and Nance's-row, says:—

"Fountain-street has the main sewer of the parish passing under it, which having been 'blown' during the wet season of last winter, the whole place was inundated with its contents, so that the poor inhabitants were obliged to wade through fourteen inches deep of foul refuse. Here the cholera first appeared, and here it raged most severely. Nance's-row contains about 20 mean, crowded houses, and is situate in an open field. At the end of this row, there is a junction of the four parish water-courses, about six feet deep, where a vast accumulation of foul, stagnant water is formed; and here the cholera appeared in its most fatal form; 22 persons falling victims in the seven northern houses, and not a single case in any of the others."

I take my next illustration from the Report of the Registrar of Windsor, who says:—

"In Windsor, out of 26 deaths from Asiatic cholera, and 4 from diarrhoea, 14 were in Bier-lane, and the courts adjacent. The medical attendant remarks on one of these courts, that the houses abut on a black ditch, and are filled with disgusting odours from this source at all times; and that other nuisances are in the neighbourhood. There have been, within a radius of 25 yards of this part of Bier-lane, 10 deaths from cholera in the last month, and cases of diarrhoea have occurred in every one of the houses."

The following is an example of cholera breaking out in a swamp in an elevated situation. It is on the authority of one of the registrars of Huddersfield:—"The first case of cholera," he says, "was registered on the 3rd August; the second on the 9th, when the fearful pestilence made its appearance on an elevated part of the district, containing about 15 or 16 labourers' dwellings, situated on a hill-side, without drainage, the refuse thrown on the surface, with open cess-pools, and malaria arising from a dirty fish-pond, which has not been cleaned out for 30 years, full of slime and aquatic vegetables; the water for the last four months having been drawn off, and the slimy deposit and decaying vegetable matter left exposed on the surface to the action of the sun and atmosphere. This pond presents about 1500 square feet of evaporating surface, and is situated within 150 or 200 yards of the dwellings on the hill side, where the cholera has been most intense; every house in this district has been infected; and for two days before the cholera, the wind blew directly from the pond into the dwellings. In this particular locality, 12 deaths have occurred, some of them among nurses who have gone from other districts, and been attacked while on the ground. There have been other cases in other parts of my district, but all in badly-drained and filthy localities."

Another circumstance which appears to have been favourable to cholera is, the drinking of impure water. Dr. Snow has drawn attention to several cases in illustration of the influence of this element. After instancing the joint towns of Dumfries and Maxwell-town, the City of Glasgow, and the south and east districts of London, supplied with the impure water of the Nith, the Clyde, and the Thames, and all of them severely visited by the cholera both in 1832 and 1848, he goes on to examine one or two special cases of a high mortality coinciding with this cause. The first case which he refers to, is that of Thomas-street, Horsleydown, "where two adjoining courts suffered with very unequal severity, the comparative immunity being probably due to the use of good water, and the high mortality to the drinking of water contaminated by the drainage." The next case is that of "Albion-terrace, Wandsworth-road, where also the mor-

tality was frightful, and the water found to be greatly polluted by the drainage." The cholera was also, as I have already stated, extremely fatal at Jacob's Island, Bermondsey, where the water used for drinking is notoriously polluted by the offscourings of a large population.

After what I have stated, you will not be surprised to hear that Milbank Penitentiary, built on a low spot on the north side of the Thames, supplied with water from the river, the scene in turn of scurvy, dysentery, and fever, should have had, in the quarter ending 30th September, thirty deaths from cholera.

I shall now illustrate the baneful effects of *overcrowding*, accompanied as that condition is very apt to be, by a general neglect of simple precautions for preserving health. On referring to the coloured curves that you see before you, you will observe that the cholera of 1848-9, (represented by the brown colour) had materially subsided during the month of December 1848, and it is likely that the mortality would have continued to fall had it not been for the fearful outbreak of cholera in the establishment of the late Mr. Drouet, at Tooting, where the pauper children of several of the Metropolitan workhouses were farmed out. Out of 61 deaths from cholera reported in the first week of January, 1849, no less than 47 occurred among the inmates of this establishment.

In the second week of January, 78 out of 94 deaths from cholera occurred either there, or in workhouses to which the children had been removed, besides eight deaths from analogous diseases. In the third week of January, 33 deaths from cholera took place, either at Tooting, or in workhouses to which the children had been taken. Four fatal cases occurred at a later period. From this one establishment alone, the enormous number of 147 deaths by cholera was reported, in addition to fifteen deaths in workhouses to which the pauper children had been removed, and eight deaths by analogous diseases: making a grand total of 170 deaths. A tragedy this, worthy of a place side by side with the annual slaughter by fever in Marlborough House, Peckham, and the scenes of horror which occurred on board some of the emigrant vessels during the epidemic of the famine-fever in Ireland.

While this frightful mortality was occurring in Mr. Drouet's establishment at Tooting, Christ's Hospital, with its large population of several hundred boys, situate, as you know, within a very short distance of some of the most unhealthy districts in London, was enjoying a perfect immunity from cholera, just in the same way, and for the same reason that the several model lodging-houses now happily established in many parts of London, were free from its attacks, while the squalid and filthy population in the midst of which they are situate, were suffering more or less severely. As I told you in a former lecture, there is a model lodging-house, containing a population of upwards of 100 single men, within a stone's throw of Church-lane, St. Giles. In that house a single death from cholera occurred, in the person of a very old man; (a) while Church-lane was the scene of a frightful mortality, not limited to the spot itself, but following its squalid inhabitants into the hop-districts, where it destroyed large numbers of them. I must reserve what I have further to say on this subject of cholera till my next, which will also be my concluding lecture.

(a) I have seen it stated that the Model Lodging-house in George-street, St. Giles, enjoyed a perfect immunity from cholera. I give this different version of the facts from my own knowledge. But even after this necessary correction, the contrast between George-street and Church-lane remains very remarkable.

PUBLIC BATHS AND WASHHOUSES are about to be commenced for the populous parish of Bermondsey. Early next year there will be nine of these useful health-restoring establishments in the Metropolis.

JOHN IMRAY, M.D., has been appointed a member of the Council for Demerara. This is the first instance, for at least many years, of a medical man being so honoured. It is time that some of the honours, if not of the loaves and fishes, should be "aired" our way.

TUSCANY.—The Grand Duke of Tuscany has united the two universities of Pisa and Sienna, making the latter the principal. The inhabitants of Pisa are quite wrathful at the loss of their time-honoured institution, in which several chairs have been suppressed. They have appealed against the decision, but hitherto in vain. The University of Pisa is of very ancient date, and many learned men have graduated there.

ORIGINAL COMMUNICATIONS.

ON HYPOCHONDRIASIS,
AND OTHER FORMS OF NERVOUS DISEASE.

By H. HUNT, M.D.

(Continued from page 430.)

HYPOCHONDRIASIS COMPLICATED WITH A
TORPID OR CONGESTED LIVER.

A strong corroboration of the view I have taken of the state of the organs of secretion, and of the necessity of removing all obstruction arising from congestion, is afforded by the effects occasionally experienced by patients at the commencement of a course of saline aperients, before their action upon the various secreting organs is fully established; viz., the febrile excitement, great disturbance of the system, headache, etc. I have already alluded to these symptoms, which are well known to those who have undergone this treatment at the natural springs, and which are confidently expected and considered as a favourable omen. The explanation appears to be obvious. These stimulating salts having been absorbed into the circulation, would, in a healthy and previous condition of the organs of secretion, speedily pass off again by the natural outlets; but if they are gorged, if the more minute vessels are plugged up, or temporarily obstructed, as I conceive them to be in congestion, a large portion of these salts will probably be retained in the system, stimulating the viscera to the performance of their functions, whilst the damaged condition of their machinery effectually prevents it; the consequence must necessarily be, a preternatural excitement of the whole body, not always unattended with danger.

If, then, after a full examination of the symptoms and state of the patient, we have reason to believe, that, in addition to the general disorder of the system and the contamination of the blood, the liver or any other important viscus labours under congestion, we should, after unloading the bowels, immediately apply our remedies to remove it.

Purgatives are ill-adapted to accomplish this object, because they rapidly pass through the bowels. We must, therefore, chiefly rely on the class of medicines termed deobstruents, among which the various preparations of mercury are the most effective. Their deobstruent action, however, as with all medicines of this class, will mainly depend upon the manner in which they are administered, and as this is a practical point of considerable importance, I shall proceed to offer some remarks thereon.

If deobstruents, either mercurials, salines, or any other, be given in large doses, or in combination with purgatives, they will be also hurried too rapidly through the intestines, to allow them time to act as deobstruents.

The patient may be weakened by their use, but is not always relieved. On the other hand, when they do not so immediately purge, but are absorbed into the circulation, their influence is brought to bear more immediately upon the congested part, the stimulus is applied to the loaded vessels and embarrassed apparatus of secretion, the obstruction is removed, the function of secretion is restored, and the organ gradually recovers its healthy tone. Purging being then induced, the effete matter which had been retained in the system is effectually carried off.

The rule, therefore, by which we should be guided in the treatment of the morbid condition under consideration, is to give our remedies in such doses and in such a manner as to insure, or at any rate to favour their operation in the way described above. If attention be not paid to this principle, we ought not to be surprised should they fail in perfectly accomplishing the purpose for which they were exhibited.

In treating abdominal congestion, especially of the liver, it is obvious, that if, before we enter upon a course of deobstruent medicines, we can by any means directly relieve the portal vessels, we shall greatly facilitate their operation. Now it happens that hæmorrhoids, or at least a fullness and swelling of the hæmorrhoidal vessels are frequent concomitants of abdominal and hepatic congestion, and the spontaneous bleeding, which often ensues from the state of these vessels, to the great relief of the patient, appears to indicate the readiest mode of attaining this object. A few leeches may be applied to the anus with the happiest results. Abstraction of blood in this way will sometimes

diminish in a marked manner the sensation of uneasiness and tightness in the region of the liver. If necessary, their application may be repeated.

The medical adviser must be guided in his choice of the most appropriate deobstruent, (selecting the mildest that will cure,) and in its administration, both as to quantity and method of giving it, by the circumstances of each case. Assuming that the patient possesses the average strength of constitution, mercury is beyond all doubt the most efficacious, and of it the *pilula hydrargyri c. cicuta*, (a) *pil. hydrargyri*, or calomel separately, or the latter combined together, will be found the best preparations. If, however, he should not have been in the habit of taking mercurial medicines, either the *hydrargyrum c. cretâ*, or very small doses of the first preparation will be sufficiently active; but if the symptoms are urgent, if there be heat of skin, and especially if any irritability of stomach exist, and the patient has been accustomed to the stimulus of mercury, calomel alone is beyond all comparison the best form in which we can give it. It tranquillises the stomach, it operates more powerfully on the liver, and it also relieves the heat and fever, by inducing a relaxation of the whole system, which is soon followed by an increase of all the secretions. The best practice to pursue in cases of passive congestion is to give two, three, or more doses of the mercurial, previous to the administration of a purgative. Much advantage may often be derived by exhibiting at the same time some alkaline medicine, either the liquor potassæ, or the bicarbonate of soda.

Should there be any febrile action present, the citrate of ammonia or potash with a sixth or fourth of a grain of tartar emetic at a dose may be substituted for them. After two, or more doses of the deobstruent medicines have been taken, an active purgative should be given. Sometimes the combined effect of these medicines is at once very great: they bring away large quantities of depraved secretion; but more commonly, although they may produce many stools, the quantity evacuated will at first be trifling, and the patient may complain of the irritation occasioned by the medicines without deriving any corresponding amount of relief. And, as I have before remarked, in such a case the evacuations may not present any very unhealthy appearance.

The practitioner should not be deterred by such a negative result from persisting in this plan of treatment. He should give in this case the deobstruent alone for a few days before the purgative is repeated, combined, if necessary, with a mild sedative, as the *hyoscyamus* or *extract. lactucæ*, to prevent as much as possible the irritation it might otherwise occasion. Unless the congestion has been of long standing and the structure of the minute vessels has been injured, four grains of the *pil. hyd. c. cicuta* with one of calomel given every night, or at the most twice a day, with a brisk aperient every second or third morning, will generally remove any moderate degree of obstruction in the course of a few days. The increased effect of the medicines on the bowels will intimate when this has taken place; numerous copious stools will then be passed, even on the days when the aperient is not taken. I may here remark, in reference to the use of deobstruents and purgatives, that since the same dose which was barely sufficient for breaking down the obstruction, may prove too powerful when that obstruction is removed, it should be diminished as soon as a copious flow of bile and other secretions has been established, or at least regulated in such a manner as to keep up a free discharge without creating distress or causing exhaustion. The evacuations, which had not been previously very unhealthy, will now generally be found exceedingly depraved, offensive, and dark, sometimes black. In a recent case, under this treatment, although offensive from the first, they were not altered in their appearance until calomel alone was substituted for the *pil. hyd.*, which the lady had taken daily for a fortnight, and then the evacuations became literally black, as if composed entirely of chimney-soot and water mixed into a paste, after which many of the unpleasant symptoms subsided.

It happens occasionally, that the obstruction will not yield to this treatment until the breath or the gums give evidence that the system is affected by the medicine. It is especially necessary to push the treatment to this extent in those cases in which some degree of inflammation has been induced in the deep-seated structures of the viscera, occasioning, perhaps, a partial obliteration of the vessels. In such, the ad-

(a) An old but valuable preparation.

dition of small doses of emetic tartar will often facilitate the operation of the mercury.

But cases which require that the mercury should be carried thus far, are exceptions to the general rule in hypochondriasis, and ptyalism should be avoided, if possible, since the presence of that mineral in the system, in a greater quantity than is absolutely necessary to effect the object in view, will alone tend greatly to deteriorate the condition of the blood, and, in many constitutions, will be sufficient of itself to induce an attack of despondency. Some cases of this nature have fallen under my own notice. At the same time, therefore, that I advocate a judicious employment of this powerful remedy, I am fully sensible of the mischief occasioned by an indiscriminate and excessive use of it. This will, I hope, be made evident, when hypochondriasis arising from other causes than those now treated of is under consideration.

When it is thought expedient to bring the system under this higher degree of mercurial action, it is better to give the medicine in small doses, and to repeat them more frequently, taking care that they also do not run off too quickly by the bowels; yet watching the effect with a jealous eye, so that we may lessen the quantity, or discontinue it altogether, as soon as we have effected our object.

Occasionally, when there is great torpor of the system, the application of a stimulating liniment or a blister over the region of the liver appears to rouse the oppressed viscus into action, and assist the medicinal part of the treatment.

If the saline treatment be adopted in the commencement, either alone or in conjunction with mercury, we cannot follow a better plan than that pursued at the mineral spas,—namely, to give whatever combination of salts we may think most advisable, in small doses, much diluted, and on an empty stomach. Should much general disturbance be created by the saline treatment, it will be advisable to postpone the further employment of it until the obstruction has been more completely removed; and if there should be any objection to a repetition of the use of mercury, the iodide of potassium, combined with the liquor potassæ, will often succeed in removing any remnant of the obstructing deposit that the mercury had left. An occasional brisk aperient should be given during the exhibition of the iodine, such as the pil. hyd. and ext. colocynth comp., or a scruple of jalap,—a dose that will not only empty the bowels, but will, at the same time, excite a free action in the liver and the other abdominal viscera.

Having, I hope, explained, with sufficient clearness, my view of the nature of congestion, and given a general sketch of the treatment necessary for its removal, (a) I will not enter into any further detail, either as to any modification of the plan of treatment I have described, or of the various formulæ which the experience of medical men may suggest. For example, the nitro-muriatic acid may be prescribed with advantage, especially after mercury has removed the obstruction, or when the use of that mineral is contra-indicated. The taraxacum also often exerts a powerful influence in exciting an increased action of the liver, and when the alvine discharges are black.

The balsam copaibia, or sp. terebenth. in small doses, will greatly conduce to the relief of the oppressed viscera; but my object is rather to suggest a more precise application of remedies than any new combination of them; neither will I repeat the measures which should be adopted (when the obstruction has been removed) to restore the system to health, as the disease will then have been brought into the condition I described in my former papers, and may be treated in a similar manner.

I may, perhaps, be allowed here to make a passing remark on the suspension of secretions generally. Whilst great obstruction or much congestion exists in one of the more important viscera,—the liver for instance,—we know how futile are the attempts to excite the cutaneous vessels, or the kidneys, by remedies commonly termed diaphoretic or diuretic, or to alter the condition of the urine, excepting by acting directly on the congested viscus. Every experienced practitioner must almost daily meet with persons whose skin is harsh and dry, and wholly devoid of perspiration, yet in whom it is impossible directly to excite that secretion,—indeed, on whom diaphoretic medicines never fail to increase the general malaise, to produce heat and irritability, if not

febrile action,—yet, when all hope of success has ceased, and the treatment has been successfully directed to the removal of the hepatic congestion, we find that not only is a free flow of bile induced, but the skin becomes soft and moist, the condition of the urine altered, the secretions of the mucous membranes re-established, as evinced by the altered condition of the mouth and fauces. In females the functions of the uterus, when disordered, are alike often restored by the relief or cure of the organ more especially suffering.

ACCESSORY TREATMENT.

While we are carrying out the general plan of treatment I have described, various circumstances may arise which deserve attention. Although they may not be of great importance in themselves, they may occasion much discomfort, pain, and alarm to the patient.

It occasionally happens, after the functions of the various organs have been restored to a more natural state, that the patient's stamina has been impaired and his strength reduced, so that the exhibition of tonics becomes necessary. It is, however, advisable to prevent the reduction of the patient's strength, if possible; and this can be often effected by combining some tonic with the purgatives as soon as the secretions begin to improve, and subsequently by tonics alone. But the exhibition of tonics is a matter of delicacy. If given too soon, or if in too large doses, they interrupt the cure. The choice of the tonic requires to be made with judgment. The mineral acids alone or combined with some bitter, are, perhaps, the best suited to persons of sound stamina; while steel is the more appropriate remedy for persons of a vitiated habit, whose pale, sallow complexion indicates the want of red blood, as well as other morbid states of it.

Much anxiety and uneasiness are often created by the acrid nature of the secretions; and patients describe the sensations they experience from this source very vividly. They will tell you that they feel as if molten lead were passing through their intestines; that the external orifice and parts adjacent are excoriated; that each evacuation is attended by tenesmus, and a feeling as if the bowels were imperfectly relieved; that sharp pinching pains are felt in various parts of the abdomen, especially in the course of the large intestine, and a distressing feeling of heat or burning in the centre of the abdomen around the umbilicus; the whole abdomen is also often greatly distended with flatus, sometimes only at one part, as at the caput coli, the transverse arch, or sigmoid flexure; in such cases, the distension is accompanied with considerable and fixed pain, which induces the fear, indeed, a settled conviction, on the part of the patient, of the existence of some serious local disease. The action of the nervous system is sometimes perverted in a different manner: instead of the patient complaining of pain and uneasy sensations, he describes his feeling to have become blunted and obtuse—even lost; that the bowels appear to be palsied, and that he is almost unconscious of their existence; and that he has lost the power of assisting himself by the exercise of the abdominal muscles when they require to be relieved. Other patients complain of an emptiness, and a sensation of sinking at the pit of the stomach, which creates great alarm, for they feel as if they were dying. Others will describe themselves as suffering from many of these disordered sensations simultaneously, and hurry from the description of one set of symptoms to another, returning to the first before they have half finished describing the second; and it will often require some tact to confine the patient's attention to the main points of his malady, and to get anything like clear and definite answers to questions. For the relief of the sensations arising from the acrid nature of the secretions, the alkaline earths will be found very efficacious; magnesia or lime-water given in conjunction with some carminative or aromatic water. These alkaline earths are to be preferred to the preparations of potash or soda, as they are not carried off by the kidneys; but by passing through the whole length of intestinal canal, they absorb and neutralize the acids almost always present in the intestines in these cases. By neutralising, they prevent the re-absorption of those matters into the system, and thereby also prevent many of the troublesome and painful (secondary) phenomena, which might otherwise be occasioned by their presence in the blood.

If the abdomen should be greatly distended with wind, turpentine enemata, or the fetid gums, may be given with advantage; friction of the spine, as well as of the abdomen,

(a) The reader must still remember, that I have as yet only considered the disease in persons of otherwise unbroken health.

with a stimulating liniment, passing the hand in the course of the colon, with long sweeps rather than by a circumscribed rubbing, which is the more common practice.

Under such circumstances, fluid nourishment should be avoided; the warm spicy preparations of food, as currey, are to be preferred. The same remedies may also be used with benefit, when the action of the nervous system appears to be partially palsied; but, as I have before remarked, all these symptoms must be considered as effects of the general cause, and these remedies as auxiliaries entirely secondary to the general treatment.

The medical adviser who attends to and relieves these painful effects of the general malady will also be the most successful in gaining and retaining the confidence of his patient,—points of no trifling importance, where so much depends on the degree of control he may be able to exercise over them.

But whilst the whole system, as well mind as body, of the hypochondriac, is made wretched and miserable by the circulation of this poisoned blood, some parts seem to suffer more severely from it than others. The brain and nerves in one case, the heart in a second, the mucous membranes in a third; and sometimes in each instance to such an extent as not only to engross entirely the mind of the patient, but to attract so much attention as to mislead even the medical adviser; no organ or set of organs suffer more frequently, or more severely, than the digestive, producing, when the morbid matter or virus is concentrated on them, the most inveterate form of indigestion, and its almost endless train of miseries, amongst which heartburn of the severest kind is the most frequent, constant, and distressing. My observations, however, on these two disorders, must be deferred to my next communication.

Brook-street, Hanover-square.

ON THE MODE OF PROPAGATION OF CHOLERA.

BY JOHN SNOW, M.D.

ALTHOUGH the more severe cases of common English cholera cannot always be distinguished from the malady called Asiatic cholera, yet hardly any one doubts the distinct nature of these diseases, or that the latter was a stranger to Europe prior to the year 1830. A careful consideration of Asiatic cholera shows clearly enough that it is propagated by human intercourse. It has proceeded in various directions along the great channels of intercommunication, never progressing faster than people travel, and generally much more slowly. In extending to an island or a fresh continent, it always makes its first appearance at a seaport, and it never attacks the crew of a ship from a healthy port that is approaching an infected country, till their actual arrival. Many instances have occurred in which quarantine or *cordons sanitaires* have protected places from the cholera, either altogether, or for a time; and the most conclusive part of the evidence, is the number of instances in which the malady has been introduced into healthy localities by persons who have been taken ill after their arrival from places where cholera prevailed. Dr. Bryson related several instances of this kind in the paper that he read before this Society, and a number more might be now related did the time permit: indeed, the cases in which the progress of cholera can be traced in this manner are the rule rather than the exception, and are, at all events, far too numerous to be set down as mere coincidences. It may be remarked, also, that coincidences of this sort are not found to obtain in rheumatism, ague, or indeed in any but epidemic diseases, the whole of which I look upon as communicable from one patient to another, this communication being probably the real feature of distinction between epidemic and other diseases.

Another circumstance strongly confirmatory of the communication of cholera, is the direct relation which exists between the number of the population and the duration of the disease in different towns and villages. The accompanying figures were compiled by me from Dr. W. Merriman's valuable table of cholera in England in 1832:—(b)

Number of Places.	Duration in Days.	Average Population.
52	0 to 50	6,624
43	50 to 100	12,624
33 } or 34 }	{ 100 and up- wards. }	{ 38,123 or 78,823 }

It will be seen, that 52 places are enumerated in which the cholera continued less than 50 days, and that the average population of these places was 6,624; that there are 43 places specified in which the disease lasted 50 days, but less than 100, the average population of these places being nearly twice as great as that of the former; while in the remaining 34 towns, in which the cholera continued for 100 days and upwards, the average population was very much greater still, being 38,000 or 78,000, according as London is omitted from or included in the list. I believe that the same rule has obtained during the recent epidemic, but I have no precise information on the point. It is hardly necessary to remark, that if the cholera cases were not connected one with another, there would be no reason why the few cases which happen in a village should not be scattered over as long a period as the thousands which occur in a great metropolis.

I shall perhaps be thought singular in asserting, that there is no evidence opposed to the propagation of cholera by its communication from individual to individual, or in favour of any other origin of the disease. The chief facts which are believed to be opposed to the extension of cholera by communication are the following: That many persons are placed in close relation with the sick, nurse them, and wait upon them, and sometimes even sleep in the same bed, without becoming infected with the malady; that quarantine and *cordons sanitaires* often fail to arrest its progress; and that persons are often attacked with it who have had no intercourse with the sick or their friends.

These facts are thought to be opposed to the communication of cholera, because it is assumed, that this disease, to be communicated, must extend itself, as the eruptive fevers are believed to do, by means of some emanation given off from the patient into the air; or, if not in that way, then by contact with the patient, or articles of clothing, etc., which have been near him. But, without assuming such hypotheses, the circumstances above mentioned would not in any way oppose the evidence of the communication of cholera. Nearly every one of these facts is equally true of syphilis as of cholera. Persons nurse and wait on syphilitic patients and might even sleep in the same bed with them without contracting the malady; and it is very doubtful, whether quarantine regulations, however strict, would prevent its communication, as they would be evaded. These circumstances are not considered to interfere with the proofs of the contagiousness of syphilis, only because we happen to know the way in which it is communicated; and when we shall know equally well the way in which cholera is communicated, I do not doubt that we shall find them equally inapplicable to that disease.

A consideration of the pathology of cholera is capable of indicating to us the manner in which the disease is communicated. If it were ushered in by fever, or any other general constitutional disorder, then we should be furnished with no clue to the way in which the morbid poison enters the system; but if it commences by a local affection of any particular part, and the system at large only suffers in consequence of the local affection, then it is pretty evident, that the material cause of the disease must have been applied to the part first affected. From all that I have been able to learn of cholera, either by my own observation or that of others, it has appeared, that the illness always commences with the affection of the alimentary canal; and in all the cases that I have seen, the loss of fluid from the stomach and bowels has been sufficient to account for the collapse, when the previous condition of the patient was taken into account, together with the suddenness of the loss, and the circumstance that the process of absorption appears to be suspended. Certain fatal cases of cholera without evacuations have occurred; but, whenever there has been an examination of the body in such cases, the excretions peculiar to cholera have been found in the bowels. It appears, indeed, that the cholera poison never enters the circulation, and that the blood does not become contaminated in this disease, except when congestion of the kidneys follows as a secondary affection. The irritation of the bowels accounts for the cramps; and the loss of the water and saline constituents of the blood is the cause of the collapse and the symptoms of

asphyxia. The careful analyses of the blood by Dr. Garrod have confirmed the fact, that its solid constituents are relatively much increased by the loss of water. On this account, it becomes so thick that it circulates with difficulty through the capillaries of the lungs, while the diminished quantity of salts renders it still further unfitted to undergo the usual changes in respiration. The injection of a weak saline solution into the veins of cholera patients in the state of collapse has often been attended with the most surprising effects of a temporary nature, at once restoring the patient, who the minute before was nearly dead, to a state of apparent health and strength. It was justly remarked by Dr. Budd, in a clinical lecture delivered at King's College Hospital, that, if the patient's symptoms depended on a poison circulating in the blood, they could not be removed by the injection of a simple saline solution. The saline solution merely restores the water which has become deficient, and supplies salts analogous to those which have been lost.

If the poison which communicates cholera from person to person does not enter the blood, it is evident that it must multiply itself on the surface of the alimentary canal, and must be contained in the evacuations from the stomach and bowels. The proofs that the cholera poison is contained in these discharges, and that the disease is communicated by their being accidentally swallowed, are of a general as well as a particular kind.

It has been constantly observed, that the want of personal cleanliness aided very much the propagation of cholera, although no explanation could be given of the circumstance; it is very evident, however, that without habits of strict cleanliness persons waiting on the sick must get their hands soiled with the cholera discharges, and must unknowingly contaminate the provisions they handle, in eating their own food or preparing that of others. The sudden discharge of the evacuations, which often soil the clothing or bed linen, and the little colour or odour they possess, very much increase the liability to their being swallowed in this way, and under some circumstances render it almost certain. For instance, when a large family, or more than one family are crowded into a single room, and when the same persons have to attend to the patient, and also to prepare and serve the meals for the rest of the inmates, without the materials for washing the hands, even if the inclination should exist, it is next to impossible that the provisions should be eaten without being contaminated with the peculiar discharges of the patient; and these are the circumstances under which the disease is found most frequently to spread among the inmates of a room. Mr. Baker, of Staines, who attended 260 cases of cholera and diarrhoea in the late epidemic, chiefly among the poor, informed me in a letter, with which he favoured me in December, 1849, that "where the patients passed their stools involuntarily the disease evidently spread." Deficiency of light is a great obstacle to cleanliness, as it prevents dirt from being seen, and it must aid very much the contamination of the food with the cholera evacuations.

The assistance which crowding lends to the spread of cholera could be explained on the hypothesis of effluvia or miasmata given off from the patient into the surrounding air; but the extension of the disease from want of cleanliness, deficiency of water, and deficiency of light, cannot be explained on such a hypothesis. The non-communication of cholera in cleanly families, where the hand-basin and the towel are in constant use, and where the apartments for cooking and eating are distinct from the sick-room; and also its non-communication, as a general rule, to medical men and other visitors of the sick belonging to the educated classes of society, are fully explained on the doctrine here laid down, although these circumstances are inexplicable on the supposition of its spread by means of effluvia. Its fearful extension in certain pauper asylums for children and lunatics is also clearly accounted for, together with its non-liability to spread in more commodious and better regulated establishments.

The great fatality of cholera among all the mining populations of this kingdom has been very remarkable in both the epidemics of that disease. The chief reasons of this are as follow:—The miners generally remain eight hours in the pits, and take food with them, which they eat whilst at work. There are neither privies, hand-basins, nor towels in the mines; and when a case of cholera occurs in a pit, the hands of the workmen, in the dark subterranean passages, can hardly fail to become soiled with the discharges. Should

we have a return of the cholera, I believe that many thousands of lives might be saved by dividing the time of labour into two periods of four hours, dissuading the workmen from taking food into the mines, and enjoining them to wash their hands on going home before taking any food. There are other causes to be afterwards mentioned which contribute to the extension of cholera in several of the mining districts, viz., the contamination of the wells and brooks with the evacuations of the people.

It can hardly be anticipated, from the nature of the subject, that we should be able to obtain distinct evidence of the cholera evacuations having been taken with the food. The following cases, perhaps, afford as decisive proof of this variety of communication of cholera as can be expected. In the beginning of last year, a letter appeared in the *Provincial Medical and Surgical Journal*, from Mr. John C. Bloxam, in the Isle of Wight, being an answer to the inquiry on cholera by Mr. Hunt. Among other interesting information, Mr. Bloxam stated, that the only cases of cholera that occurred in the village of Carisbrook, happened in persons who ate of some stale cow-heels, which had been the property of a man who died in Newport, after a short and violent attack of cholera. Mr. Bloxam kindly made additional personal inquiries into the case, in consequence of questions I put to him, and the following is a summary of the information contained in his letter:—

The man from whose house the cow-heels were sent for sale died on Monday, the 20th of August. It was the custom in the house to boil these articles on Monday, Wednesday, and Friday; and the cow-heels under consideration were taken to Carisbrook, which is a mile from Newport, ready boiled, on Tuesday, the 21st. Eleven persons in all partook of this food, seven of whom ate it without any additional cooking. Six of these were taken ill within twenty-four hours after eating it, five of whom died, and one recovered. The seventh individual, a child, who ate but a small quantity of the cow-heels, was unaffected by it. Four persons partook of the food after additional cooking. In one case the cow-heels were fried, and the person who ate them was taken ill of cholera within twenty-four hours afterwards, and died. Some of the food was made into broth, of which three persons partook while it was warm; two of them remained well, but the third person partook again of the broth next day, when cold, and, within twenty-four hours after this latter meal, she was taken ill with cholera, of which she died. It may be proper to mention, although it is no unusual circumstance for animal food to be eaten in hot weather when not quite fresh, that some of the persons perceived the cow-heels to be not so fresh as they ought to have been at the time they were eaten, and part of them had to be thrown away a day or two afterwards, in consequence of being quite putrid.

A man living in West-street, Soho, who kept a horse and cart, was employed, in the beginning of September, 1849, to remove some furniture from a house in Lambeth. The furniture had been the property of a woman who died of cholera, and had just been buried. The bedding and night-chair were left just as they were when the patient died. This man was taken with cholera during the night, within thirty-six hours after removing the furniture and other effects, and he died of the attack. I saw him with Mr. Marshall, of Greek-street, and we both remarked that his hands were very dirty, and had apparently not been washed for some days.

If the views here explained be correct, it is evident that the cholera poison may often be conveyed to a distance with provisions, as in the instance of the cow-heels above-mentioned, when there is no evidence of personal intercourse. There is also another very important medium for transmitting the cholera poison from the sick to the healthy, without immediate intercourse. It is the water which people drink; and in this case the proofs are often of a more direct and decisive nature.

The deficiency of water had often been spoken of, but the quality of the water had hardly ever been publicly mentioned as contributing to the increase of cholera till August, 1849, when Dr. Lloyd related to the South London Medical Society some occurrences that had taken place in Rotherhithe, and a pamphlet of mine, containing other instances, and some reasoning on the subject, appeared at the same time. Mr. John Grant, Surveyor to the Commissioners of Sewers for Surrey and Kent, also drew up a report in the same month, respecting the contamination of a well in a

court in Thomas-street, Horsleydown; and attention having been strongly directed to the matter, several other instances of the connexion between violent outbreaks of cholera and the contamination of the drinking water were related.

One of the most fatal instances of communication of cholera by means of water, is that which occurred at Albion-terrace, Wandsworth-road—a row of seventeen houses, most of them detached a few feet from each other, and constituting the genteel suburban dwellings of a number of professional and tradespeople. All the houses were supplied with water on a uniform plan, from a spring in the neighbourhood, the water being conducted into a tank placed behind each house, from which it was pumped into the kitchen when required. The tanks were all connected together by pipes, and the surplus water flowed away into a drain, which received the contents of the house drains and cesspools. The various drains and pipes were so constructed that the water was liable to become tainted, and it had been occasionally complained of previously; but during a storm of rain on July 26th, the chief drain burst, and its contents became mixed with the water in the tanks. I had an opportunity of finding afterwards in the water, the stones and husks of currants and grapes, and various other substances which had gone through the alimentary canal. The more gross materials, however, settled to the bottom of the tanks, and the water pumped up was not so bad as to excite suspicion or attract much attention, except in two or three of the houses.

"The first case of cholera occurred at No. 13, on July 28, (two days after the bursting of the drain,) in a lady who had had premonitory symptoms for three or four days. It was fatal in fourteen hours. There was an accumulation of rubbish in the cellar of this house, which was said to be offensive by the person who removed it; but the proprietor of the house denied this. A lady at No. 8 was attacked with choleraic diarrhoea on July 30; she recovered. On August 1, a lady, aged 81, at No. 6, who had had some diarrhoea eight or ten days before, which had yielded to her own treatment, was attacked with cholera; she died on the 4th, with congestion of the brain. Diarrhoea commenced on August 1, in a lady, aged 60, at No. 3; collapse took place on the 5th, and death on the 6th. On August 3 there were three or four cases in different parts of the row of houses, and two of them terminated fatally on the same day. The attacks were numerous during the following three or four days, and after that time they diminished in number. More than half the inhabitants of the part of the terrace in which the cholera prevailed were attacked with it, and upwards of half the cases were fatal. The deaths occurred as follow; but as some of the patients lingered a few days, and died in the consecutive fever, the deaths were less closely grouped than the seizures. There was 1 death on July 28, 2 on August 3, 4 on the 4th, 2 on the 6th, 2 on the 7th, 4 on the 8th, 3 on the 9th, 1 on the 11th, and 1 on the 13th. These make 20 fatal cases; and there were 4 or 5 deaths besides amongst those who were attacked after flying from the place." The fatal cases were distributed over ten of the seventeen houses, and cases occurred also in the other seven houses, with the exception of one or two that were empty, or nearly so. In short, the cholera extended to all the houses supplied by the contaminated water, and to no others; for there were hardly any cases in the immediate neighbourhood at the time.

There are no data for showing how the disease was communicated to the first patient, at No. 13, on July 28; but it was two or three days afterwards, when the evacuations from this patient must have entered the drains having a communication with the water supplied to all the houses, that other persons were attacked, and in two days more the disease prevailed to an alarming extent.

A similar instance of communication of cholera through the water occurred nearly at the same time "in Thomas-street, Horsleydown, where there are two courts close together, consisting of a number of small houses or cottages inhabited by poor people. The houses occupy one side of each court or alley, the south side of Trusscott's-court, and the north side of the other, which is called Surrey-buildings, being placed back to back, with an intervening space, divided into small back areas, in which are situated the privies of both the courts, communicating with the same drain; and there is an open sewer which passes the further end of both the courts. Now, in Surrey-buildings, the cholera committed fearful devastation, whilst in the ad-

joining court there was but one fatal case, and another that ended in recovery. In the former court the slops of dirty water, poured down by the inhabitants into a channel in front of the houses, got into the well from which they obtained their water, this being the only difference that Mr. Grant, the Assistant-Surveyor for the Commissioners of Sewers, could find between the circumstances of the two courts, as he stated in his report to the Commissioners. The well in question was supplied from the pipes of the South London Water Works, and was covered in on a level with the adjoining ground; and the inhabitants obtained the water by a pump placed over the well. The channel mentioned above commenced close by the pump. Owing to something being out of order, the water for some time past occasionally burst out at the top of the well, and overflowed into the gutter or channel, afterwards flowing back again mixed with the impurities; and crevices were left in the ground or pavement, allowing part of the contents of the gutter to flow at all times into the well, and when it was afterwards emptied, a large quantity of black and highly offensive deposit was found it.

"The first case of cholera in this court occurred on July 20th, in a little girl, who had been labouring under diarrhoea for four days. This case ended favourably. On the 21st July, the next day, an elderly female was attacked with the disease, and was in a state of collapse at ten o'clock the same night. Mr. Vinen, of Tooley-street, who attended these cases, states that the evacuations were passed into the beds, and that the water in which the foul linen would be washed would inevitably be emptied into the channel mentioned above. Mr. Russell, of Thornton-street, Horsleydown, who attended many of the subsequent cases in the court, and who, along with another medical gentleman, was the first to call the attention of the authorities to the state of the well, says that such water was invariably emptied there, and the people admit the circumstance. About a week after the above two cases commenced, a number of patients were taken ill nearly together: four on Saturday, July 28th, seven or eight on the 29th, and several on the following day. Eleven of the cases were fatal. The deaths occurred in seven out of the fourteen small houses in the court.

"The two first cases on the 20th and 21st may be considered to represent about the average amount of cases for the neighbourhood, there having been just that number in the adjoining court about the same time. But, in a few days, when the dejections of these patients must have become mixed with the water the people drank, a number of additional cases commenced nearly together." (a)

The following instances were made known by Dr. Lloyd:—In Silver-street, Rotherhithe, there were 80 cases and 38 deaths in the course of a fortnight, early in July, 1849, at a time when there was very little cholera in any other part of Rotherhithe. The contents of all the privies in this street ran into a drain which had once had a communication with the Thames; and the people got their supply of water from a well situated very near the end of the drain, with the contents of which the water got contaminated. Dr. Lloyd informed me, that the fetid water from the drain could be seen dribbling through the side of the well, above the surface of the water. Among other sanitary measures recommended by Dr. Lloyd, was the filling up of the well; and the cholera ceased in Silver-street as soon as the people gave over using the water. Another instance alluded to by Dr. Lloyd was Charlotte-place, in Rotherhithe, consisting of seven houses, the inhabitants of which, excepting those of one house, obtained their water from a ditch communicating with the Thames, and receiving the contents of the privies of all the seven houses. In these houses there were 25 cases of cholera, and 14 deaths; one of the houses had a pump railed off, to which the inhabitants of the other houses had no access, and there was but one case in that house. (b)

The following instance, as well as some others of a similar kind, is related in the Report on Cholera by the General Board of Health:—

"In Manchester, a sudden and violent outbreak of cholera occurred in Hope-street, Salford. The inhabitants used water from a particular pump-well. This well had been repaired, and a sewer which passes within nine inches of the

(a) The passages in the above account, included within inverted commas, are quoted from a pamphlet, by the Author, "On the Communication of Cholera."

(b) See Med. Gaz., 1849, Vol. II., p. 429.

edge of it became accidentally stopped up, and leaked into the well. The inhabitants of 30 houses used the water from this well; among them there occurred 19 cases of diarrhœa, 26 cases of cholera, and 25 deaths. The inhabitants of 60 houses in the same immediate neighbourhood used other water; among these there occurred 11 cases of diarrhœa, but not a single case of cholera, nor one death. It is remarkable, that, in this instance, out of the 26 persons attacked with cholera, the whole perished except one."—P. 62.

Dr. Thomas King Chambers informed me, that at Ilford, in Essex, in the summer of 1849, the cholera prevailed very severely in a row of houses a little way from the main part of the town. It had visited every house in the row but one. The refuse which overflowed from the privies and a pigsty could be seen running into the well over the surface of the ground, and the water was very fetid; yet it was used by the people in all the houses except that which had escaped cholera. That house was inhabited by a woman who took linen to wash, and she, finding that the water gave the linen an offensive smell, paid a person to fetch water for her from the pump in the town, and this water she used for culinary purposes, as well as for washing.

The time does not permit of my relating any more of the numerous instances in which severe outbreaks of cholera have been connected with adulteration of the water with the contents of drains and cesspools; and this is the less to be regretted, as the influence of this kind of water over the increase of cholera is now generally admitted.

In the seventh notification of the General Board of Health, on September 18, 1849, soon after attention had been first prominently drawn to this matter, the following passage occurs:—"The ascertained fact, that the use of vitiated water acts as a poison on the stomach and bowels, producing sickness, diarrhœa, and other symptoms resembling those of cholera, has recently received melancholy confirmation in numerous instances."

Now, in these instances, the disease induced is admitted to have been actual cholera in the same notification, and in the subsequent report of the Board, and there is no evidence to show that vitiated water generally acts as a poison; on the contrary, in many of the instances in which these outbreaks of cholera occurred, the people had been drinking the same vitiated water since the cholera of 1832. However repulsive to the feelings the swallowing of human excrement may be, it does not appear to be very injurious so long as it comes from healthy persons, but when it proceeds from cholera patients, and probably patients with some other maladies, it is a means of communicating disease.

[To be continued.]

CASES OF PUERPERAL HÆMORRHAGE.

By STEPHEN MONCKTON, M.D.

Case 1.—August, 1846, Mrs. S., aged thirty-six, parturition occurring at end of eighth month, with the sixth child. Habit spare and lax; powers feeble. Pains commenced in a modified and irregular form about three p.m., and were soon followed by vomiting, syncope, and a trifling hæmorrhage from vagina. Before, however, the surgeon, who attended in my absence, reached the patient, she had rallied, and the pains were coming on with greater vigour and regularity; the discharge of blood being still of no importance. At seven p.m. I first saw her; she was then pale, feeble, and depressed; pulse fluttering; mind gloomy; surface chilled; still a slight oozing of blood; parts yielding; os uteri half dilated; no placenta to be felt. Under these circumstances the practice was, rupture the membranes, ðij. of ergot (camphorated powder) in warm brandy and water; perfect horizontalism, and chafe the extremities. All appreciable hæmorrhage ceased; pains were active, and the head soon descended rapidly. Still the exhaustion grew upon us, and as the child passed the vulva, despite cold air and brandy, the woman fainted;—instant and firm pressure upon the uterus extruded at the same time the placenta and many large coagula, the organ itself readily assuming its proper reduced and small dimensions; no current hæmorrhage could be at all detected even by hand within the uterus; but the mischief was already done, and, in a few short moments, the poor thing ceased to breathe. The infant was still-born.

Case 2.—April, 1848, Mrs. J., aged thirty-eight, spare, lax, and asthenic, eight months gone with fourth child; eleven p.m. awakened, while in bed, by grumbling pains and moderate discharge of blood, both of which gradually increased. I found her in an hour or two somewhat pale and exhausted, pains irregular, parts soft, hæmorrhage trifling, but persistent; os half open, or nearly so, and free from placental attachment. Here again the same practice was pursued—ruptured membranes, ergot, and stimuli. Labour went on rapidly; but, as the faintness increased also, though the apparent hæmorrhage was far from alarming, I felt bound, by means of the vectis, the only instrument at hand, to extract the child; this was dead, and its birth immediately followed by the expulsion of many large, firm coagula. By careful manipulation within and without, the placenta was removed, uterus reduced, bleeding, if any, arrested, and the woman, though long syncopeated, was at last restored, and did very well.

Case 3., occurred last week, to this same patient, in her next confinement, and also at or about the eighth month. Being called earlier, I kept her recumbent, and employed throughout firm and steady abdominal compression with broad bandages; when state of parts permitted, ruptured the membrane, gave ʒj of ergot, and kept the forceps close at hand. Notwithstanding all this, the uterus was again found full of coagula, almost or entirely unmixed with fluid blood. Though exhausted, she at length recovered; and this time the infant also was alive.

The pathology of these cases seems tolerably clear. They approximate to the unavoidable hæmorrhage of Rigby; the placenta being not prævious but sufficiently near the os uteri to come within the scope of that expansion which occurs about the cervix and lower segment during the last months of gestation, and at the same time sufficiently remote from the orifice to cause the retention of the extravasated blood within the cavity of the uterus. The two features that I would especially dwell upon are, first, that the hæmorrhage is internal; and, secondly, that it is not the result of violence or accident. When the placenta verges on, without covering, the os, serious hæmorrhage will very frequently occur; but then the amount both of loss and danger may be readily appreciated, and almost as readily arrested, by rupturing the membranes, as the open vessels become at once occluded by pressure of descending head; when, however, the blood does not escape per vaginam, it is difficult to estimate correctly the position of the patient, and not so easy to remedy it when known; for much mischief may be done to a feeble woman, intolerant of hæmorrhage, before the syncope is recognised as anything more than constitutional or unimportant. Again, the perforation of membranes, though doubtless indispensable when the os is fairly dilated, by no means uniformly succeeds at once; the escaping waters appear to be replaced by blood, and the irregularities of the child's body to afford ample room for the lodgment of coagula. Indeed, when treating a case where the syncope accompanying the first pains has passed off, and does not attempt to recur, but the pulse and powers hold their own, the waters most certainly should not be evacuated till the head be well advanced, and everything ready for immediate delivery.

Moreover, these cases differ from those wherein the ovum is partially detached, and premature labour brought on by violence or casualty, inasmuch as they are distinctly spontaneous in their origin. Commencing while the patient is in bed, and even asleep, (this is known, not only by the pains and show then appearing for the first time, but by the sudden sickness and fainting, which clearly mark the period of extravasation,) and, what is still more decisive, they are not unfrequently preceded, as in placenta prævia, by a smaller amount of pains and flooding, perhaps weeks before the final attack takes place. It is a recognised fact among veterinary practitioners, that the females, especially of neat cattle, are prone to abort when pregnant by a large and disproportionately heavy male. How far will observation and statistics maintain the idea, that a similar disproportion between parents may lead, in the human race, to a similar result? For, if the woman were at the same time small and asthenic, the decidua being diffident and insufficiently tenacious, a large heavy ovum would have every facility for gravitating and attaching itself to the lower portion of the uterus.

So much for pathology. There are two points in practice:—1st. Always regard with salutary-suspicion sudden,

and especially increasing faintness in an about-to-be parturient woman, and adopt precautionary measures accordingly. 2ndly. When such a condition is associated with a small discharge of blood, do not exaggerate the importance of the visible hæmorrhage, and prematurely rupture the membranes; but rather, unless the indications be really urgent, use firm external compression with general means, leaving the amnion unbroken, till such time as the evacuation of its contents can be immediately followed by the natural or artificial removal of the child.

Brenchley.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. GEORGE'S HOSPITAL.

By HARVEY HOLL, Esq.,
Late Curator of the Museum.

STRANGULATED FEMORAL HERNIA;

SECONDARY HÆMORRHAGE FROM ULCERATION INTO OBTURATOR ARTERY, WHICH WAS GIVEN OFF FROM THE EPIGASTRIC.

A woman, aged 34, was admitted, under Mr. Keate, having been the subject of femoral rupture on the right side about eighteen years, for which she had worn a truss, though not constantly; and when the hernia came down, which it occasionally did, she was able to return it herself. On the night of the 8th ult., during a violent fit of coughing, the hernia protruded, and she was unable to reduce it. On the three following days the tumour increased in size, and became painful. The taxis was applied severely, without success. On admission, at 11 p.m., the tumour was about the size of an egg; the skin over it was tense, red, and œdematous; there was an indistinct fluctuation to the hand, which gave the impression that the contents were partly fluid and partly solid; it was not tender on being handled, and impulse was very indistinct. There was very little constitutional disturbance; the bowels had acted, for the last time, scantily, soon after the descent of the hernia; she had constant nausea, but no actual vomiting; there was some dragging at the umbilicus, but no tenderness of the belly; the pulse was quiet, and the tongue clean. She was placed in a warm bath, and the taxis employed unsuccessfully; ice was, therefore, applied to the tumour. Early the next morning she was in much the same state, but towards noon a considerable change had taken place. The tumour was now more tender, and the integuments covering it more red and œdematous, giving it the appearance of an acute abscess. There was still not much disturbance of the constitution, and little or no distress of countenance. The pulse had risen a little in frequency, and the tongue was rather more coated. There was more pain and dragging in the belly, but no actual tenderness; and, although there was much nausea, there was no vomiting. Mr. Charles Johnson, under whose care the patient was placed, in the absence of Mr. Keate, now resolved to cut down upon the tumour, and ascertain its nature. In making the first incision, the integuments were observed to be much infiltrated and inflamed, and, on proceeding further, the sac of a femoral hernia was exposed. On laying open the sac, no fluid escaped, but it contained a portion of omentum adherent to its inner surface anteriorly, behind which there was a loop of intestine separated from the omentum by a large quantity of dark-coloured, offensive fluid. The intestine was healthy. The neck of the sac, which was very deeply seated, having been divided upwards and inwards, the intestine was easily returned; and it was then found that the gut had been contained in a partial sac, formed of omentum, adherent by its outer surface to the proper sac. In dividing the omentum at the neck of the sac, a small vessel was wounded, which required the ligature. The portion of omentum adherent to the sac was, at its lower part, inflamed and infiltrated with blood, and to have returned it would have required much dissection; it was, therefore, together with a small portion which it was necessary to draw down to secure the divided vessel, left in the wound to suppurate. Wet lint was applied to the wound. Soon after her return to bed, some oozing of blood took place from the wound, which was speedily checked by the application of ice. The bowels acted without medicine on

the following morning. The patient went on well, though a portion of omentum sloughed away; but, three weeks after the operation, erysipelas attacked the wound; it was, however, easily controlled by ammoniated salines, wine, and moderate support. The wound became healthy, and she continued to improve in strength under the administration of bark and ammonia till the 20th of January, when a slight oozing of blood was observed, which continued through the next and following days. It was now determined, on consultation, to enlarge the wound and ascertain the source of the hæmorrhage, as the patient was sinking from loss of blood; and on doing so a general bleeding sloughy surface was exposed, to which blue lint was applied, and she was ordered pills of acetate of lead and opium every four hours. On the same evening, the bleeding returning, Mr. Johnson removed the dressings and ligatured a small vessel. Again, on the 24th, the hæmorrhage recurred; but pressure, and the application of ice, were effectual in arresting it. The wound became sloughy, and she sank and died on the 26th, without further hæmorrhage.

The body was examined twenty-six hours after death. The lower part of the great omentum, much thickened and narrowed below, was adherent to the posterior margin of the right femoral ring, and was continuous with the sloughy mass contained in the wound. A knuckle of the ilium, four inches from the cœcum, was also adherent, by its distal surface, to the margin of the ring immediately behind the omentum, and likewise a portion of the cœcum itself. A few delicate, filiform, but not very recent adhesions, passed between the cœcum and its appendix, and the convolutions formed by the lower part of the ilium. On the outer side of the neck of the sac the epigastric artery and vein gave off the obturator vessels, which, curving round the neck of the sac internally, passed downwards to the opening in the obturator membrane, through which they escaped from the pelvis. The artery lay immediately in front and below the vein. It was in contact, by its lower surface, with the sloughy cellular tissue surrounding the neck of the sac, and was itself dark-coloured and perforated by a small ulcerated opening through which a probe could be passed from the external wound into the interior of the vessel. Beyond this, on either side, the artery was for about a quarter of an inch blocked up with lymph. The ligature had been applied to a small vessel at the upper part of the wound.

PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

NORTH DISPENSARY, LIVERPOOL,

By M. LYNCH, Esq.,
Surgeon.

SALIVARY FISTULA.

ANNE JANE BUSHELL, aged five years, was brought to me for an abscess in her cheek. She had a fall on a fender about a month previously. Shortly afterwards a tumour formed, which burst, and continued to discharge a thin purulent liquid. From the nature of the discharge, and the situation of the wound, I suspected an injury of Stenon's duct, and was confirmed in this opinion by laying her on the opposite side, and noticing the cavity of the wound, after being sponged out, to fill with salivary fluid. Having consulted with Mr. Chalmers, of Everton, we adopted the following mode of procedure: I introduced a small hydrocele trocar and canula through the wound, from without inwards, and, having got it into the mouth, withdrew the trocar, leaving the canula, having previously formed a piece of gutta percha to fit the canula, about two inches long, with a head to it, somewhat resembling a twopenny tack with the point cut off. Through the shoulder of the apparatus, I passed some ligature silk, and, by means of an eye probe, I passed the silk through the canula, and then withdrew the latter, securing the threads with some strips of adhesive plaster to the cheek beyond the abscess, thus forming an efficient seton; the head on the interior of the cheek enabling me to fix it firmly. After the seton had remained in the cheek about five weeks, I was obliged to withdraw it, owing to its causing great swelling and inflammation of the side of the face, which speedily disappeared, and the saliva for some days

passed entirely into the mouth; but in about a week after the withdrawal of the seton, it again collected, and burst externally. I now commenced to pass a small probe from the mouth in the track of the seton daily, and was obliged to continue to do so for nearly three months, before I could confidently expect a perfect cure. If a day or two was omitted, symptoms of a fresh filling of the old cyst were sure to present themselves. However, after persevering for the afore-mentioned length of time, I was gratified in effectually curing the fistula, as some two months have now elapsed since the last passing of a probe, and no return of the complaint has appeared. I may add, that the treatment of this seemingly trifling affection required almost daily attention for nearly five months.

LITHOTOMY.—CHLOROFORM.

John Cunningham, aged nine and a half years, was brought to me on Sept. 12th, suffering from symptoms of stone in the bladder. His mother stated that he had been subject to occasional fits of difficulty in making water since he was two years old. He had become much worse for the last two months. She described his most urgent symptoms, as inability to hold his water for any time, wetting the bed at night, and often being obliged to lie on his back to empty his bladder. She stated (to use her own words) his hands were constantly in his breeches; yet, on examining, there was no elongation of the prepuce, nor was there prolapsus of the rectum. Having satisfied myself of the presence of a calculus by sounding, I operated on him on the 25th Sept., performing the lateral operation. Having got him under the influence of chloroform, and tied in the usual manner, I was obliged to inject his bladder with tepid water, the chloroform causing the urine retained to entirely come away. Indeed, in using chloroform, I fear it will be always difficult to retain the urine in the bladder, for, if you hold the penis whilst putting the patient under its influence, when you let it go to introduce the staff, a great portion will escape; and the same will occur after injecting the bladder. I introduced the curved staff, and, giving it to an assistant, I made the usual incision through the skin, superficial fascia, etc.; and, feeling for the groove in the staff with the forefinger of my left hand, passed the knife (Key's) along the groove into the bladder. I then withdrew it, and, passing in my finger, felt the stone lying at the fundus. Having introduced the forceps in the usual way, I instantly seized the stone, and extracted it without any difficulty. It was of the phosphatic kind, and weighing two drachms. I do not know that this case presents any point of interest, as all the proceedings were in the mode most commonly practised at present. I have already noticed the influence of chloroform in causing the urine to come away; and if it could be managed to prevent that accident, it certainly would be desirable. On the other hand, the bladder containing little urine is not of the same consequence with the chloroform as without it, as, under its influence, the muscular coat is quite relaxed, and the cavity much larger; as I had occasion to experience in examining with the sound in this case. The urine began to come away partly by the natural canal, on the tenth day, and by the twelfth came altogether so; the wound in the bladder closing at the same time, and the lad being able to go about on the twentyfifth day. I forgot to mention, that there was no catheter introduced into the bladder through the wound, the patient being placed on his back in bed, and his knees and shoulders supported by pillows.

TRINITY COLLEGE, DUBLIN.—The decease of His Majesty the King of Hanover creates a vacancy in the Chancellorship of this University. The Earl of Rosse is reported to be a candidate, and is strongly supported.

ISLINGTON MEDICAL CONVERSATIONAL SOCIETY.—The following resolution was unanimously agreed to at a meeting of the above Society, held on Tuesday, the 18th instant:—Resolved,—“That the members of this Society, seeing the extent to which the public is imposed upon by the form of quackery called homœopathy, feel it to be their duty to state, that they can in no case sanction such imposture, but, on the contrary, explicitly repudiate all connexion therewith, and, in the most unqualified terms, declare such practice to be sheer ignorance or dishonesty, and, therefore, dangerous to the public well being; and, further, that the members of this Society do pledge themselves that they will not knowingly meet, in professional consultation, any person practising that delusion, as such persons have clearly placed themselves beyond the pale of legitimate medical science.”

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

- This Evening, Nov. 29.—MEDICAL SOCIETY OF LONDON. *Subject*:—Dr. T. SNOW BECK, F.R.S., “On the Enlargement of the Uterus after Labour or Abortion.” Eight o’Clock.
- Monday, December 1.—EPIDEMIOLOGICAL SOCIETY. *Subjects*:—1. Dr. GAVIN MILROY, “On Cholera in Jamaica.” 2. W. J. COX, Esq., “On the Mode of Treatment of Cholera.” Half-past Eight o’Clock.
- CHEMICAL SOCIETY. Eight o’Clock.
- Tuesday, December 2.—PATHOLOGICAL SOCIETY OF LONDON. Eight o’Clock.
- Wednesday, December 3.—GEOLOGICAL SOCIETY. *Subjects*:—1. C. J. F. BUNBURY, Esq., For. Sec. G.S., “On a Curious Fossil Fern from Cape Breton.” 2. The Rev. ADAM SEDGWICK, F.G.S., “On the Cambrian and Silurian Rocks which appear at the Base of the Carboniferous Chain of Yorkshire, near the Craven Fault.”
- Thursday, December 4.—HARVEIAN SOCIETY. Eight o’Clock.
- Friday, December 5.—WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON. *Subject*:—W. BATTEN, Esq., “On a Case of Perforation of the Stomach, with Remarks.” Eight o’Clock.
- Saturday, December 6.—MEDICAL SOCIETY OF LONDON. *Subject*:—Mr. J. B. BOWEN, “On Rupture of the Perinæum and its Treatment.” Eight o’Clock.

THE MEDICAL TIMES.

SATURDAY, NOVEMBER 29.

SURGICAL DIPLOMA OF THE UNIVERSITY OF DUBLIN.

It would be an interesting subject of Medico-historical research to trace the various causes which originated those artificial and arbitrary distinctions, by which, even to the present day, the professors of the healing art continue to be divided in corporate as well as educational interests. The aim of medicine is, and has ever been the same, whether we consider it as dealing with the internal administration of remedial agents, or the external applications of manual or mechanical skill to the removal of disease. As the scientific interests of medicine and surgery are incontestably identical, so likewise may their corporate. To impartial minds it cannot but be a source of profound regret, that the unwise dissensions and conflicting influences of by-gone days should still be evidenced in the corporate and educational distinctions which yet unhappily characterise the professions of medicine and surgery. The days of such narrow and exclusive views are, however, numbered. Better feelings and more comprehensive principles are beginning to prevail; and we confidently anticipate that, before long, judicious measures of reform will place these now divided branches of the Profession on a more uniform basis. In other countries the unreal character of the distinctions which had been established by time or usage between medicine and surgery have long since been recognised. We may point to the example of France. There, the medical and surgical courses of study have been inseparably combined in one curriculum, and the artificial division of the professional body into physicians and surgeons for ever abolished; there one comprehensive university degree qualifies to practise in either medicine or surgery, or in both. For nearly half a century, the possessor of the degree of D.M.P. (Doctor of Medicine, Paris) has practised medicine or surgery indifferently, as the one or the other department proved the more suitable to his tastes and abilities; and can it be urged, that professional or scientific interests have suffered from the alliance of these kindred studies?

In these countries, the University of London made the

first step towards a union of the two branches of the Profession, by the introduction of a surgical curriculum into its educational system, and the establishing of a degree in surgery on a foundation equally extensive as that of its medical degrees. In adopting a similar curriculum, the Irish University has set an example which we trust will be followed elsewhere. The requirements of a complete professional education in the present day are such, that the directors of the medical departments of the public service, and all Boards and other bodies having the patronage or appointment to medical office, should make it imperative on every candidate to produce evidence of the fullest medico-chirurgical qualifications. Numerous obstacles of a serious kind have hitherto existed, and continue to present themselves, in the way of students desirous to accomplish this object; but we feel confident, that if a regulation with regard to the possession of medico-chirurgical qualifications were enforced by the principal departments of the public service, the excellent example of the London and Irish Universities would be speedily followed by other institutions, and the difficulties which yet obstruct the student anxious to qualify himself for all the duties of the professor of the healing art would soon be removed.

We see in the alliance of complete Professional with University education, and the discipline of an Academic training, the recognition of principles, the more general extension of which would exert the happiest influence on the medical body. When we remember that the great mass of students are allowed to commence their professional career before their minds have received that amount of culture, by preliminary education, without which they are totally unfitted to enter on the most difficult field of observation that can engage the intellects of man, we cannot wonder that many who obtain admission to the professional ranks contrast so unfavourably in general acquirements with the educated classes of the public, nor that a low standard of scientific medical attainments so widely prevails.

With the numerous conflicting corporate interests which sway the Profession, it is hardly to be anticipated that any system can be readily established so uniform and comprehensive as that introduced in France, where every candidate for the degree in medicine is obliged to have passed the examination of Baccalaureat in Letters and Sciences. Yet we do hope that measures will soon be taken to insure, at least, the possession of a competent preliminary education at the entrance of every student on his professional career. To the excellent example which the Universities of London and Dublin have given in this respect, we especially direct the attention of our other educational institutions. The Surgical Degree of Trinity College must take a high position, and, we doubt not, it will be received with consideration by the heads of the Medical departments of the public service. In another column we publish the regulations under which the Degree is to be conferred. From a glance at this, it will be seen that ample provisions are made for insuring a competent general, as well as medical education. Candidates are required to complete one year's graduation in arts, which comprises, not only classics and mathematics, but also attendance on at least one course of lectures in logic and mechanics. The latter subjects are essential parts of an educational course preparatory to commencing medical studies.

There are few who will not be materially benefited by an acquaintance with the elements of the art which teaches us the right use of reason. Examples of the loose and inconclusive use of argument, and the deductions to be drawn from

facts, are unfortunately of but too frequent occurrence in the pages of our periodical literature. The purely professional portion of the curriculum will be found most extensive; and, in the established reputation of the professors of the University school, we have a sufficient guarantee that the several courses of instruction will be carried out in the most efficient manner.

The advantages thus afforded to the Irish student of medicine cannot be too highly estimated. Within a period of four years he is now enabled to graduate in Arts, Medicine, and Surgery, fulfilling the requisites for a complete general and professional education in a University second to none in scientific standing; and no reasonable doubt can be entertained that the medical man thus qualified will take a much higher social position than those whose education has been conducted on a less comprehensive scale; while, in candidature for office, his acquirements will contrast favourably with those of his competitors whose medical knowledge is based on a more limited range of preliminary studies.

UNLICENSED HOMŒOPATHS.

In the unanimous protest which the Profession is now making against the absurdities and the dangers of homœopathy, one point appears to us to have been somewhat overlooked.

The question between us and the homœopaths is often looked at by the public, and is always argued by the globulists, as if it were a discussion between two great sections of the body medical. It is, on the contrary, a question between the medical body and a sect, the members of which have, for the most part, received no medical education whatever. There are, we all know, some few homœopathic practitioners who have been duly instructed in the sciences which form the substratum of therapeutics, and who now cling, with immovable tenacity, to the diplomas of that body whose authority they attempt to undermine. But these men are in the minority. The great mass of homœopaths are individuals who are tampering with the lives of their fellow-beings, without the least knowledge of the structure of the frame they meddle with, or the least insight into the physiological actions they are called on to control. Medically speaking, they are totally uneducated, and have for the most part abandoned trades and callings, often very humble ones, to pursue a more profitable employment in the land of Gulls. It is indeed most extraordinary, that an educated man, who would take good care that his carpenter or his tailor should be well trained in his calling, and who would not trust the repair of his carriage or his coat except to some one who had been brought up and properly taught to do the work, should not use equal discretion when the thing to be repaired is his own health, or that of those nearest and dearest to him.

We would strongly advise our readers to make themselves acquainted, if possible, with the antecedents of the homœopaths who may practise near them, and to make known, temperately but firmly, to their patients, the kind and degree of medical training which these impostors have had.

Our brethren at Doncaster have at present an opportunity of doing this. A certain Mr. Spencer Hall has been long known as an itinerant lecturer on Mesmerism, on Phrenology,—on everything, in fact, which could draw half-crowns in his direction. Lately, however, the trade has become slow; the lovers of novelty and excitement have had enough of Spencer Hall, and a change of scene became necessary. Mr. Spencer Hall has turned, of course, homœopathist, and,

after a brief sojourn at Sunderland, has decided on honouring Doncaster with the light of his countenance. He announces his presence in that favoured locality by a modest pamphlet, in which he relates a marvellous story of his conversion to homœopathy, which is no doubt about as true as the mesmeric feats of his pristine career.

Mr. Spencer Hall has no diploma, and has received no medical education. Feeling, no doubt,—for he is a man who knows the world,—that it is well to make people think that he is skilled in all the learning of the Egyptians, he has published his pamphlet to explain how it is he has no degree. He wishes to make it appear that he received his medical education at Edinburgh, but having become an homœopath, that he was deterred, at the last hour, by scruples of conscience, from presenting himself for examination! But, unfortunately for him, he has convicted himself. At the commencement of his pamphlet he states that he went to Edinburgh in the autumn of 1844, while at page 10 he informs us that he left that place in 1845. Now, after some months residence only, he *could not* have been eligible for examination according to the rules of the University, and therefore, the story of his struggle with himself on the eve of the day of examination, as to whether he should take his degree, must be classed among those other fables which compose the literature of the singular sect which at present numbers Mr. Spencer Hall among its followers. According, therefore, to his own shewing, Mr. Spencer Hall could not at the very utmost have attended more than a few months in the classes of the University; and moreover, we are enabled confidently to affirm that the name of “Spencer Hall” *does not appear in the matriculation book of the University of Edinburgh between the years 1840 and 1850.* The attempt, then, to make it appear that he completed a regular medical education, altogether breaks down. We trust that the intelligent inhabitants of Doncaster will treat this man as he deserves, and that they will not allow themselves to be duped by representations which are at once seen through by all who are acquainted with the subject. A more disingenuous pamphlet than that published by this man we have never read; and luckily Mr. Spencer Hall, in spite of his experience in the art, must in this instance fail to throw dust in the eyes of the public.

THE MEDICAL BENEVOLENT COLLEGE.

It gave us most sincere pleasure to print, last week, the noble list of contributors to the funds of the Medical Benevolent College. An excellent beginning has been made; and, as a second list of subscribers is about to be issued, we hope we may say that the ultimate success of this important measure is no longer doubtful. The funds are, however, still most inadequate, and unremitting exertions are still necessary. The project cannot but command the approbation and sympathies of every member of the Profession; and every member is almost bound to give to it as much support as is compatible with his circumstances. Numerous as are the names of the subscribers, they are few in comparison with the multitude who have not yet come forward. Most of the large towns are unrepresented; and Manchester, Birmingham, York, or Huddersfield, will surely not suffer themselves to be outbid in this race of benevolence and charity by small and less wealthy places. Local secretaries should be appointed for every town in the kingdom; and it would be well if the Committee were to write to the principal practitioners in each town, and urge them to undertake the office of solicitation and collection in their district.

We trust, and indeed anticipate, that the Profession, though it be split into segments on points which concern its politics or its external forms, will yet show itself united in this noble effort to soften the pangs of misery, and to allay the anguish of distress.

THE LORD CHANCELLOR AND MEDICAL MEN.

In a lunacy case, *Re Brown*, heard before the Lord Chancellor, an application was made by the next of kin, for a fee of fifty guineas, paid to Dr. Winslow, to be charged to the estate of the lunatic. Dr. Winslow had been employed by the next of kin to visit the lunatic at York, and decide whether it would be better for him to remain with his friends and relatives, or to be placed in a lunatic asylum. Dr. Winslow decided on the former plan, which was, however, overruled by the Court. The next of kin was desirous that the lunatic should be with his relatives. On the application being made, the Lord Chancellor is reported to have made the following unjust and untrue attack on the Medical Profession. He observed, “that in the present instance, *as was likewise almost always the invariable practice*, the medical man had reported in favour of the views of those parties who had employed him.” There is neither sense, grammar, nor truth in this attack. We are at a loss to conceive how a practice can be *invariable* which is only *almost always* pursued; and we are certain that the great majority of medical men do not report in favour of those who employ them, unless they deem it just and right so to do. If the Lord Chancellor’s words have been reported correctly, he has shamefully slandered the members of a Profession as honourable, and far more useful and valuable than his own, although less likely to obtain the loaves and fishes. We are also sure that the honourable physician whose conduct he attacked under cover of a general remark, would indignantly reject an attempt to cause him to render any other than a honest opinion. We will not imitate the Lord Chancellor’s conduct, and carry the war into his own profession, by commenting on the proceedings of some of its members, and assuming that such is the general and usual mode of action of all. Such a line of proceeding would be as unjust as that adopted by the Chief Judge in Equity.

DR. HENRY HOLLAND.

WE are able to state, on very sure authority, that the relation contained in a letter to the *Lancet* of last week, regarding an alleged consultation at Norwich between Dr. Holland and a homœopathic practitioner of that city, is greatly at variance with the real facts of the case.

We know, upon the authority alluded to, that Dr. Holland, who was previously altogether ignorant even of Dr. Bell’s name, on being told by the family of the patient that he was a homœopathist, though professing to practise on both systems, directly and strongly expressed his opinions on the subject; and that his views were in no respect altered, by being informed, that the practice followed in the case had been of the ordinary kind. We learn, too, that Dr. Holland added, that if he saw Dr. Bell, it could only be for the mere purpose of receiving information respecting the previous history of the case, for which he had been referred to him. Dr. Holland repeatedly saw his patient alone during the evening, and had decided upon the line of practice to be pursued before Mr. Bell came to the house the morning after Dr. Holland’s arrival, and just before his departure. Nothing in the shape of a consultation was held.

with Dr. Bell; and the family distinctly understood that such was the fact.

We cannot doubt that Dr. Ranking, and our provincial contemporary, thus informed of the circumstances, will retract the imputation cast upon a physician of high standing, and one whose opinions on homœopathy are well known.

REVIEWS.

On the Transmission from Parent to Offspring of some Forms of Disease, and of Morbid Taints and Tendencies. By JAMES WHITEHEAD, M.D., F.R.C.S., on the Medical Staff of the Lying-in-Hospital, and Lecturer on Obstetric Medicine at Manchester, etc. 8vo. Pp. 351. London: 1851.

This work contains five chapters. In the first chapter the doctrine of hereditary transmission is treated of generally; in the second, illustrations in the form of cases, thirty-three in number, of transmitted syphilis, are given; an analysis of those cases occupies the third chapter; in the fourth, the external characters of constitutional syphilis are detailed; the treatment of syphilis, primary, secondary, and tertiary, is described in the concluding chapter. The first chapter is of little worth; Dr. Whitehead's knowledge of pathology and physiology is hardly up to the present state of those sciences, and the consequence is, that he says that the blood globule, from the mere circumstance of its dimensions, is not capable, under normal conditions, of circulating in the capillaries; quotes Bérard's statement, as though it was not now known to be founded on an error in observation, to prove that blood-globules are converted into pus-corpuscles on the field of the microscope, and seems ignorant of the fact, that when Van Swieten, Ambrose Paré, and Quesnay spoke of a discharge of pus with urine, that all they meant was a fluid resembling pus to the naked eye, and that, consequently, they might have called half a dozen different fluids by that name. The other four chapters are far more valuable; they contain details of facts observed by Dr. Whitehead himself, or conclusions drawn from those facts; and, by giving us the facts, he has enabled us to judge for ourselves of the value of his conclusions.

That the virus from a primary syphilitic sore may communicate syphilis to a previously healthy individual, no one in the present day doubts; that either of the parents having suffered from syphilis, the offspring may be the subject of secondary syphilis, few also can refuse to credit; and that although at the time of getting the child the parents be free from all outward manifestation of the diseased state which they communicate to the child. But that a man suffering from secondary symptoms, say syphilitic roseola, can infect a healthy woman, can communicate to her a disease which manifests itself by a copper-coloured, scaly eruption, sore throat, warty excrescences from the genitals, and ulcers syphilitic in character of the neck of the uterus, does admit of grave doubt; and *à fortiori* is the doubt greater whether a man who for months has lost all outward manifestations of a syphilitic taint can give to a woman, by sexual congress a disease attended with the symptoms above detailed.

It is chiefly to prove, that a man thus in apparent health may infect his wife, that Dr. Whitehead's treatise is brought before the Profession. But, Dr. Whitehead goes yet further: he affirms, not only that secondary eruptions may propagate syphilis by contact, not only that a man who is free from all appearance of syphilis, may communicate that disease to a female in the act of connexion: but that the milk of a woman suffering from secondary symptoms as syphilitic roseola—there being no disease of the nipple itself—may convey the syphilitic taint into the constitution of the child who feeds on it; and that a child may be infected by being vaccinated with lymph taken from a vesicle on the arm of another child whose skin is the seat of syphilitic roseola.

There are three other points which Dr. Whitehead urges on his reader with considerable energy, viz., the origin of cauliflower cancer of the uterus,—we suppose Dr. Whitehead means epithelial cancer, as it is called—in syphilitic infection; the venereal origin of sycosis; and the possibility of all the secondary symptoms of syphilis following a

gonorrhœa. Now, to the majority of Dr. Whitehead's cases adduced in support of the position he has taken, we object as unsatisfactory; and it is the very difficulty of procuring satisfactory evidence that renders the thorough investigation of this subject almost impossible. In order to make the grounds of our objection to the evidence clear, we will give the heads of one of Dr. Whitehead's cases, and show in what to our mind its weakness consists.

Case 5.—In February, 18—, Dr. Whitehead attended a lady in her first confinement. For the first ten months after the birth of the child the health of the mother and infant was excellent. "At this date," writes our author, "I treated the husband for a primary venereal sore." Under the use of iodide of potassium, the patient "got speedily well, and, on account of the nature of his commercial engagements, was away from his wife for at least two months after every outward manifestation of the disease had left him. When the child was fifteen months old, and still at the breast, she had a crop of scaly blotches on the face and forehead, the nates, thighs, and abdomen, with sore mouth, noisy breathing, a bad complexion, and was extremely fretful." "The mother at the same time complained of ardor urinæ, excoriation of the vulva, and leucorrhœa."

Both mother and child soon appeared tolerably well. When eighteen months old the child, still being at the breast, had another accession of eruptions, swelling of the throat, inflammation and excoriation of the mouth, cracked and angry-looking lips, tender eyes, huskiness of voice, and nasal breathing. The labia pudendi were swollen, and there was a yellowish purulent secretion from the vagina. The abdomen was tumid; the ankles and feet anasarcaous. Two of the lymphatic glands of the neck subsequently suppurated, and the child died at the age of twenty months. The mother at this time had "syphilitic inflammation of the throat and iritis," flat tubercles on the labia pudendi, and an abundant puriform discharge from the vagina, and, subsequently, metro-peritonitis. She was under treatment several months, and eventually recovered perfectly.

This case is headed, "Communication of Secondary Syphilis from husband to wife—Transmission of the disease to her infant through the medium of the breast—its effects upon the uterine system of the mother:" and the following conclusions drawn from it:—

"1. The symptoms under which the wife laboured were syphilitic in their nature, yet was there no evidence that the disease had been communicated to her in its primary form.

"2. The disease which proved fatal to the child was also undoubtedly syphilitic, and this could only have been communicated through the medium of its mother's milk.

"3. The tendency which syphilis manifests to affect the genital organs, although introduced into the system by a different channel."

Now, although we grant that the disease under which the mother laboured was of a syphilitic nature, yet it seems to us by no means clear that she did not become infected from the primary sores on her husband; for it does not appear, that from the time the husband had the connexion by which he contracted the disease till he was well, that he never slept with his wife; and, again, although we grant that the disease which proved fatal to the child was undoubtedly syphilitic, we are by no means disposed to allow, that it could only have been communicated through the mother's milk, for if she had primary sores, it is not unreasonable to suppose, from the close relations subsisting between a mother and her infant at the breast, their inhabiting the same bed, often washing in the same room, and using perhaps the same sponge and towels, that the child might have been infected from the primary sores of the mother, or from the discharge from the vagina, when primary sores are seated within the external orifice.

Now, examined in this way, almost if not every one of Dr. Whitehead's cases adduced as evidence in support of the views he has adopted, break down. The difficulties in the way of obtaining trustworthy evidence are almost insuperable. "On no topic," says Dr. Whitehead himself, "are men so little inclined to be candid, as in matters liable to endanger their reputation as regards their conjugal fidelity;" and, if this be true of the majority of men, how much more extensively true is it of women. However, the difficulty of the task must not deter us from attempts to solve the question; and we have no doubt that, at some future period, Dr. Whitehead will be able to offer us more satisfactory evidence.

In the 4th Chapter is a section on certain abnormal states of the uterus which indicate the presence of lues venerea.

"In all the cases examined," says our author, "with one exception, disease of the uterus, of characteristic aspect, was found to exist. It seems to matter but little through what channel the poison be introduced,—whether by sexual congress, by labial contact, or through the medium of the breast." In venereal affections, according to Dr. Whitehead, there is often a purulent discharge from the vagina, which stains the linen of a greenish hue, the stain being very difficult to remove by washing.

The appearances found in the uterus, in cases of lues venerea, are the following:—

1. Hypertrophy of the whole or part of the organ.
2. Induration.

These two pathological conditions are not by any means peculiar to lues venerea.

3. Erythema, presenting an even surface of a dark red, glistening aspect, or being interspersed with a number of white elevations, usually denominated follicular enlargements.

4. Excoriation; the cuticle, when the parts happen to be viewed at an early period, being broken in such manner as to present an appearance as though the subjacent structure had burst the cuticular envelope by over distension.

5. Aphthous ulceration.

These three forms of uterine disease, Dr. Whitehead says, are invariably syphilitic in their origin.

6. Endo-metritis. Of this there are several varieties, some of which are syphilitic.

7. Warty excrescences.

I believe, says Dr. Whitehead, there is no phenomenon more certainly indicative of the syphilitic diathesis than this.

Dr. Whitehead's merit is, that all his statements are founded on his own observations; that he has seen for himself, and honestly stated what he has seen. His great fault, a too easy credence of the assertions of his patients, and a general looseness in his pathological statements.

1. *Thoughts for the Medical Student. An Introductory Address, delivered at King's College, London, Oct. 1, 1851.* By WILLIAM BOWMAN, F.R.S. Pp. 32.

2. *Inaugural Address, delivered at the Opening of Sydenham College, Birmingham.* By JOHN BOON HAYES. Pp. 24.

We have never been among those who condemned the time-honoured custom of opening the medical session with an Introductory Address. It has been held, that such addresses are always unnecessary, and are generally commonplace. But, if not absolutely necessary to the prosecution of his studies, it cannot be denied, that the student of medicine ought not to be allowed to commence an important period of his life without some attempt to awaken in him sentiments and resolutions germane to the task which lies before him; and that this attempt need not be necessarily distinguished only by the absence of novelty and genius, as too generally asserted, is sufficiently proved by the numerous examples on record of introductory lectures being characterised alike by the highest qualities of truth, originality, and eloquence. In the year 1850 we published no less than six such lectures; and there is not one of them to which a student would not have listened with interest and benefit alike to his intellect and his heart.

The two Addresses before us are full of fine thoughts, finely expressed. Mr. Bowman's lecture is especially distinguished by the tone of thoughtful and useful advice which runs through it. A forcible picture is drawn of the nature of the Profession of Medicine, of the duties it claims, and of the exertions it demands. We regret that we have space only for one quotation, but it will suffice to show the spirit of the lecture and the power with which it is written. After speaking of the spirit and aim of Rational Medicine, Mr. Bowman continues—

"In pursuing the course thus rapidly sketched out, Rational Medicine adopts all the true results of observation, and seeks to reduce them into order,—searching amid the heterogeneous assemblage of reputed facts, for those leading guiding lights which serve to dispel the gloom in which mere empirical knowledge is shrouded; yet it does not reject or overlook what is fairly proved, because it can find no place for it as yet in its system. It is content, in its present state of imperfection, to mingle the empirical with the scientific, though ever striving to bring empirical facts under the control of law. In reducing the body of

experience to rules, it does not make itself the slave of rules or systems, remembering the complexity of the problems before it, the uncertainty and necessary occultness of many of the conditions involved, the influence of modifying influences. It stores up experience with simplicity of mind, is ever forward to receive new facts and to pursue fresh avenues of research. With patient industry and singleness of purpose it adopts knowledge from every quarter, and casts aside nothing as worthless that comes to it on reasonable testimony. It is not conceited, but candid and open. It may fall into the errors which are but incident to human thought, and the usual accompaniments of periods of great mental progress; but it is always willing to be guided to the truth, being animated above all things by a love of truth. It is ready to exclaim with Locke, 'It is truth alone I seek, and that will always be welcome to me, when or from whencesoever it comes!' It knows, indeed, that it is ignorant of the whole truth, that in all, even the most perfect and advanced of human systems of science, there is much to mark the poverty and weakness of our faculties, and therefore it vaunteth not its powers, or its conquests, but is tranquil, patient, humble, modest. If it discovers a new and useful truth, fraught with advantage to mankind, mindful of its great object, and true to that object, it promptly throws it into the common store, 'glad to distribute, willing to communicate' it."—P. 12.

The second Address we have to notice was delivered at the opening of a new medical school in Birmingham, and to which, if it can carry out the views so ably sketched by Mr. Hayes, we wish every success. The subject of medical education is discussed with much judgment; and we fully agree with Mr. Hayes, that the preliminary education should be finished and tested before the student commences his medical career. Subsequently, Mr. Hayes refers to the organization of Sydenham College, which presents some features of novelty and interest. It is governed by a Council composed of a great number of the medical men practising in Birmingham and the vicinity, and who are thus made directly interested in the educational scheme established in the town. A considerable power of supervision is given to these councillors over both the lecturers and the students. The effect of this upon the students will evidently be great. Every student will be brought under the observation of the medical public of the district to which he belongs, and in which he may probably afterwards practise. Talent, industry, and good character will thus, at the commencement of his career, gain for a good student the approbation of those whose favourable opinion is the best guarantee of future success; while idleness and inattention may be checked by the consciousness of the hundred eyes which always rest upon them. This idea of making the Profession of the district the governors of the medical school is a happy one, and we are certain will be attended with very good results.

Mr. Hayes' lecture seems to augur a brilliant and useful career for Sydenham College, and if the other lecturers possess talents as undoubted and as practical, Birmingham will be better off for medical schools than any other provincial town in the kingdom.

The Prevention and Cure of Many Chronic Diseases by Movements. By M. ROTH, M.D.

There are occasions on which we never fail to admire that saying of Menander—

"Multas ob causas non probo sententiam
Te nosce; multo rectius dictum foret
Nosce alios."

And on the present occasion our admiration is accompanied with an intense longing—yet a longing how vain—of being able to view, at our leisure and unsuspected, the workings that go on inside the pericranium of a man who could write a book such as that before us,—on Specific Movements. The very name, as announced, falls ominously on the ear, and disposes us to dismiss the intruder with little ceremony and less inquiry; and, from this impression, had we no better reason—and we suppose the impression will also be that of our readers—we are led to infer, that, of Dr. Roth's book, the title-page will be about the only page that will be read, at least by the few,—unless, indeed, the wish to have a laugh at its many absurdities should, some idle moment, tempt here and there a straggler to go further. But, as in this and in similar instances, the longing desire which has so often filled our minds cannot be gratified in the way we wish,—for we no more comprehend the mesmeric recipe for seeing

through a thick head than we do for seeing through a stone wall,—so must we, for the present, yield to the force of that great argument, necessity. And hence we must be so far resigned as to rest satisfied with what we can glean from the book itself, the author of which, but for that twist which gives a man a legitimate standing in the family of the Wrongheads, might be supposed capable of better things. He can, for instance, lay claim to an acquirement which some men never possess—a certain degree of diligence. He says he “has contented himself with compiling from every available source, whatever seemed to him to be of value. The mere fact that this method,” so says Dr. Roth, whose sentence we shall finish in our own way, “The mere fact that this method”—the method pursued by Dr. Roth—would be sufficient to induce us to pass a heavy censure on his book, had we no graver reasons for doing so. The way in which this work has been produced is, as might be expected, carefully concealed from the eye that looks only at the title-page. There is no hint there about compilation, nor anything to lead to a surmise that every word it contains is not “his own.” From what sources Dr. Roth could have amassed this heap of good things, but few English readers could surmise, and of this the compiler does not seem to be ignorant; for, says Dr. Roth, “This method of treatment [by specific movements] is insufficiently known to the Profession and the public.” Dr. Roth may, notwithstanding, be supposed to have no great wish to enlighten the Profession, and still less expectation of being able to do so, had he even the wish.

But M. Roth will no doubt disclaim both the position and office we have assigned him; for as some men are hard of hearing, for reasons with which they themselves are perfectly acquainted, so M. Roth may be equally hard of conviction. If so, the respectable M. Bailly may, with one or two “passive movements” of his vigorous hand, assist us in relaxing the spastic sinews of Dr. Roth’s obstinacy. “La nature,” says M. Bailly, “réserve à un petit nombre d’hommes le privilège d’éclairer le monde; et en leur confiant les lumières qu’ils doivent répandre sur leur siècle, elle dit à l’un, tu observeras mes phénomènes; à l’autre, tu seras géomètre; elle appelle celui-ci à la connoissance des loix; elle destine celui-là à peindre les mœurs des peuples et les révolutions des empires.” It would be preposterous to suppose that M. Roth, whose patch-work is composed of rags from so many purloins should have the most distant pretensions to rank with any of those of whom Dr. Bailly speaks. It is not from *La Nature* that Dr. Roth holds his honours; she has nothing to do, from beginning to end, with his motley cento; and if M. Roth, who attaches an M.D. to his name, cannot in his calling refrain from desecrating such subjects as physiology and pathology, we need have no reluctance in laying before the reader irrefragable reasons for condemnation, taken from such portions of his book as seem to be his own composition.

Though Dr. Roth can complacently say, “The influence of mechanical agents on our organism is not generally admitted, an opinion which is a necessary consequence of ignorance,” we are yet far from seeing what right Dr. Roth can have to assume the office of monitor and teacher among even the tyros of our schools, and our opinion Dr. Roth himself will scarcely be able to gainsay.

“The danger of a fatal termination in many diseases of the respiratory organs,” says Dr. Roth, “is caused by the impossibility of expectorating, or of an expiratory movement, as we see in croup, bronchitis, pneumonia, and affections of the mucous membranes of these organs, as asthma, tuberculosis, etc. etc.”—P. 64.

Would not Dr. Roth find some difficulty, notwithstanding the aid he might derive from his native talent that way, in writing another sentence containing so much palpable error?

Dr. Roth’s retrogressive “movements,” too, in physiology, are of the same sturdy character:—

“Frictions on the abdomen with a woollen cloth have restored the formation and circulation of the blood in the bowels.”—P. 288.

Rare physiologist!

“To chemical phenomena belong generation and reproduction, and these are produced by the vital activity of the different glands and glandular organs, the lymphatics and blood-vessels,” etc.

Thus reproduction is a production of the vital activity of glands, glandular organs, and lymphatics. Rare Bœotian physiologist!

“An old man of 70, an artist, who for many years had not left his room, derived benefit from sawing wood, fencing, and swinging his arms alone (solus). This cheering and cordial effect,” says Roth, “is, perhaps, attributable to the course of the arterial blood being changed by the quick movement of the arms.”—P. 288.

Rare Bœotian, whose retrogressive “movements” are surely of the most sturdy kind! It is no exaggeration to say, in reference to him,—

“Trunca manum pinus regit, et vestigia firmat.”

“Yawning is a very deep and long breathing; it is not only a strong natural stimulant for the respiratory process, but also, like a drink of fresh, cold water, an awakening and strengthening means for the exhausted vital power.”—P. 300.

An inexpensive, delightful, and elegant Bœotian recreation.

“Sneezing avails for the excretion of congealed matters and strange substances.”—P. 65.

But enough of such inanity.

In the epigraph which Dr. Roth has prefixed to his book, occurs the following sentence:—

“It is not enough for the physician to know that bodily movement is useful in a disease; but he must also be enlightened by physiology, in order to be able to prescribe what kind of movement must be used.”

Let us, then, turn to the practical part of the book, that the reader may see what enlightened use Dr. Roth makes of physiology.

“The prescription in gonorrhœa is generally (besides some movements depending upon particular circumstances) the following:—

“1. Percussion on the sacrum in the stride—standing position.

“2. Transversal chopping on the neck (of the bladder?) in the sitting position.

“3. Pressure above the os pubis in the lying position, etc.

“4. Vibrations of the perinæum, in the same position.” P. 231.

Admirable book this for the physical education of English youth of both sexes!

Piles, with discharge of Mucus.—“Besides the general treatment, we make use of movements on the pit of the stomach, and under the ribs. Strong sawings on the neck, longitudinal frictions on both sides of the throat, [the plot thickens] above the shoulders and down the arms, the positions acting on the diaphragm as flexions and turnings of the trunk are necessary; and if the rectum be very relaxed, spasms or blind piles be present, active movements and manipulations on the chine-bone down to the bottom are employed.”

Among the specific movements prescribed “to prevent the further development of incipient piles,” we have “passive manipulations on the sacrum and pelvis; on the first, by knockings; on the latter, by pressures.”

To these extracts from the practical part of the book, we shall only add one or two Germano-Bœotian curiosities:—

“Flat or not projecting nipples must be sucked by an adult woman or an older child, to prepare them for the nurse.” P. 292.

A child, such as the one required, older than an adult woman, must be of Bœotian parentage.

Something for the Cockneys.—“Those who cannot lead a life according to the principles of nature, ought often to ascend a mountain, and saw wood, in suitable dresses.” P. 295.

Trotting on Board of Ship.—Voyagers to Margate and Northend will be glad to hear of a new remedy for sea-sickness. “A passenger, being on the deck of a ship, sat down upon a chair, and imitated the movements which we make when trotting on horse-back, and thereby diminished his nausea.” P. 298.

One word more, as we throw aside this book. If Dr. Roth have nothing of the sagacity of Gerion’s dog—and how should he?—yet have we a reason for thinking he may have at least as many heads; and we are greatly mistaken if we have not already encountered one of them baying lustily in the arid fields of homœopathy.

Sunning-hill Wells; or a Practical Inquiry into the Action of Iron as a Constituent of the Blood, in Health and Disease, in connexion with that Chalybeate Spring. By HENRY HOLMES, M.D., etc. Pp. 103. London. 1851.

Sunning-hill is in Berkshire, and it rejoices in a chalybeate spring concerning which the late Dr. Mathew Baillie wrote a short treatise. Still, this spring is but little resorted to; and the object of Dr. Holmes’s brochure, is to bring it into

greater vogue—to turn some drops from the great stream which sets towards the German spas to a spot at home.

The iron exists in the Sunning-hill spring in the form of the carbonate. The quantity of iron present is small; but, in consequence of the absence of saline ingredients from the water, Dr. Holmes says, that the whole of the iron is absorbed, none running off by the bowels.

Sunning-hill, he states, is a very pleasant place for a residence.

Had Dr. Holmes written an account of Sunning-hill, the composition and the peculiar effects of its chalybeate spring, he might have effected his object; but he has filled his book with physiological and pathological views, and those far from correct.

GENERAL CORRESPONDENCE.

ON THE SPIRAL EVOLUTION OF THE EPIDEMIC POWER.

[To the Editor of the Medical Times.]

SIR,—In my former communication, which you published in the *Medical Times* of the 10th August, 1850, I called the attention of the Profession to the fact, that the latitudes of the route of the epidemic cholera were altered that year as compared with the years 1848 and 1849. From this apparent fact, I drew the consolatory conclusion, that England would escape an attack of the disease in 1850. Although at the moment I was addressing you, I was aware that five deaths from Asiatic cholera were reported in London, and that deaths from the same disease were announced in other towns in England, yet still I considered myself justified in expressing an opinion which time has so happily confirmed.

In that communication, I intimated that it appeared to me, that the cause of the epidemic which had engirdled the globe could not be of local origin. I considered it to arise from a derangement of the central forces of the earth,—that the epidemic power had assumed the form of a parabola, and was traversing the globe from east to west. In the earlier years, the course of the configuration of dipolarised light was between the parallels of 40° and 60° north latitude; whereas, in 1850, the progress appeared altered, approximating to the Equator, between the parallels of 20° and 40° north latitude. Since the date of my former communication, the epidemic has raged in China, Hindostan, Egypt, Malta, Algeria, Barbary, the Canaries, the valley of the Mississippi, Mexico, and California; all within the predicated parallels. Jamaica, about $1^\circ 30'$ to the south of the 20th parallel, and Java, about 8° to the south of the Equator, were attacked. From these facts, I am confirmed in the opinion which I offered in my former note, that the true cause of the epidemic is not of local but of cosmical origin. During the progress of the epidemic, a series of magnetic storms were passing through the globe. This fact was proved by the chromatic dipolarization of the earth light, as manifested in the Aurora Borealis. The auroral corruscations were present during the progress of the epidemic power. If the original circles of latitude had been maintained, the disease (after its Atlantic transit) would have appeared in Newfoundland, Labrador, and the shores of Hudson's-bay. I have not heard that such was the case. On the contrary, we find it in the United States; for it took an oblique direction across the Atlantic latitudes. The circular was thus altered into a spiral progress as respects the globe. Now, it is a remarkable fact, that in all the great cosmical operations, such is the organization of systems of stars, and the condensation of the nebulae, when the two opposing forces are balanced the most perfect of all mathematical figures, the circle, is produced. If, however, a third extrinsic power interferes, such as that of attraction or gravitation, a spiral degeneration is the result. And this primal law seems to pervade the animal and vegetable organisms. That the spiral evolution of the epidemic power was produced by an efficient cause, there could be no doubt. Gravitation could not account for it; consequently an attraction of another character must be sought for. It appeared to me, that the first oblique deviation was caused by the attraction of the magnetic equator, posited in the Atlantic Ocean about a degree and thirty minutes to the westward of the Azores. The epidemic power does not appear to have been enabled, by its own dynamic velocity, to pass the meridian of the magnetic equator in its original circular route. This attraction, apparently exercised by the magnetic equator upon the revolving parabola of dipolarised light, seems to me deserving of attention. But, although the attraction of this third power appears to have been effective to alter the position of the epidemic

power 20° to the south of its former route, the spiral evolution being completed, the epidemic power resumed its circular progress in other latitudes parallel with the Atlantic isothermal lines. The disease then manifested its fatal powers by attacking the places which I have mentioned above. During the progress of the disease other parts, not contained in the general route, may have been attacked; these appear exceptions to the general law, and the causes producing the disease in those places may require a special investigation. It is not my wish to enter into a controversy upon the above views, but only to draw the attention of the Profession to the fact, that the condition of light may have more influence in the production of epidemic and other diseases than is generally supposed. In the great epidemic we may behold, on a magnified scale, the properties of the smaller epidemics which locally prevail. We may therefore consider it probable, that these minute imitations arise from similar causes, but modified in degree. It is possible that the angle of polarisation may produce an effect not anticipated. If the rays of solar light be polarised by reflection from the earth light, at an angle of 40° , and produce epidemic cholera, a polarity disturbed at an angle of 20° might produce a minor epidemic of a species peculiar to that angle. When we consider that the integrity of the triad unity of light is a necessary condition of the vital organisation of the animal and vegetable world, and that light decomposed cannot fulfil its original purposes, all deviations from the normal integrity are deserving of consideration. If an epidemic map of the globe were published in conjunction with the magnetic map, it is probable that an unexpected light might be thrown on the origin of epidemics.—I am, &c.,

WILLIAM JOHN THOMAS, M.R.C.S.

Liverpool.

STATISTICS OF AMPUTATION AT THE GENERAL HOSPITAL, BIRMINGHAM.

[To the Editor of the Medical Times.]

SIR,—On looking over the record of my cases of amputation, performed at the General Hospital, Birmingham, which I have been induced to do in consequence of Mr. Hodgson's assertion, in his evidence lately given to the Board of Governors, and quoted in the *Medical Times* of November 1, 1851, that "seven out of ten patients die from amputation of the thigh," I find I have performed the operation of amputation:—

Of the thigh 16 times. 6 of these were primary; 10 were secondary. Of these, taken together, 3 were fatal; 2 were primary operations, 1 secondary; 1 died from other injuries, viz., concussion of the brain, and removing an arm at the same time. The other two died from the effects of purulent infection. I may add, however, that in one of the cases I removed, at the same time, successfully, the thigh at the upper third, and the opposite leg below the knee.

Of amputations below the knee, I have had 13 cases, of which 3 were fatal; 2 from purulent infection, and 1 from consumption some weeks after the operation, but before the stump was quite healed.

Of the humerus, I have had 9 cases, of which 2 died. In one, the thigh also was amputated (in the child above mentioned), in the other (a boy about eight years old) a cart had passed over both thighs, producing great effusion of blood beneath the integuments, from the effects of which he sank.

Of the fore-arm, I have had 6 cases, all successful.

Of the shoulder-joint 1, unsuccessful; the man having also sustained severe bruises, and other injury of the chest.

Taking hospital cases as they generally occur in a large manufacturing town like this, where many amputations must be primary, I believe that these cases show a favourable average, more than that recorded by Mr. South in his edition of "*Chelius's Surgery*," Vol. II., pages 905 and following.

All these amputations have been performed by the circular mode, or as much so as the circumstances of the case, with respect to obtaining sufficient integument, admitted.

I have the impression that I have not been so successful in my amputations as some of my colleagues, particularly our much respected senior surgeon, Mr. Wood, who I believe is one of the most successful operative surgeons now living. Had I not been present when Mr. Hodgson made the assertion referred to, viz., that 7 out of 10 died from amputation of the thigh, (of course, judging from his own impression of success during the time he was connected with the Birmingham General Hospital,) I should have supposed that the reporter had made a mistake, and substituted the word "die" for "recover," which would probably be nearer the truth. As good sometimes arises out of evil, the possibility of such

assertions being made, shows the utility of faithful records of the results of every operation in a public institution being carefully kept.

I am, &c.

DICKINSON W. CROMPTON, F.R.C.S.
One of the Surgeons to the General Hospital.

Birmingham.

RETAINED PLACENTA.

[To the Editor of the Medical Times.]

SIR,—In reply to "Physician Accoucheur," in your valuable Number of Nov. 22, I beg to say, that in the case in which the placenta was permanently retained, it was, doubtless, absorbed and passed off by the fetid sweats,—the lochial discharges were purulent and smelt very offensive, but still nothing solid passed! I did not deem it necessary to say how I used one of Maw's enema syringes in the other case, for I had supposed that every member of the Profession would have given me, at least, the credit of performing so trivial an operation properly, namely, introducing the tube by the guidance of the finger safely within the os uteri before discharging the contents of the syringe within its cavity. The placenta left in this case came away exactly sixteen hours and a half after I had removed the former part of the same. I do hope this will be sufficient to upset Dr. Robertson's dogma!!

I am, &c. J. S. BEALE, M.R.C.S.E.

Harrow-road.

MR. GAY'S METHOD OF TREATING DISEASED JOINTS.

[To the Editor of the Medical Times.]

SIR,—Every practical surgeon must feel interested in the subject brought before the London Medical Society, at a recent meeting, by Mr. Gay, a report of whose paper upon the treatment of diseased joints by free incisions into the articulation, appeared in the *Medical Times* of last week.

It is with great pleasure that I bear my humble testimony to the excellent results of this mode of treatment in certain forms of joint-disease. Through the kindness of Mr. Gay I had the opportunity of seeing and examining, in the wards of the Royal Free Hospital, two of the cases in which he had adopted this plan, and certainly the effects were most excellent. The one case I recollect was that spoken of in the Report, where the foot of a young female was involved in serious disease, and where amputation was considered necessary, and not performed on account of the wretched state of the patient's health. I saw her previous to her discharge from the hospital, and nothing could possibly have been more satisfactory.

It has also fallen to my lot to watch for some time a case of extensive disease of the knee-joint, in which there was every appearance of amputation being necessary to save the patient's life, and where free incisions being made on each side of the articulation, a perfect recovery (that is to say, ankylosis having taken place) ensued.

Mr. Gay's views with respect to the pathology of certain forms of joint disease, and the rationale of his mode of treatment are so clear and sensible, that it appears to me a trial should be given to the plan of opening a diseased articulation freely before resorting to excision or amputation. Nevertheless, I cannot go so far as that gentleman has done, in remarking, that "the operation of resection of a joint is not only a useless, but an unphilosophical mode of treatment for diseased joints." Ample experience has already shown that resection is far from being a useless operation; for, when properly and fully conducted, it has proved to be a most successful procedure, and the limb is preserved in just as useful a condition as after the operation recommended by Mr. Gay.

There can be little doubt that there are many forms of this disease in which free incisions into the joint will be sufficient to bring about a cure; whilst, at the same time, a great number of cases will be met with in which morbid action has gone on to such an extent, that nothing else but the excision of the ends of the bones will be of eventual service.

I should not have troubled you with these remarks, as I had originally intended to have been present at the reading of Mr. Gay's paper, and to have given my evidence in favour of his plan of treatment from what I had seen of it; but I was unfortunately prevented from attending the meeting, and therefore beg to offer my mite, in addition to what was there adduced in favour of a measure which has been brought before the Profession by a surgeon,

whose character is such as to give great weight to any practical proposition emanating from him.

I am, &c.

HENRY SMITH.

13, Caroline-street, Bedford Square.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY, AND THE HOMŒOPATHS.

[To the Editor of the Medical Times.]

SIR,—In common with many others, I must beg to remonstrate at the kind of censure aimed, both by yourself and your Correspondent "Argus," in your Number of last Saturday week, against those Fellows of the Royal Medical and Chirurgical Society, who may not sign the memorial about to be presented to the Council, on the subject of homœopathy. By implication, you condemn us, either as abettors of homœopathy, or as "favourable to the lax and supine behaviour of the Colleges."

This is not like your usual impartiality, and sound unprejudiced judgment. Many refuse to sign this memorial, not because they are friends to quackery, but because they think the Medical and Chirurgical Society is not the proper channel through which an opinion should be expressed on the subject of homœopathy. It would be engaging the Council in the discussion of a matter entirely foreign to the sphere of their duties. If any perverts are to be found among the Fellows, they should be excluded; but any expression of opinion by the Council or by the Fellows summoned to a general meeting, would be extending a degree of condescension to this fanciful practice and gross deception, which hereafter could not be refused to mesmerists, electro-biologists, or even the disciples of the "Od" force, whenever their turn arrives to pass from the humble position of the marvel of a *soirée* to become the major and more attractive farce of the day.—I am, Sir, &c.

17, Chester-street.

W. R. BASHAM.

MEDICAL ETHICS.

[To the Editor of the Medical Times.]

SIR,—I believe that your readers will sympathise with me in what I am about to relate, and I trust you will do me the kindness to give me your advice.

This morning, while out visiting my patients, I met a lady some ten weeks confined, formerly an old patient of mine, with her child in her arms. After the usual compliments, I suggested the propriety of vaccinating the infant, when she said, "It has been done, Sir: it was done by Mr. Jones, of Soho-square." "Why," said I, "did you take it there?" feeling hurt at her having left me: to which she said, "Oh, Sir, he was so kind; he advised me to have it done as soon as the child was seven weeks old, and he told me it would be gratuitous." "I see," I observed, "this was said when you called to have it registered?" "Yes," was the reply.

Now, Sir, do not imagine that this is the first time that I have been thus served; far from it. Three times during these last twelve months I have been similarly annoyed by finding my patients solicited to bring their children to be vaccinated when they have gone to have them registered.

I wish, then, to know of you, is there any remedy for this? Can you suggest any plan whereby practices such as these can be put a stop to?

I might observe, in conclusion, that Mr. Jones has the quadruple duty imposed upon him, of attending to this parish of 18,000 to 20,000 inhabitants, the Strand Union Workhouse, the Registrarship, and the Vaccination.—I am, &c.

A MEDICAL PRACTITIONER OF ST. ANN'S, SOHO.

HOMŒOPATHIC THUNDER.

[To the Editor of the Medical Times.]

SIR,—Of all your readers, medical and non-medical, there is probably not one who could not point out among his friends or acquaintances, one or more individuals who invariably suffer the most distressing symptoms at the approach or apprehended approach of a thunder-storm.

"Sunt qui trepidant, et ad omnia fulgura pallent,
Cum tonat ex animis primo quoque murmure cœli."—JUVENAL.

But of them all, there is probably not one who yet knows the homœopathic remedy in such cases. It is, if not remarkable, at least novel. The following is the manner of exhibition. The patient is to be seated in such a manner that the most perfect still-

ness can be observed, the mouth itself being half open, so that the very breathing shall not be heard, *nec labia movet*; the operator, that is, the homœopathic thunderer, having silently seized between the thumb and forefinger of each hand the very finest fibril of silk that can be procured, now approximates his two hands, with their important trust, close to the ear of the patient, now motionless as a statue; then, with suitable gravity of face, *more undabatorum*, and when all is silent expectation, he gently disparts his two hands, so as to snap the delicate fibril in twain;—in an instant, (by virtue of the homœopathic law,) all is changed; the symptoms have all vanished, as by enchantment; and nothing is now heard but uncontrolled and uncontrollable laughter; but whether at the expense of the poor homœopath or not, we do not intend at present to inform your over-curious readers. They who long for further information will, no doubt, ask the first fat-headed homœopath they meet; unless, indeed, they prefer applying at once to the Secretary, or porter, or patrons of the homœopathic hospital for idiots of all grades and denominations, who will gladly give them all the information they desire, and duly advertise them of all the cures the mock-thunderers may from time to time perform,

I am, &c. R.

REPORTS OF SOCIETIES.

STATISTICAL SOCIETY OF LONDON.

Lieut.-Col. W. H. SYKES, Vice-President, in the Chair.

Dr. GUY read a paper on the

DURATION OF LIFE AMONG THE CLERGY.

This paper was the first of a series of communications which Dr. Guy proposed addressing to the Society on the duration of life among the members of the several professions. A preliminary inquiry into the subjects, based on facts extracted from the obituaries of the Annual Register, was brought under the notice of the British Association in September, 1846, and was subsequently published in the Ninth Volume of the Statistical Society. In that essay, it was shown that the clergy are longer lived than the members of other professions, though they do not live so long as the population of England, and not so long by several years as agricultural labourers. The facts contained in the present communication tended to confirm the results established in the former essay, by showing a very favourable duration of life among the clergy; but detailed comparison of one profession with another were necessarily reserved till the completion of the contemplated series of papers. The essay was illustrated by several tables; among others by tables comparing the clergy of cities and towns with those of rural places, the married with the single clergy, and the clergy of past times with those of the present day. It resulted from these tables, which were admitted to be based on some points on too small a number of facts, that the clergy of rural districts had an advantage of more than two years over those in cities and towns, and the married of more than five years over the single. The duration of life among the clergy in the last three centuries appears to have been remarkably steady, with signs of recent improvement. The last table of the series contrasted the average age at death of popes, archbishops, bishops of the Established Church, and Romish saints. The popes, being appointed very late in life, attained the greatest mean age, exceeding that of the archbishops and bishops by about one year, the latter surviving the Romish saints by about two years. This abbreviation of life in the case of the saints of the Romish Calendar, may probably be attributed in part to celibacy, in part to the ascetic practices to which some of them were addicted.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. P. M. LATHAM, President.

Dr. Bence Jones presented a specimen of

SEROUS CYSTS IN THE KIDNEY, WITH

SOME OBSERVATIONS ON THE FLUID CONTENTS.

John Bussy, aged 35, was admitted into St. George's Hospital on the 29th of October, 1851. No satisfactory history could be obtained from him. It was said that he had been ill for a month, and that he was accustomed to drink hard. On admission, the

fetor of the breath was intolerable. The pulse was 130, exceedingly feeble; the tongue coated, the expectoration scanty. There was no œdema of the legs; the urine was passed involuntarily in bed. There was much delirium, and he was often trying to get out of bed. There was extensive dulness at the back of the right lung, with very loud bronchial breathing, and coarse moist sounds, and absence of all healthy respiratory murmur. The pulse increased in frequency, the breath became more fetid, and he died October 31st. *Post-mortem* by Dr. Ogle fourteen hours after death. The body was emaciated, but well formed. Height 5 feet 6 inches. There were extensive and very firm adhesions in the left pleural cavity; slighter adhesions towards the apex of the right cavity. Both lungs had a very dark bluish black surface, from an immense quantity of dark deposit, in small shot-like masses beneath the investing pleura, which was roughened by prominent tubercular deposit, around which the dark matter was generally deposited. On section, both lungs contained large quantities of scrofulous matter. The tubercles, which varied much in size, were generally surrounded by the black deposit. This was especially the case in the right lung, where, in the posterior parts, vomicae had formed, with definite fibrous areolar parietes, containing matter, for the most part of a very dark brownish colour, and very fluid, and of a most offensive gangrenous smell. Some of the tubercular matter, instead of softening, had become consolidated, and presented pasty-like deposits; but these were rare. In its posterior and central parts the lung was perfectly hepatized around the tubercles and vomicae. The upper part and margins of both lungs were free from consolidation, but full of frothy fluid. The bronchial tubes throughout were highly congested. The heart was healthy, and weighed 10½ oz. The abdominal cavity contained a small quantity of yellow fluid. The liver was soft, pale, and very fatty, weighing 3 lb. 5 oz. The kidneys weighed together 11 oz. 7 drs. The right kidney was rather larger than the left. Both were perfectly smooth on the surface. The capsule being easily removed, numbers of small cysts, of various sizes, were seen. They varied in size from a pin's head to a walnut. On section, they were seen extending into and destroying the cortical structure. Some contained a gummy, soft, solid matter, of a yellowish colour. Others contained perfectly liquid contents. One cyst, the walls of which were fibrous and white, was punctured, and from it about a drachm of clear, offensive-smelling liquid was obtained. Examined by the microscope, scarcely a single blood globule could be found. No epithelium or crystals of any kind could be seen. The liquid was neutral to test paper. The specific gravity was about 1005. It contained no trace of uric acid. No earthy phosphates. Dr. Bence Jones could not satisfy himself that any urea was present. There was some salt of ammonia present, and a very considerable quantity of albumen. Under the microscope, the kidneys appeared healthy. The spleen was soft, weighing 3½ oz. The other viscera were healthy.

Dr. C. J. B. Williams inquired whether the contents of the cysts had been submitted to chemical analysis to ascertain the presence of urea? The great amount of the fluid they contained was generally serum, not urine; but, nevertheless, he (Dr. Williams) had in more than one instance detected the existence of a certain proportion of urea. The inference he had drawn was, that these cysts contained urine diluted with serum, and that they were obliterated uriniferous ducts.

Dr. Bence Jones remarked, that the fluid had a specific gravity of 1005, and that there were not any traces of uric acid. The fluid was neutral to test paper, so that, perhaps, there existed minute traces of urea. Uric acid, however, was totally absent from the fluid, which contained albumen plentifully.

Dr. C. J. B. Williams said, there was a very interesting point to which Dr. Bence Jones had not alluded,—that was the occurrence of gangrene of the lungs in connexion with this inefficient state of the kidneys. It was not improbable that the diseased condition of the lungs had been favoured by the non-purification of the blood by the kidneys.

Dr. Heale, after describing his views relative to the cardiac and renal circulations, observed, that any great disturbance of the system was sure to produce an equivalent disturbance of the lungs, and might thus account for the gangrene.

Dr. Crisp expressed his conviction, that the gangrene of the lungs and the renal disease were mere coincidences. If it were otherwise, gangrene of the lungs would be much more prevalent.

Dr. Bristowe presented a specimen of

DEPOSIT OF TUBERCLE IN THE PERITONÆUM, AND IN THE UTERUS AND FALLOPIAN TUBES.

The two preparaticus (the one a portion of the small intestines, the other the uterus and appendages) were removed from the body

of an unmarried female, twenty years of age, of ordinary stature, and not emaciated, who died three weeks ago, in St. Thomas' Hospital, without the possibility of any satisfactory history being obtained, or attention being specially directed to the abdominal symptoms, which were slight. The author was not aware if there had been any discharge from the uterus. *Post-mortem.*—On opening the cavity of the abdomen, strong adhesions were found in almost every part, and a small amount of slightly (if at all) turbid serum. The great omentum was strongly adherent to the abdominal parietes in front; the convex surface of the liver was so closely and firmly united to the diaphragm, that they could not be separated, and the intestines were everywhere attached to one another by strong bands and filaments of cellular tissue. Besides this, the peritoneal surface, together with the adhesions, was thickly studded with nodules of tubercular matter, varying in size from that of a filbert to scarcely visible points. The largest of all were very irregular and nodulated. Those of intermediate size (between that of a pin's head and that of a pea) were more or less rounded, and either sessile or pedunculated or developed apparently in the adhesions themselves. Most of them presented patches of black discoloration, and this was so far of use that it enabled one to recognise the deposit in its earliest stage. The mesentery, like the other parts of the peritoneum was studded with tubercles, but the mesenteric glands, as far as they were examined, appeared healthy. The stomach and great part of the intestines were healthy; the solitary glands of the large intestine were unnaturally distinct, and their orifices remarkably large and evident. In the sigmoid flexure was an ulcer, about an inch in diameter, with a sinuous, well-defined margin, and small patches of mucous membrane still adherent to its surface. The liver was somewhat enlarged, pale, soft, coarse in texture, and fatty. The spleen was of natural size, remarkably firm, of a dark colour, and presented on section a slight degree of translucency. The kidneys were pale, but healthy. The uterus and its appendages were the seat of extensive tubercular deposit. The Fallopian tubes were shorter than natural, about one-third of an inch in diameter, smooth on the surface, apparently distended, and conveying to the finger a sense almost of fluctuation. The right one was remarkably twisted, the fimbriated extremity being turned back upon the uterus, to the posterior part of which it was adherent. The left followed nearly its usual course, but both were fixed by adhesions to the surrounding parts. On squeezing them, well-marked tubercle exuded from their extremities, and on section they were seen to be completely filled by yellow cheesy tubercle. The ovaries were closely drawn to the sides of the uterus, but were themselves healthy. The uterus was somewhat increased in size, and twisted out of its natural direction by the adhesions which itself and the Fallopian tubes had contracted. On section its mucous membrane was seen to be the seat of tubercular deposit and ulceration. That of the cervix was healthy. Isolated masses of tubercle were likewise seen in the muscular tissue of the uterus itself. The peritonæum covering the uterus was similarly affected to the other parts of that membrane. The only mark of disease in any other organ was the presence of two or three small clusters of miliary tubercle in the apex of the right lung.

Mr. Pollock remarked, that, on looking over the *post-mortem* examination-books at St. George's, he had found that there had been six cases in which the mucous membrane of the uterus had been destroyed in the same way as in Dr. Bristowe's case, and in which there had been little or no evidence of discharge from the uterine parietes during life. In three of these cases scrofulous disease was found in the ovaries.

Dr. Brinton considered, that in many cases the fibrinous deposit after peritonitis assumed the characters of tuberculous matter, so as to lead to a doubt whether the matter deposited really is tubercular matter, especially when all the more important organs, usually affected in that disease, escape. Had the aid of the microscope been resorted to?

Dr. Bristowe said, that it had not been employed at the time when the observation could be satisfactorily made.

Dr. C. J. B. Williams had seen many cases of tubercular peritonitis, unaccompanied by any affection of the mesenteric glands; in fact, so far from their going together, he (Dr. Williams) thought they might rather be regarded as antagonistic of each other. When tubercular peritonitis exists, the mesenteric glands escape, and when those glands are diseased, then the peritoneum is more usually free. It may be said, that what is called tubercular peritonitis is not really tubercular; so says Chomel; but the diseases merge into each other, and, in fact, although the yellow tubercle is not produced, yet the miliary tubercle is met with in such cases.

Dr. Bristowe had examined a patient lately, in whom tubercular disease of the ovaries co-existed with the same condition in the lungs.

Dr. West asked Dr. Bristowe whether, in the case he had mentioned, the entire of the uterus was diseased?

Dr. Bristowe replied, that the uterus was not affected, but the ovaries and the Fallopian tubes.

Dr. West had asked the question, because doubts were sometimes entertained as to the nature of the deposit in the interior of the uterus; it was supposed to be fibrinous deposit mixed with a considerable quantity of epithelium, and not true tubercle. He had referred to the subject to gain information from the members present.

It was then arranged that the organs exhibited by Dr. Bristowe should be placed in Dr. West's hands to report on at a future meeting; and also that the kidneys exhibited by Dr. Bence Jones should be referred to Dr. Bristowe for a similar purpose.

MEDICAL SOCIETY OF LONDON.

DR. MURPHY, President, in the Chair.

Dr. Snow placed on the table

TWO KIDNEYS AFFECTED WITH GRANULAR DEGENERATION,

AND HYPERTROPHIED TO NEARLY TWICE THE NATURAL SIZE.

The patient from whose body they had been removed was a female, aged 38. She had had scarlet fever four years ago, and since that time had not felt perfectly well. It was reported that she had an attack of inflammation of the bowels two years ago. For some months before her death she had been very pale and anæmiated. Six weeks ago she had an attack of acute rheumatism after exposure to cold, but recovered from it, and as she had a good appetite and no pain or other prominent symptom, her medical attendant expected that she would get well. She, however, became more blanched, presenting the appearance of a person who had suffered from profuse hæmorrhage, and she died of simple exhaustion without coma or other cerebral symptoms. He (Dr. Snow) did not see the patient till a few hours before her death, when it was ascertained that she had for some time been in the habit of passing urine in much more than the natural quantity. Some urine met with in the bladder after death was found to be albuminous. The liver was a little enlarged, but the organs generally, with the exception of the kidneys, were pretty healthy. Dr. Snow considered that the disease of the kidneys probably originated in the attack of scarlet fever. Dr. Christison had remarked that some cases of Bright's disease dated their origin from scarlet fever, and he, Dr. Snow, had witnessed the same circumstance. The continued drain of albumen from the system had sometimes the same effect as a true hæmorrhage, Dr. Christison having found the quantity of hæmotosin in the blood to be extremely deficient in some cases of albuminuria; and in the case under consideration, the anæmia was the only symptom, (failing a chemical examination of the urine,) and caused death without any of the other complications which often result from Bright's disease. The patient had never had anasarca, or any form of dropsy, the diuresis having probably prevented this.

Dr. Camps inquired of Dr. Snow, what were the symptoms immediately preceding death? Death from anæmia was of extremely rare occurrence, and, consequently, the detail of the symptoms would be very interesting. He thought it possible that death had occurred by syncope, the heart not receiving its due stimulation from the absence of blood-corpuscles.

Dr. Snow, in reply, said, the symptoms were those of exhaustion. Death by anæmia, from organic disease, was not so very rare. The patient had suffered from acute rheumatism some time before her decease; on recovering from that malady, she continued blanched, the exhaustion made progress, and she sank. There were not any remarkable symptoms, nor was there any dropsy.

Mr. Streeter inquired, whether there was any fatty degeneration of the heart, and also, whether the fatty degeneration of the kidney was considered to be a chronic disease, connected with the scarlet fever, which had occurred years previously, and not followed by dropsy.

Dr. Snow said the heart was pale and flabby, with a little fat on the surface. It was not examined under the microscope, and no fatty degeneration evident to the naked eye. The left ventricle was slightly hypertrophied. He (Dr. Snow) believed that Bright's disease following scarlatina was of very common occurrence. As to fatty degeneration of the kidney, he would not give any opinion. Dr. G. Johnson thought that Bright's disease consisted chiefly of fatty degeneration, but he would not say whether all the chronic diseases

of the kidneys which were classed together under that denomination were instances of fatty degeneration; in some he was inclined to think there was sometimes a fibrinous deposit. Cases of renal disease, with considerable diuresis, may occur after scarlatina without the complication of dropsy. He (Dr. Snow) had met with such cases. He could not say whether there was or was not pain in the loins; if there had been, it was not sufficient to attract attention.

Dr. Sibson remarked, that Dr. Johnson had modified his views respecting fatty degeneration of the kidneys as causative of Bright's disease. He looked upon it now as only one of the causes of that disease. Gluge was the first to originate that theory.

Mr. Streeter could understand the existence of such disease in one kidney, unaccompanied by pain in the loins, dropsy, or albuminous urine, but not in both. He presumed that in the case before the Society, the disease had commenced in one kidney, and that the other had been involved afterwards; and he thought that if the patient had survived, there would have been no discerning structure of the organs left, and then dropsy would have supervened.

ERRATUM.—We have been requested to state, that the improvement in the speculum recti, shown by Mr. Coulson at the Medical Society, was suggested by Mr. Hovell, surgeon, of Clapton, and not by Mr. Ferguson, as mentioned in our Report.

HARVEIAN SOCIETY.

Dr. James Bird read a paper

ON THE PATHOLOGICAL MODIFICATIONS AND TREATMENT OF CROUP;

the main object of the author being to point out the important differences of practice demanded in such gradations of pathological condition. The *morphological* character of the disease, or the result of morbid action, should influence us less in determining the particular mode of treatment to be followed, than a consideration of its *pathogenic* origin. As the membranous exudation which characterises the latter stages of croup may, though rarely, be a consequence of true inflammatory hyperæmia, but is more frequently associated with asthenic congestion, a predominance of spasmodic symptoms, and a secretion of unorganisable fibrinous membrane from the mucous cryptæ, which are found dilated, and in an ecchymosed or pale condition, very different from that of true sthenic fibrinous inflammation, Dr. Bird considers that this state of diphtheritic exudation, which is so common among the inhabitants of towns, and those occupying low, damp, malarious localities, is of low vitality and unorganisable, existing in conjunction with much irritability and spasmodic action of the muscles of larynx, and transverse membranous fibres of the trachea, by which the air-passages are momentarily contracted or closed. The exuded membrane resembles in such cases that sometimes met with in cases of diphtheritic dysentery, and is detached by exactly the same process, a return of the natural mucous secretion of the part, which separates it from the original mucous structure, and prepares it for excretion. These morbid results are viewed as dependent on particular climatic influences, which should be always taken into account before determining any particular line of treatment. The antiphlogistic measures necessary for subduing true inflammatory croup, and which might be found salutary in a dry, cold climate, would be utterly destructive of the patient in an opposite state of disease, or in a damp, malarious locality. Such are the important general principles on which Dr. Bird would regulate the treatment; and, in order that this may be conducted with precision and discernment, the disease is divided into three stages: 1st. The catarrhal stage; 2nd. The spasmodic stage; and 3rd. The stage of exudation,—all of which are minutely described. A careful diagnosis is made between the second stage of croup, or *laryngitis stridula*, and that purely spasmodic disease, the thymic asthma of German pathologists, commonly called *laryngismus stridulus*. In order further to guide the judgment in treating this disease, its several complications of bronchitis, gastric affections, and cerebral irritation, reflected on the larynx by branches of the pneumogastric, the recurrent laryngeal nerves, are particularly pointed out. The indications of cure are—1st. To allay the spasmodic irritability of the laryngeal muscles and fibres of the trachea, by which the air passages are contracted, and the respiration rendered stridulous. 2nd. To subdue the inflammatory hyperæmia of the mucous lining of the larynx and air passages, and thus prevent the secretion from

its follicles of false membrane. 3rd. On the failure of these measures, to procure the discharge of the false membrane and support the strength. The means of specially fulfilling these indications are then detailed at length, but of which an abstract cannot well be given here.

ROYAL COLLEGE OF SURGEONS.

EXAMINATION FOR THE FELLOWSHIP.

MATHEMATICS.—November 4, 1851.

TRANSLATE INTO ENGLISH.

Ipsa teneus dextra pateram pulcherrima Dido
Candentis vaccæ media inter cornua fundit;
Aut ante ora deum pingues spatiat ad oras,
Instauratque diem donis, pecudumque reclusis
Pectoribus inhians spirantia consulit exta.
Heu vatum ignaræ mentes! quid vota furentem,
Quid delubra juvant? Est mollis flamma medullas
Interea, et tacitum vivit sub pectore vulnus.
Uritur infelix Dido, totaque vagatur
Urbe furens, qualis conjecta cerva sagitta,
Quam procul incautam nemora inter Cresia fixit
Pastor agens telis, liquitque volatile ferrum
Nescius; illa fuga silvas saltusque peragrat
Dictæos; hæret lateri letalis arundo.
Nunc media Æneam secum per moenia ducit,
Sidoniasque ostentat opes urbemque paratam;
Incipit effari, mediaque in voce resistit:
Nunc eadem labente die convivia quærit,
Iliacosque iterum demens audire labores
Exposcit, pendetque iterum narrantis ab ore.

Ἡσίτευσεν δὲ τῶν βαρβάρων πεζὸς μὲν ὁ Περσίων, ἵππος δὲ ἡ Σακίων, ἀνὴρ δὲ λέγεται Μαρδόνιος. Ἑλλήνων δὲ, ἀγαθῶν γενομένων καὶ Τεγεστέων καὶ Ἀθηναίων, ὑπερεβάλοντο ἀρετῇ Λακεδαιμόνιοι. ἄλλω μὲν οὐδενὶ ἔχω ἀποσημῆσθαι (ἅπαντες γὰρ οὗτοι τοὺς κατ' ἐσωτοὺς ἐνίκων), ὅτι δὲ κατὰ τὸ ἰσχυρότατον προσενείχθησαν καὶ τούτων ἐκράτησαν. καὶ ἄριστος ἐγένετο μακρῷ Ἀριστόδημος κατὰ γνώμας τὰς ἡμετέρας, δὲ ἐκ Θερμοπυλίων μόνος τῶν τριηκοσίων σωθεὶς ἔχε ὄνειδος καὶ ἀτιμίην. μετὰ δὲ τούτον ἠρίστευσαν Ποσειδώνιος τε καὶ Φιλοκύων καὶ Ἀμομφάρετος Σπαρτιῆτης. καίτοι γενομένης λέσχης δὲ γένοιτο αὐτῶν ἄριστος, ἔγνωσαν οἱ παραγενόμενοι Σπαρτιῆτων Ἀριστόδημον μὲν βουλόμενον φανερώς ἀποθανεῖν ἐκ τῆς παρεούσης οἱ αἰτίης λυσσώντα τε καὶ ἐκλιπόντα τὴν τάξιν ἔργα ἀποδείξασθαι μεγάλα, Ποσειδώνιον δὲ οὐ βουλόμενον ἀποθνήσκειν ἀνδρὰ γενέσθαι ἀγαθόν τοσοῦτον τούτον εἶναι ἀμείνω. ἀλλὰ τὰντα μὲν φθόνῳ ἂν εἴποιεν οὗτοι δὲ τοὺς κατέλεξα πάντες, πλην Ἀριστοδήμου, τῶν ἀποθανόντων ἐν ταύτῃ τῇ μάχῃ τίμιοι ἐγένοντο.

1. How far did the conquests of Alexander the Great extend? Mention the date and circumstances of his death. Did he in any way promote the interests of science?
2. What was the ostracism? Mention any remarkable persons who were ostracised.
3. Who were the sophists? Who was their chief antagonist, and what was his fate?
4. Name the principal orators of Greece, and account for the excellence which oratory attained in that country.
5. What is the character of the early Roman history in point of reality and credibility? By what great modern writer has it been investigated?
6. What were the agrarian laws? By what celebrated Romans were they proposed, and with what result?
7. Give the date and character of the Emperors Claudius and Trajan.
8. "Parcere subjectis et debellare superbos." Give instances of this from the history of Rome.
9. Translate into Latin:—The fraternal love of Maximus and Condianus has saved their names from oblivion and endeared their memory to posterity. Their studies and their pleasures were still the same; and in every action of life it was observed that their two bodies were animated by one soul. The Antonines, who valued their virtues and delighted in their union, raised them in the same year to the Consulship, and Marcus entrusted to their joint care a great military command, in which they obtained a signal victory over the Germans. The kind cruelty of Commodus united them in death.

MATHEMATICS.

1. Find the sum of $\frac{1}{4}$ ths of $\frac{1}{3}$ rd of a guinea, '2333... of 1*l*., and .75 of 1*s*.; and reduce 3*s*. 4*d*. to the decimal of a crown.

2. If A, B...Z be any number of magnitudes of the same kind, and *a*, *b*, ...*x* as many others of the same kind with one another, though not necessarily of the same kind with the former, and if

$$A : B :: a : b, \quad B : C :: b : c, \text{ \&c.}$$

prove that

$$A : Z :: a : z.$$

3. Find the time between 1 and 2 o'clock at which the minute and hour hands of a watch are exactly opposite.

4. Divide $14a^2b + 2b^3 - 7ab^2 - 12a^3$ by $2ab - 4a^2 - b^2$ and solve the equations

$$(1) \frac{4x+2}{2x-1} - \frac{2x+3}{x+1} + 5 = 0; \quad (2) \frac{x}{y} - \frac{y}{x} = x - y + \frac{xy}{2}.$$

5. Illustrate the use of negative quantities by means of the following problem:—A is 20 years old and B is 27. What time must elapse before B's age is to A's as 3 to 2?

6. If one side of a triangle be produced, the exterior angle is greater than either of the interior opposite angles.

7. From a given point exterior to a given circle, it is required to draw a tangent to the circle.

If the positions of the point from which the tangent is drawn, and of the centre of the circle, be given, but the radius of the circle be variable, find the locus of the point of contact.

8. Explain the different kinds of levers, and state what is in each the ratio between the power and the weight when there is equilibrium.

To what classes do you refer respectively a balance, a crow-bar, a pair of nutcrackers, a pair of tongs, an oar?

9. Find the centre of gravity of a triangle, and show that it coincides with that of three rods of equal weight, which coincide respectively with the three sides of the triangle.

10. From the fundamental property of a fluid, deduce by mathematical reasoning the result, that the pressure which the liquid in an open vessel exerts on a given small area taken in the side or bottom of the vessel depends only on the magnitude of the area, and on its vertical depth below the plane of the surface, and not on the form of the vessel, or the quantity of liquid which it contains.

11. Explain the action of the siphon.

Could a portion of mercury at the bottom of a deep vessel be drawn out by means of a siphon?

12. Show how to graduate a thermometer when extreme accuracy is not required. In what part of the process is it necessary to attend to the barometer, and whence does the necessity arise?

Show how to pass with facility from one to another of the three scales commonly used. *Ex.* How is the temperature 60° F. denoted in Reaumur's and in the Centigrade thermometer?

13. Explain the formation of images by plane mirrors.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, November 20:—

FITZGERALD, THOMAS GEORGE, Army.
HEWITSON, CHARLES CHRISTOPHER, Stanhope.
MORRIS, CHARLES JAMES, Hampton Wick.
WHITE, CHARLES JOSEPH, Portsmouth.

OBITUARY.—On the 13th inst, suddenly, at Hertford, R. Shillito, Esq., surgeon, aged 73, a member of the Society of Friends. On the 18th instant, at Brighton, Thomas Yates, M.D., aged 68. On the 22nd instant, at Glasgow, Dr. Charles Inches, R.N., deservedly esteemed and regretted. On the 23rd inst., at 10, Oval, Cambridge-heath, in the 60th year of his age, Frederick Oger, Esq., surgeon, formerly of Whitechapel.

NAVAL APPOINTMENTS.—Surgeon William Robertson, M.D. (1843), to the Hogue screw steam-ship, at Queenstown. Joseph Browne (1851) to the Rapid, 8 brig, at Portsmouth.

ROYAL MARINES.—Dr. W. L. Gordon, Assistant-surgeon to the Woolwich division, vice Ernest Elliott, appointed to Portsmouth Dockyard. Dr. William W. Wilbey, Assistant-surgeon to the Portsmouth division, vice Alexander Robertson, promoted.

MEDICAL APPOINTMENTS AND VACANCIES.—Two physicians

and one surgeon are required for the London Hospital for Sick Children. The physicians must be Fellows or Licentiates of the College of Physicians of London, and the Surgeon, F.R.C.S. Eng. Applications to be made on or before the 6th of next month. A Resident Surgeon also is wanted at the Western General Dispensary, New-road. Candidates must be legally qualified: salary not stated. Sir James Eyre, Physician-Accoucheur to the St. James's and St. George's Dispensary, having resigned that office, has been elected Consulting Physician to the Institution. Mr. Wakens has been appointed surgeon to the Queen's Bench Prison, in the room of Dr. Hooper, whose decease, from concussion of the brain, in consequence of being thrown out of his carriage, we lately recorded. The Seamen's Hospital Society require a physician for the Dreadnaught Hospital-ship, in the room of Dr. Black, resigned. The candidates must be F.R.C.P.L. or L.R.C.P.L. Testimonials, etc., to be sent in on or before the 3rd Dec. A Dispenser, L.A.C., is wanted for the workhouse of St. Mary, Islington. Salary 60*l*. a year, with board and lodging. Testimonials, etc., to be sent in on or before the 6th Dec.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—At the meeting of this Society, on the 25th inst., John Grove, Esq., and William Adams, Esq., were elected Fellows of the Society; and Charles Bland Radcliffe, M.D., and Charles Ridley, Esq., were proposed as Fellows.

KING'S COLLEGE, LONDON.—The venerable Dr. Warneford has just founded in perpetuity eight new scholarships, of the annual value of 25*l*. each, for the medical students of this College. Six of these (two to be filled up every year) are for the encouragement of a previously good education, as tested by an examination in divinity, Greek, Latin, mathematics, modern history, and French or German, to be held immediately after matriculation at King's College, at the beginning of each October term. The subjects for this year will be settled immediately after the sealing the trust-deed; but in future twelve months' notice will be given. These scholarships will be filled up for the first time in October, 1852, and will be tenable for three years, on condition of a certificate of good conduct and diligence being produced at the close of each year. Two other scholarships, tenable for two years, (one to be filled up each year,) are designed for the benefit of resident medical students, and will be awarded to those students who, having resided in the College rooms without blame during a considerable part of two years, shall thereupon pass the best examination in divinity, and in such professional subjects as are suitable to their standing. The first examination for these scholarships will take place at the close of the summer session in 1853. The future effects of these Warneford scholarships in the improvement of the medical character are too evident to require notice. Dr. Warneford has shown himself in this, as on several previous occasions, a true and zealous friend of the Institution he seeks to benefit, and also to the medical student, whose character he evidently endeavours beneficially to modify. Such deeds as these are deserving of the highest commendation.

UNIVERSITY OF DUBLIN.—We are enabled to lay before our readers the regulations which have just been adopted by the University in reference to the recent changes in the Medical Department.

“Resolved by the Provost and Senior Fellows:—

“That a diploma in surgery be given to such students as are matriculated in medicine, and have completed, at least, one year in arts, on the following conditions:—

“1. To complete one year in arts, it shall be necessary to have answered, at least, one examination, subsequent to the junior freshman year; or to have completed the junior freshman year only, by passing the Michaelmas examination of that year, and keeping one previous term either by lectures or by examination.

“2. Students who have not passed an examination in the senior freshman year, will be required to attend one course of lectures in logic. Students who have not passed the junior sophister year of the undergraduate course will be required to attend one course of lectures on Mechanics with the assistant to the Professor of Natural Philosophy.

“3. Students so qualified will be admitted to examination for the diploma in surgery, as soon as they shall have completed the prescribed curriculum.

“4. This curriculum shall extend over a period of four years, and shall comprise attendance upon the following courses of lectures in the School of Physic in Ireland:—Anatomy and Physiology, three courses; Demonstrations and Dissections, three courses; Theory and Practice of Surgery, three courses; Practice of Medicine, one course; Chemistry, one course; Materia Medica, one course; Midwifery, one course; Practical Chemistry, Botany,

Medical Jurisprudence, of each one course of three months' duration.

[Four of the above courses, together with one course of Demonstrations and Dissections, may be attended in any school of medicine recognised by the Board.]

"Also attendance for three sessions, each of nine months' duration, on the practice of any of the following hospitals, together with attendance on the Clinical Lectures on Medicine and Surgery there delivered:—

"1. Richmond, Whitworth, and Hardwicke Hospitals. 2. Meath Hospital. 3. Steevens' Hospital. 4. Jervis-street Infirmary. 5. City of Dublin Hospital. 6. Mercers' Hospital. 7. St. Vincent's Hospital.

"Of the courses of lectures which are of six months' duration, not more than three can be attended during any one session.

"5. Candidates for the diploma, who have complied with the foregoing regulations, must pass an examination before a Court of Examiners, consisting of the Regius Professor of Physic, the Professors of Anatomy, Surgery, Chemistry, Midwifery, and Botany.

"The examination of each candidate will be divided into two parts,—one of which shall be devoted to Anatomy and Physiology, Surgical Anatomy, the Theory and Practice of Surgery, and Operative Surgery; and the other to Practice of Medicine, Midwifery, Chemistry, Materia Medica, and Toxicology.

"6. Candidates for the diploma must submit their certificates and testimonials of qualification to the Regius Professor of Physic, and the Professor of Surgery, who shall sign the chart necessary to be laid before the Senior Lecturer and the Registrar, previous to the issuing of the *Licent ad Examinandum* to the Professors."

PROGRESS OF EPIDEMICS.—A disease has broken out among the Chinese population at San Francisco, presenting many of the symptoms of cholera; it has proved fatal in several cases. The physicians reported a great increase of the number of sick, chiefly from dysentery, the prevailing malady at this season of the year.

DR. MILROY ON CHOLERA IN JAMAICA.—We have received a copy of the Report which was presented by Dr. Gavin Milroy to the Governor of Jamaica, and sent by him to the House of Assembly, in April last. There are several points connected with the prevalence of cholera in Jamaica which are of much interest. The general result of Dr. Milroy's observation has been to confirm the observations made in India and England on the influence of putrescent effluvia in localising cholera. Every town and village in Jamaica teems with nuisances of the very worst description, and "in the great majority of instances the first cases of cholera in a town have appeared in its filthiest and most neglected parts. The very spot where the disease would manifest itself, has often been indicated by the resident medical men before the pestilence had reached their neighbourhood, and the prediction has been usually verified by the result." The dwellings of the negroes appear to be nearly the fac-similes of our London lodging-houses. "In a room of eight or nine feet square, as many as six, eight, or ten persons are often crowded at night, without the least regard to either age or sex, and most of them lie in a state of semi-nudity on the ground. The negroes have a great dislike to cool air, and they therefore most diligently exclude its introduction by shutting both the windows and doors of their sleeping-places." After remarking at great length on the sanitary deficiencies of the land, Dr. Milroy endeavours to enforce upon the colonial legislature the necessity of instituting a correct registration of births and deaths, of training up in the island competent medical men (to meet, not only the possible occasional prevalence of cholera, but the immense mortality at all times prevalent; and to carry out vaccination,) and of enforcing sanitary superintendence. We trust most sincerely that the measures so energetically urged by Dr. Milroy will meet with due support; and we would suggest that the General Board of Health in this country should urge the case on the attention of the Colonial Secretary. The Imperial Government have recognised the importance of sanitary reform at its heart and centre; it is but logical to apply the same remedy at its further limits and in its remote dependencies.

GERMAN MEDICAL LITERATURE.—The catalogue of books for the Leipzig fair shows that in the short space of time between the Easter fair and the 30th of September there were published in Germany no less than 3860 new works, and that there were on the latter date 1130 in the press. Of the 3860 already published, 108 treat of medicine.

DEATH FROM CHLOROFORM.—A female, 37 years of age, named Elizabeth Hollis, the wife of a labourer in Chipping Norton, died lately from the effects of chloroform, administered prior to an operation by Mr. John Farwell, surgeon of that place. At the inquest it appeared that the deceased had long suffered severely from a

cancer of the uterus, and that an operation of some kind, nature not stated, being contemplated, chloroform was given, with a fatal result. The mode of giving the anæsthetic was not mentioned at the inquest, or, at all events, is not stated in the newspaper report, which is very meagre. The jury were perfectly satisfied that the chloroform was necessarily used, and properly and judiciously applied under the circumstances, and returned a verdict accordingly. Mr. Farwell should furnish the Profession, for their satisfaction, with all the circumstances of the case, the symptoms and progress of the disease, the nature of the operation he proposed, the mode in which the anæsthetic was given, the fatal symptoms it produced, and the treatment adopted to combat them. We recommend Mr. Stanley's lecture, recently published in this Journal, to his consideration, and that of all surgeons. It is eminently practical.

PUBLIC BATHS AND WASH-HOUSES FOR THE LABOURING CLASSES.—Return for the month ending October 31st, 1851:—

Establishments.	BATHS.		WASH-HOUSES.		
	Number of Bathers.	Total Receipts.	Number of Washers.	Number of Hours Washing, &c. &c.	Total Receipts.
METROPOLIS.		£ s. d.			£ s. d.
The Model, Whitechapel ...	12,916	164 14 3	4,384	9,298½	47 19 8
St. Martin-in-the-Fields ...	16,841	271 0 10	4,802	10,086½	48 19 9
St. Marylebone ...	11,227	148 18 7	2,368	6,572	27 7 8
St. Margaret and St. John, Westminster ...	6,266	76 15 1	2,414	5,062½	27 10 4
Greenwich ...	8,490	120 5 10	71	247½	1 17 1
Totals ...	55,740	£781 14 7	11,039	31,267	£153 14 6
COUNTRY.					
Liverpool—					
Cornwallis-st. ...	7,120	114 10 2	not open.		
Paul-street ...	2,412	35 19 1	1,450	8,700	17 5 0
Hull ...	4,629	45 8 0	464	1,699	8 6 4
Bristol ...	3,483	44 7 11	538	973½	5 0 7
Preston ...	1,705	16 7 11	511	1,411	5 19 7
Birmingham ...	4,288	62 8 4	205	773	5 10 5

Statement showing the Number of Men, Women, and Children, who have used the Public Baths in Goulston-square:—

Year.	Month.	Number of Bathers.	Total Receipts from Bathers.
			£ s. d.
1848	January to December	48,637	580 9 3
1849	January to December	108,082	1,404 19 10
1850	January to December	137,519	1,830 3 7
1851	{ January 1 to October 25 } 43 weeks only (a)	141,904	1,931 15 6

Of the Bathers, there were in 1849, 4,695 Women; in 1850, 10,589; and during 43 weeks this year, there have been 13,177.

Statement showing the Number of Women who have used the Public Laundry in Goulston-square:—

Year.	Month.	Number of Washers.	Number of Hours Washing, &c.	Total Receipts from Washers.
				£ s. d.
1850	{ March 4 to December 31 } (43 weeks)	14,217	31,718	172 5 9
1851	{ January 1 to October 25 } (43 weeks) (a)	32,626	74,950	408 11 5

(a) Still increasing.

THE EXTERNAL USE OF ARSENIC.—A case of considerable importance has been tried in the Exeter District County Court, in which a farmer named Huggins sued a druggist of the name of Froom, for the damage accruing from the loss of sundry sheep, deceased from the poisonous effects of a sheep-dipping composition, prepared and sold by the defendant for the destruction of tick and lice in the fleece of the animals. It appeared on the trial, that the plaintiff had used the composition in 1849 with great success, and

that many others had done the same in that year, in 1850, and also in 1851. The composition consisted of 5 lbs. of arsenic, 5 lbs. of sulphur, 20 lbs. of soft soap, and $\frac{1}{4}$ lb. salt of tartar or potash. This was stated by the defendant, who added, that he did not think an arsenite of potash would be formed, from the presence of arsenic and the potash in the composition. He knew the difference between arsenious acid and the arsenite of potash: the former was very insoluble, the latter soluble. Some of the defendant's own witnesses proved that several of their sheep had suffered more or less from the washing, and a few had died. This was attributed to the want of proper precaution, and not attending to the printed directions, especially as regarded sponging certain parts of the animals. Some of the men engaged in the operation, who had wetted their clothes with the solution of the composition, and had not changed, were also taken ill. Another similar composition, for which Froom's was a substitute, was said to be less injurious, but the analyses made by Dr. Hulme served to show that it contained more arsenic, with a somewhat less proportion of potash. Two days were occupied in the hearing, and the Judge took time to consider his judgment, which he promised to deliver on the 29th instant.

MORTALITY NOTABILIA.—A further and important increase in the mortality is an indication that the public health has suffered to a considerable extent from the coldness of the weather. The deaths registered in London, which in the last week of October were 861, and in the first two weeks of November increased to 989 and 1022, rose in the week which ended last Saturday to 1132.

During three weeks of October the weekly mean temperature at Greenwich exceeded 52°; in the last week of that month it fell to 46°; in the first two weeks of November to 40°; and last week it exhibited a further decline to 35°.

The present return is heavy as compared with corresponding weeks of the ten years 1841—50, the average of which did not exceed 992. If the average be corrected for increase of population, it becomes 1091, on which last week's mortality shows an excess of 41.

Cold and its Fatal Effects.—With the depression of temperature towards the close of the year comes increased fatality of diseases of the respiratory organs. This class, which is exclusive of phthisis, numbered in two previous weeks 148 and 168; but last week the number rose to 256, whilst the corrected average of corresponding weeks is 208. These 256 deaths are distributed thus: 103 caused by bronchitis, 105 by pneumonia or inflammation of the lungs (of which 82 occurred among children), 27 by asthma, 4 by laryngitis, 5 by pleurisy, and 12 by other diseases of the respiratory organs.

Phthisis, or consumption, has not discovered the same tendency to increase, the numbers ascribed to this disease in the last three weeks having been 125, 123, and 135. This last number, however, is somewhat greater than the corrected average.

Epidemics and Nuisances.—Next to the above class in its contingent of mortality, and nearly equal to it, is that of epidemics, among which typhus, scarlatina, and small-pox, are the most fatal. Sixty-two persons, of whom 23 were children, 33 were 15 years of age and under 60, and 6 were 60 years and upwards, were carried off by typhus, continued fever, &c. In the workhouse, Bishops-gate, the son of a labourer, aged 4 years, died on 19th November of "petechial fever (15 days), broncho-pneumonia (4 days)." This child was admitted with its mother a month ago from 3, Harrow-alley, Aldgate, the father also lying ill with fever in the men's house. Mr. Spencer observes, that the place they came from is situated amongst a number of slaughter-houses, close and confined, the houses being in a dirty state, and mostly crowded by Irish of the poorer class. In the sub-district of Mild-end, New Town, at 2, Dyer's-court, Booth-street, on 17th November, the daughter of a labourer, aged 5 years, died of low fever. The medical officer reports that "this is the third death within the last three months in the same family. The water-closets are in a very bad state."

London Fever Hospital.—Three deaths which occurred respectively on the 19th, the 20th, and the 21st November were registered at the London Fever Hospital; the first was that of a police-constable, the second that of a workman from the Chemical Works, Battersea-fields, and the third that of a fruitseller from Clerkenwell. Mr. Watts, the Registrar, states, that "at this hospital, which is situated in the Liverpool-road, Islington, 15 patients were admitted on one day in last week. The number at present under treatment is 106. It is right that the public should know that it is a free hospital, supported by voluntary contributions, and that patients are admitted by a surgeon's certificate."

Scarlatina.—The number of fatal cases of scarlatina registered last week was 45. In corresponding weeks of ten previous years, the number ranged from 17 to 118. In Paddington, at 108, Praed-street, on 16th November, the daughter of a cordwainer, aged 10

years, died of "scarlatina, malignant sore throat (5 days)." The medical attendant of this case states that the deceased had lived in a cold and damp kitchen.

Small-pox and Vaccination.—Last week small-pox carried off 26 children, and 5 persons of 15 years of age and upwards. In 4 of these cases it is stated that the patients had at some previous time been vaccinated. On 20th November the son of a French-polisher, aged 8 years, at 12 King-street, in the sub-district of Golden-square, died of "variola (10 days), not vaccinated." This (says Mr. Churchman) is the first case of small-pox I have entered during a period of nearly three years and a half in which I have been registrar. At 44, Gerrard-street, Islington, a spinster, aged 30 years, died on the 19th November of "confluent small-pox (16 days)." She had been vaccinated when young; her brother, also an adult, had an attack, but recovered. At 7, Craven-buildings, St. Clement Danes, on 19th November, the son of an engineer, aged 11 years, died of "small-pox confluent (13 days), unprotected." Mr. Fitch states, that "the father of deceased attributes the death of a former child to foul matter being used, and for this reason omitted to vaccinate three other children, who all had the disease at the same time." In Lambeth, Waterloo-road sub-district (second part), at 51, Oakley-street, on 20th November, the daughter of a stay-maker, aged 3 years, who had been ineffectually vaccinated, died of "small-pox (14 days);" and, in the same street, at No. 49, on 17th November, the daughter of a commercial traveller, aged 13 years, died of "small-pox (9 days), without vaccination." Mr. Daws adds, that small-pox has been very prevalent in his district for some months; and, in Oakley-street, there are several other cases at the present time. In the sub-district of South St. Giles-in-the-fields, at 37, Broad-street, the daughter of a labourer, aged 4 years, died on 21st November of small-pox, without medical attendant. Mr. Faulkner remarks:—"This child had not been vaccinated, and a surgeon was called in only when it was dying. The mother did not consider it necessary to have advice earlier, as she had already attended several children with the same disease." In Deptford, at 1, Sun-street, on 19th November, the son of a wheelwright, aged 2 years, died of "small-pox (11 days), vaccinated with effect 15 days before death." Mr. Marchant remarks, that "a brother of deceased died of the disease in the same house on the 2nd instant. There can be little doubt, therefore, that this child was infected before vaccination."

Miscellaneous.—Among other causes of death are measles, which carried off 19 children, hooping-cough 27, croup 7; diarrhoea of which 21 persons died, influenza 3, purpura 3, remittent fever 1, rheumatic fever 1, erysipelas 12; 4 children died of syphilis, 8 from want of breast milk and inanition, and 2 were suffocated in bed. At Woolwich a boy of 10 years died of "disease of the hip (nearly 2 years)." It is added, that he injured himself in endeavouring to imitate some strolling tumblers, who were passing through the town.

DEATHS in the Metropolis for the week ending Saturday, November 22, 1851.

CAUSES OF DEATH.	Nov. 22.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	508	379	242	1132	9924
SPECIFIED CAUSES	503	378	238	1122	9873
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	171	56	13	240	2236
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	1	16	20	37	537
3. Tubercular Diseases	61	119	4	148	1569
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses, ...	47	37	39	123	1152
5. Diseases of the Heart and Blood- vessels	1	34	21	57	328
6. Diseases of the Lungs, and of the other Organs of Respiration ...	133	60	63	256	1887
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	15	21	13	51	579
8. Diseases of the Kidneys, &c. ...	1	2	5	8	93
9. Childbirth, Diseases of the Uterus ...	...	8	...	8	110
10. Rheumatism, Diseases of the Bones, Joints, &c.	8	3	3	9	77
11. Diseases of the Skin, Cellular Tis- sue, &c.	1	1	...	2	11
12. Malformations	3	...	...	3	32
13. Premature Birth and Debility ...	51	1	...	52	210
14. Atrophy	16	2	1	19	155
15. Age ... ..	...	...	53	53	556
16. Sudden	2	3	...	5	98
17. Violence, Privation, Cold, and In- temperance	17	15	3	35	243
Causes not Specified	5	1	4	10	51

TO CORRESPONDENTS.

SUUM CUIQUE.

[To the Editor of the Medical Times.]

SIR,—I was sorry to see the letter of "Suum Cuique" in the pages of so respectable a journal as the "Medical Times." I earnestly trust he is not a member of our Profession, for I must say, that his letter and his proposal are a disgrace to it. Jesuitism may do for others, but, for medical men, who are bound in honour and in justice to the offices, their patients, their profession, and the world in general, if they do report at all, to do so fairly and honestly,—to assert publicly that, unless paid for their opinion by the consulting office, they (or rather, he, for I hope he is alone in the matter,) will seek by special pleading, for the benefit of the patient by whom he anticipates being paid, to distort the facts, and to put the best face he can on the case he is consulted in, is an instance of shameless wrong, such as I never anticipated on the part of a *soi-disant* professional brother. Pray, Sir, discourage it to the utmost. We have no right to such a California. It were better to refuse altogether: that we have a right to do, unless we get a fee: but Suum Cuique's plan is disgraceful. To propose compelling offices to pay us, because we can have them at our mercy, if we choose to play the rogue!—"surely an enemy hath done this." It is a rare thing for a man to boast of his dishonesty.

I am, &c.

M.R.C.S.

THE PATHOLOGICAL SOCIETY OF LONDON.

[To the Editor of the Medical Times.]

SIR,—In the List of Members, just published by this Society, in the fifth part of their Transactions, I find the name of Robert E. Dudgeon, M.D. Is this gentleman the homœopath, who is writing in favour of the Hahnemannian jugglery in your journal, and the Editor of the "British Annals of Homœopathy?" If he is indeed that individual, I would ask the Council, consisting as it does of some of the most eminent names in the Profession,—I would ask Dr. C. J. B. Williams, who, according to the same List, is one of the Vice-Presidents of the Society, and an active member thereof, as their reports show, and who spoke so earnestly at the meeting of the Provincial Association at Brighton, in favour of the Resolutions against homœopaths, how they or he can reconcile the retaining that name in the list of their members, and thus persist in offering so great an insult to the Profession. I do not purpose entering into an examination of the doctrine of those would-be offsets of the Profession; but I contend, that no Society of medical men can do justice to themselves, to their professional brethren, or to the public, while they retain among them men who profess doctrines diametrically opposed to ours, and who, if they really believe what they assert, must look upon us as destroyers of those who place their lives in our hands. There cannot be,—there ought not to be, any union between the two.

I am, &c.

AN ALLOPATHIC SURGEON.

In reply to a Correspondent, Mr. Mapleson's Pamphlet has been advertised thus:—"Observations on the Treatment of Cleft Palate by Mechanical Means. By John Mapleson, Dentist and Cupper to the Queen." The wording and punctuation of this advertisement would lead ninety-nine out of every hundred who read it, to believe that Mr. Mapleson was Dentist to Her Majesty. In fact, it distinctly affirms him to be so. Now, Mr. Mapleson is *not*,—never has been,—and, to judge from the wisdom displayed in filling the Royal medical appointments, never will be Dentist to the Queen. We would direct Mr. Mapleson's attention to the fable of the daw that decked itself in peacock's feathers; and especially to that part of it which tells of the fate of the pretentious bird. We suspect that the plan of treatment recommended by Mr. Mapleson is the same, or very nearly the same, as that practised for some time by Mr. Saunders, the real Simon Pure,—the Dentist *bonâ fide* to the Royal Family. How Mr. Mapleson should have fallen on the same plan we cannot imagine. However, when the feathers of a bird's wings belong to another, two chances to one that those on its head and tail are also borrowed.

A Subscriber asks, 1st. What would be the post-mortem appearance of the skin when pressure had been applied to it during life, and continued some time after death,—the body being at the time in bed, at a temperature of 90°F. ? 2nd. In an infant dead from suffocation, (but still warm,) the head and face being highly congested,—would pressure applied over the mouth after death, and continued for twenty-four hours (the body being in the horizontal position, with the face upwards) cause the vessels to empty themselves so that the skin assumes its natural appearance, or would it still remain congested?

1. The appearances would vary with the instrument employed to make the pressure, the force with which the instrument was applied, and the period of time during which the pressure was continued. Thus, a rope, twisted tightly round a part, would leave such signs as are described under the head of "Strangulation," in any good work on medical jurisprudence. The thumb, or any blunt instrument would, if the pressure from either was considerable, produce a bruise, &c. &c. 2. We do not see that "pressure applied over the mouth" could exert much influence on the condition of the vessels of the face. So long as there is neither rupture of the vessels and extravasation of blood, transudation of a solution of the colouring matter of the blood through the coats of the vessels, nor coagulation of blood within the smaller vessels, so long may any part, however much it is congested, become pale when placed above the level of the other parts of the body. Under the circumstances stated, however, we doubt if the face would have assumed its natural appearance.

Mr. Ward (on Retained Placenta, &c.) is requested to forward his address.

Mr. Lowe's communication will appear in an early Number.

Mr. Reynolds' letter escaped our notice; we will immediately attend to it. We received Mr. Reynolds' second letter too late in the week for our present number.

[To the Editor of the Medical Times.]

SIR,—In your last week's report of the Medical Society, the suggestion of the alteration in Mr. Curling's speculum is wrongly attributed to me. The suggestion is due to Mr. Hovell, of Clapton, at whose request I manufactured the instrument. Your early correction of this error will oblige.

Surgical Instrument Manufactory,
21, Giltspur-street, London.

I am, &c. J. FERGUSON.

A Poor Student.—We can see no help for our Correspondent. Public bodies are bound by their laws; if they broke them for one poor student they would soon be asked to break them for another; and so on till every medical student in the kingdom had been admitted to examination on his own terms. Can our Correspondent inform us where the rich medical students are to be found? His own case is a hard one, but we fear he must endure that which is beyond help.

M. D.—Declined with thanks.

R. Q., Rochester.—Thanks for the information. We shall be obliged for more on the same subject. The medical practitioners of Rochester, and the adjacent towns, should meet to consider the steps to be taken in the matter. R.Q. may depend on it, neither the clergy nor the lawyers are sleeping on the subject.

M.R.C.S.—Not suited for our pages.

Mr. James Smith.—

When caps into a crowd are thrown,
What each man fits he calls his own.

The remark had no relation to the gentleman mentioned by our Correspondent. If he took it to himself, it must have been because he found it fit him; certainly the cap was not made for him, but thrown into the crowd. We know that it will fit a score.

A Subscriber will see that the advertisement enclosed in his letter has received the attention that was its due.

Timon—not of Athens we hope, must look at the bright side of affairs. Patience, and, in time, patients will come.

M.D.—It shall not be repeated.

A Subscriber.—Apply to our Publisher; the Editor only directs the literary part of the Journal.

Mr. James.—In the case put by Mr. James, the physician acted correctly. The patient had a perfect right to consult the latter without communicating with the former. It is a frequent practice for patients to get what they call "further advice," without asking their ordinary attendant to go with them to the house of the physician. Generally speaking—it is "love of cash," that bids the patient "do a deed so rash!"

We have received certain hospital reports; but we can read neither the name of the author, nor that of the hospital whence they emanate.

T. C. D. is referred to our Leading article.

Dr. Dudgeon.—Our great object in conducting the "Medical Times" is the advancement of the science of medicine. It is therefore clear, that entertaining the opinion of homœopathy which we do, we cannot allow its pages to be occupied with long letters in defence of that (to us) systematic folly. If we admitted Dr. Dudgeon's assertions about isopathy, might not an isopath claim a column for the defence of his folly, and so by degrees the space in our Journal occupied by the science of medicine grow beautifully less. Hydropathy, Isopathy, Homœopathy, Kinisopathy, and every other pathy that flesh is heir to—for the flesh is weak—taking its place. We assure Dr. Dudgeon, that to our mind, his pathy is as far removed from the domain of science as is either of the other pathies we have joined with it. Dr. Dudgeon denies having stated that Fleischmann ever gave drop doses of mother tincture. Such of our readers as are anxious to be better acquainted with Dr. Dudgeon's edition of homœopathy, will, we are sure, read Dr. Dudgeon's own Journal, where it is given at full.

W. H. B., of Harpold, near Northampton.—The letter has been received, and is—where it ought to be.

A Fellow of the London Medical Society, who wishes to address Dr. Murphy in our pages, must append his name to the letter.

COMMUNICATIONS have been received from—

THE SECRETARIES OF THE EPIDEMIOLOGICAL SOCIETY; Mr. CROMPTON, of Temple-row, Birmingham; Mr. ROBERTSON, of Union-place, New Kent-road; Dr. RIGBY, of Berkeley-square; Dr. DUDGEON, of Gloucester-place; Mr. CLIFTON, of Cross-street, Islington; Mr. BEALE, of the Harrow-road; M.R.C.S.; AN ALLOPATHIC SURGEON; Mr. GROVE, of the Wandsworth-road; Dr. SEATON, of Sloane-street; Mr. PRATER, of Brook-street; Mr. MILTON, of Jewin-street, City; Dr. STONE, of Haydock Lodge; A STUDENT OF ST. BARTHOLOMEW'S; SECRETARY OF THE WESTERN MEDICAL SOCIETY OF LONDON; W. H. B., of Harpold, near Northampton; Mr. HENRY SMITH, of Caroline-street, Bedford-square; Dr. BASHAM, of Chester-street; R.; Mr. PARKER, Medical Officer of the Mile-end Workhouse; Dr. JONATHAN GREEN, of Great Marlborough-street; Mr. COULSON, of St. Mary's Hospital, and Frederick-place, Old Jewry; A MEDICAL PRACTITIONER OF ST. ANN'S, SOHO; Mr. WARD, M.R.C.S.; Mr. FERGUSON, Instrument Maker, of Giltspur-street; Mr. LOWE, of Congleton; A SUBSCRIBER; A POOR STUDENT; M.D.; R. Q., Rochester; Mr. JAMES SMITH; A SUBSCRIBER; STUDENS; SECRETARY OF THE GEOLOGICAL SOCIETY; Mr. BORD, of Airdrie; T. C. D.

ORIGINAL LECTURES.

CLINICAL LECTURE ON SURGERY,

AT

GUY'S HOSPITAL.

By BRANSBY B. COOPER, Esq., F.R.S.

Senior Surgeon to, and Lecturer on Surgery at, Guy's Hospital.

THE first case I find in my clinical book to-day, gentlemen, is one headed "Venereal Disease." The subject in this case is a man, whom I admitted on the 15th Oct.; it is as follows:—James Jones, aged 29, lives at Poplar, has an emaciated appearance, and has had gonorrhœa seven times. When he came in he had a discharge from the urethra, and a chancrous sore upon the under surface of the prepuce. He stated that about two months before he had had connexion, and a fortnight afterwards had first observed a sore on his penis. The sore soon healed by the application of bread poultices; but it left behind it an indurated cicatrix about the size of a nut. In the course of a few days the sore again broke out, and at the same time commenced a yellow discharge from the urethra. This time the patient took a great many mercurial pills; the glans penis was then very much swollen, but subsided after a second application of the poultices; his mouth was very sore from the action of the mercury. While under the influence of the mercury he took cold, from the effects of which he is still suffering, complaining of severe pain in his head and joints, particularly in the morning when first he awakes; he has a slight cough and perspires a good deal at night; his mouth remains very sore from the effect of the mercury; his appetite is good. In consequence of his perspiration I considered it unsafe to continue the mercury, and therefore gave him the mineral acids with bark, which in a few days produced, in combination, probably, with rest and cleanliness, most beneficial constitutional effects; but as all his local symptoms remained unaltered, and, indeed, put on a more decided syphilitic character, I ordered

Pil. hydrarg., gr. v.; pulv. opii, gr. ʒ. ft. pil. omni nocte sumenda.

Some days after his admission he complained that in the act of micturition his water would suddenly stop, and stated that, some years ago, he had a stricture of the urethra; he was therefore further ordered

Potass. iodid., ʒss.; liq. potass., ʒiss.; tinct. hyoscyami, ʒiss.; decoc. sarzæ, ʒviii. M. ft. mist. capt. cochl. ampl. ij., bis quotidie. To have middle diet.

Six days after the chancre had nearly healed, there remained only a very small open surface. The discharge from the urethra sometimes stops suddenly; when this is the case he is likewise liable to the stoppage in the flow of the urine already spoken of. The patient says, that he thinks there is an abscess which continues to gather and discharge, as he suffered severe pain. A catheter was passed and some obstruction was felt. He was ordered a fourth of a grain of opium to be taken immediately. The discharge has continued up to the present time; the chancre has nearly healed; and in other respects the patient remains in just about the same state.

Although the history of this case clearly points it out as one of syphilitic disease, it will be observed, that there are some circumstances about it which have occasioned a marked peculiarity in the symptoms. In the first place, however, we find that the disease appeared about a fortnight after the patient had had sexual intercourse; this is the time which usually elapses in such cases before the venereal sore shows itself; that is to say, from ten to fourteen days is the period which the disease seems to require to root itself sufficiently in the constitution before it is capable of producing any local mani-

festation. In the present case the sore followed the connexion in the usual time, but it is remarkable that it very readily healed under simple treatment, in this respect varying apparently from an ordinary chancre; but although the sore healed at the time, it very soon broke out again, and it may be remarked, indeed, that when it healed, it left behind it a peculiar induration, a circumstance which would be sufficiently indicative to my mind, that the specific cause of the sore had never been removed. When the sore appeared the second time, it was accompanied by the yellow discharge from the urethra which is mentioned in the description of the case. This discharged matter was unlike that of gonorrhœa; besides, the discharge was not continuous; sometimes it suddenly ceased; then came on again as suddenly; and during its cessation the patient always experienced considerable difficulty in passing his urine, the obstruction to micturition appearing to be deeply seated in the urethra. Although the discharge from the urethra had not the usual appearance of that in gonorrhœa, still it was a question whether it was not caused by that disease. From the presence of the sore on the penis, the syphilitic character of the affection seemed clearly enough established from the first; but the existence of a chancre is no proof that gonorrhœa may not likewise be present. From the circumstance, that relief was experienced when a poultice was applied, the discharge might have been the consequence of some chronic affection, and this was the more probable, as the patient had had gonorrhœa seven times previously. Taking all the symptoms into consideration, the obstruction appeared to be caused by abscess in the urethra, perhaps situated in one of the lacunæ, and the intermittent, if I may use the expression, discharge from the urethra depended upon the accumulation and discharge of pus from the abscess, the difficulty in passing the urine being, of course, accounted for easily under such conditions.

I remarked, a moment ago, that syphilis and gonorrhœa may be co-existent. Can two specific poisons continue to pervade the system at the same moment? may be asked. Such a question would not, however, be applicable to this case, for gonorrhœa is not specific in its nature; and Ricord has distinctly shown that it and chancre may be met with in the same individual at the same time. I considered the sore in this case, however, purely syphilitic, and with this view I ordered the blue pill and opium, employing the mercury in its specific character against this form of disease. I also gave iodide of potassium, because I have often found it assist the action of the mercury in a remarkable manner, particularly in strumous constitutions. The result of the treatment satisfies me as to the correctness of my diagnosis; the patient is rapidly improving; the ulcer on the penis, which had at first all the characteristic appearance of a virulent sore, such as the raised, hardened edges, tendency to excavate the tissues rather than to spread superficially (the secretion being of a dirty yellowish slate-colour), indurated base, and areola of inflammation, has now become a healthy sore. It has lost its virulent character, and I trust that the patient will soon be cured. As to the abscess in the urethra, that will yield, I have no doubt, to the constitutional remedies employed, and will be healed by nature as she acquires a greater degree of curative power. You must have observed, gentlemen, that when I commenced giving the mercury and opium, I abstained from applying any local treatment to the sore itself. This is my invariable practice; and my object is to keep the sore free from ointment or other extraneous matter, that I may be enabled to observe whatever changes may be produced in it by the influence of the medicine, as the appearance of the sore affords characteristic indications, under the constitutional operation of the mercury. With regard to the length of time during which mercury ought to be continued in syphilis, I think the only guide is to be found in the state of the chancre. I should continue it so long as the base of the sore maintained its peculiar hardness; and I believe it is only when this is overcome that the virus can be looked upon as being eradicated. This effect has been, I believe, produced in the present case; and, if the patient be but commonly cautious in protecting himself from cold and wet, and in keeping himself regular in his manner of life, there is little chance of secondary symptoms making their appearance.

Case 2.—The next case is headed one of inciso-lacerated wound. I will read the account of the case:—

William Radlett, aged 56, living in the Kent-road, a pale,

sickly-looking man, a pickle-maker by trade. He has lived an irregular life, and drank hard. Was admitted into the hospital on the 15th inst. with an inciso-lacerated wound on the right leg. When admitted, he stated, that on the previous Thursday week he accidentally fell off a ladder when he was at least twelve feet from the ground; in falling, he struck his leg against the iron wheel of a truck. The limb was benumbed by the blow, and the wound bled profusely. He was immediately carried to a surgeon, who strapped up the wound. On the following Sunday, the injured part became so painful that the patient was obliged to apply a bread-and-water poultice; this gave him some ease at the time, but on the Wednesday he came into the hospital. When admitted, he complained of great pain all up the leg, particularly when he attempted to put his foot to the ground. The wound was about three-and-a-half inches in length, and was situated on the inner side of the tibia. There was a great deal of inflammation extending all over the calf of the leg.

Ordered: Hydrarg. chlorid., gr. ij.; ext. coloc. co., gr. iij.; pulv. ant. tart., gr. ʒ. M. ft. pil. statim sumend.; with Haust. sennæ, four hours after the pill.

The bowels having been well opened,

Ordered: Tinct. serpentariæ ʒi., ex. infus. cascarillæ. Ter die.

Catapl. lini, cruri applicand.

On the 18th inst. the inflammation had subsided, and the wound looked healthier.

On the 21st, the wound looked still better; it had been strapped, and bread poultice applied over the strapping. From this time, the patient has continued to go on improving until the present moment.

To many of you, gentlemen, this may not appear a case of sufficient importance to be selected as the subject of a clinical lecture. I am, however, of a different opinion; although the wound itself was not of a very serious character in this particular instance, the subject of wounds is one to which you ought to devote attention whenever you have the opportunity. In your future practice, you will necessarily be often called upon to treat wounds of different kinds, and it therefore behoves you to study their varieties and treatment whilst you have the privilege of attending the practice of a large hospital.

Wounds apparently slight, often lead to very serious and even dangerous consequences, when they occur in the persons of old people, or in those who are in a state of constitutional debility; in old people, in whom, as a natural accompaniment of advanced age, the circulation has become enfeebled, and the blood has ceased to be forced with its normal rapidity through the extremities, which are distant from the propulsive influence of the heart, the slightest abrasion or incision in the toes, or indeed in any other distant parts, have been known to cause death, owing to the constitution in the senile condition being incompetent to sustain the most trifling reparative effort, gangrene of the part being the natural result; this destroying the individual by its general re-action on the constitution.

In the case now under our consideration, the wound has been well termed inciso-lacerated. Now, gentlemen, it is always of importance to have our ideas upon matters like these made as clear as possible; and with respect to wounds, it is very necessary to understand their character before we can well determine upon the best method of treatment. Wounds, as you doubtless are aware, may be of four kinds—incised, lacerated, contused, or punctured; the importance of the wound depending, in many respects, upon the condition in which the parts are left; but also, indeed, upon the nature of the force by which they are produced. In a simple incised wound (to which variety, that in the present instance partly belongs) where the tissues have been divided by a cutting instrument, the edges of the wound should be carefully brought together, and kept in apposition, in order that the parts may unite by what is termed the first intention; and, generally speaking, unless, indeed, the wound be of great extent, or the constitution of the patient be not possessed of the normal amount of reparative power, the progress of cure is uninterrupted, and the parts are in a comparatively short time restored to the natural sound condition. In this case, although the proper treatment was followed in the first instance, there appear several reasons why the wound did not heal so readily as I have mentioned. First, the wound itself was not a simple incised wound, but

some part was lacerated. Now, in a lacerated wound, even although it may not be very severe, the parts may be in a state in which they cannot unite by adhesion; the tissues are so far torn and injured, that their vitality may have been reduced below the standard necessary for the exercise of reparative power necessary to adhesion. Under these circumstances the wound cannot heal by the first intention; but suppuration must be established, granulations must be thrown out, and new tissues are elaborated to occupy the place of those which had been injured; this process of granulation is necessarily a more lengthened one than that of mere adhesion. Secondly, the habits of the man were not such as to produce the constitutional state most conducive to the reparation of lesion of any kind; we are told that he had led "an irregular life, and had drunk hard,"—a manner of living which would be likely to produce great constitutional irritability, and a diminution, at the same time, of the vital force, upon the exercise of which the restoration of a healthy state of the system must entirely depend. Thirdly, a week had elapsed between the time at which the accident occurred and that at which the patient was admitted into the hospital. It is true that the injury had been subjected to treatment during that time, but it is impossible to say that the treatment had not been nullified by the conditions under which the injury remained in other respects. We can readily understand, that a very slight injury of this kind, if it were kept dirty, irritated by a coloured stocking, or by the use of the limb, or by the individual indulging in spirituous liquors,—subjected to such sources of irritation, might become a very serious matter, and afterwards prove very difficult to heal.

When the man came into the hospital there was a great deal of inflammation, which extended over the leg. The treatment was first directed to the reduction of this inflammation; and, when it had somewhat subsided, attention was directed to the wound itself. Soap-plaister was applied, to afford support to the whole, not only with the object of preserving some of the parts in apposition, but also to prevent the stretching of the wound by the elasticity of the neighbouring skin. As the man was in a somewhat cachectic condition, (no doubt the result of the dissipated habits I have alluded to before,) he was likewise put upon good diet, and ordered to take tonic medicines. Under this system of treatment, the wound has been brought into a healthy condition, and is now in a fair way of being shortly cured.

The principle which should regulate the mechanical treatment (if I may employ the term) of a wound of mixed character such as that in the case I have just concluded, must be obvious. From what I have said it will be perceived, that different parts of the wound must be in totally different states with respect to reparation. Those parts, then, which are simply incised should be brought together and supported by plaisters, so as to encourage by every means the union by adhesion. The lacerated parts, in which reparation by such a process is impossible, should be supported to facilitate granulation; and if there be contusion, stimulating remedies may be applied to assist in throwing off the sloughing dead matter, and in filling up the vacuities also by granulation.

I have next a case of

STONE IN THE BLADDER, WITH OPERATION.

Case 3.—William Noble, aged 8, a fair-haired boy, of a strumous appearance, was admitted September 26th. The boy is a native of Kent, and was supposed to be labouring under symptoms of stone in the bladder. From what could be understood of his history of what he had suffered, it appeared, that, about two months before he came to the hospital, while in the act of making water, the flow of urine suddenly stopped. He was then examined by a surgeon, who passed a sound, but could not be sure whether or not a stone was present in the bladder. He consequently advised that the boy should be brought to the hospital. The day after his admission, Mr. Cooper passed a sound, and distinctly felt a stone; but it is remarkable that, since the boy has been in the hospital, he has had no symptoms of stone, and he has passed his water freely and without pain. About a week after his admission, the dresser discovered that he had an attack of whooping-cough; consequently, it was not thought advisable to operate then, but to wait until he got better of the cough.

He was ordered, mist. alum. co.

This so soon relieved him, that, on Tuesday, Mr. Cooper

determined to perform the operation of lithotomy. Very little blood was lost during the operation. The stone proved to be very large for so young a child, weighing 142 grains, and consisting principally of oxalate of lime, but with an external covering of crystallized phosphate of magnesia and ammonia.

After the operation, ordered syr. papav., ʒi.

This was repeated at bedtime. The first night, the child slept well; had had no shivering, and passed his water well through the wound.

On the 23rd inst., the little patient was still progressing favourably. The wound looked healthy, and no blood had passed.

On the 24th had passed a very restless night. Had an attack of shivering, and several clots of blood passed away. Complained also of a pain in his head.

On the 25th had much improved in all respects.

Now, Gentlemen, in this case there are some peculiar points to which I shall draw your attention. You will observe, in the first place, that, with the exception of one indication, the sudden stoppage of the urine, none of the ordinary symptoms of stone were present. In children there are two or three symptoms which particularly mark the presence of this disorder: elongation of the prepuce, and prolapsus of the anus are the most prominent of these. The first of these symptoms is caused by the child pinching and pulling at the prepuce during the paroxysms of pain which are frequent in this complaint, and in which the pain is felt chiefly in the end of the penis, at the extremities of the irritated nerves, and not in the seat of the irritation. The prolapsus is of course caused by the straining, in the vain efforts of the child to pass his water during the time that the passage into the urethra is stopped mechanically by the stone, or by spasm in the part caused by the irritating influence of the stone.

The other symptoms of the disease are also generally sufficiently well marked to enable us to distinguish it with tolerable certainty, even before we resort to the use of the sound; the intolerance of motion, especially of a jolting motion, and the evacuation of bloody urine, are leading symptoms; and in addition to the pain at the end of the penis, and occasional interruption to the passage of the water, are unmistakable diagnostic marks. Not that it is very uncommon for some of these indications to be absent; I was once called to see a patient in the country who was suffering from retention of urine, in consequence of a small stone being impacted in the urethra. I cut down upon and removed the stone, and, upon passing a catheter, discovered a very large stone in the bladder, the existence of which was never suspected before. The patient had never had a symptom of stone, and had suffered no inconvenience of any kind from its presence, although, up to the very time of being seized with retention of urine, he had been engaged in severe exercise. In the museum at Cambridge, there is a stone of immense size, weighing as much as 25 ozs., which is described by Pepys in his "Diary," as having been removed from an Alderman in London, in whom the disease had never been suspected during life, and who died of another complaint. Be all this as it may, the little patient in the present instance had manifested no signs of the presence of stone after the first sudden stoppage of the water; but immediately upon applying the sound, I discovered the calculus. Soon after his admission into the hospital, it was found that he was labouring under an attack of hooping-cough; I therefore thought, that he was not in a fit constitutional condition to be subjected to the operation of lithotomy; he was consequently treated for the cough, and the operation was not performed until some weeks after. After the operation, everything went on very favourably with the child, with the exception of his being attacked by shivering fits; experience has, however, taught me not to attach too much importance to this symptom after the operation of lithotomy. At first we should be led to believe, that the sign would indicate constitutional disturbance, which would be alarming when viewed in connexion with such an operation; but it is, in fact, almost always produced by the presence of coagula of blood in the bladder, and is premonitory to the expulsion of these clots by the wound. After the blood has been thrown out the rigor ceases; this was the case with the subject of the operation. In this instance he was attacked by rigor, small clots of blood were forced out of the wound, the constitution became quieted, and he has continued to go on favourably ever since; and in the course of a short time I shall expect to see him dis-

charged from the hospital quite cured. In conclusion, gentlemen, I shall draw your attention briefly to the steps of the operation itself. Most of you were present when I operated upon the subject of the case I have now related, and you will remember that, in preparing the patient, he was laid upon the table in the usual position, the palms of the hands being confined by ligature to the soles of his feet; his knees were then separated from each other, and his heels held back to the buttocks. When the patient was placed in the proper position the staff, as it is termed, was introduced into the bladder, and as soon as I had felt the stone I handed the staff to my assistant to hold firmly with his right hand. The immediate steps of the operation are four: the first consists in laying open the perinæum; to effect this you may have observed that I commenced an incision a little to the left side of the raphé of the perinæum, where it unites with that of the scrotum, and continued it downwards and outwards until I reached a point midway between the anus and the tuberosity of the ischium; this penetrated the skin, fat, and superficial fascia. The second step consists in laying open the pelvis. To achieve this I introduced my forefinger into the first wound to a sufficient depth to enable me to feel the groove of the staff through the membranous portion of the urethra; into this groove I inserted the point of the knife, and by a second incision in the same direction as the external wound I divided the whole length of the deep fascia of the perinæum with the transverse muscles and artery of the perinæum and some portion of the accelerator urinæ muscle. The chief point to be observed here is that the opening into the urethra should be in its membranous part, and not through the bulb, as in the latter case the large artery of the bulb would be almost certain of being wounded. It is likewise in this second step that the rectum may be injured. Want of time will not, however, permit me to dilate upon the difficulties which may attend these steps. I must confine myself to a description of their mere course. The third step consists in dividing the whole length of the membranous portion of the urethra and of the prostate gland: the knife is therefore inserted for the second time into the groove of the staff, which you may have observed I then took from the assistant with my left hand, depressing it until it was brought into an almost horizontal position, turning its groove at the same time towards the patient's left side; in this position the knife is passed along the groove into the bladder; the size of the opening can be regulated by the angle at which the knife is held with the staff. The parts divided in this step are the urethra, prostate gland, and the fibres of Wilson's muscle on the left side; the important point is to avoid complete division of the left lobe of the prostate, for if the fascial covering of this gland be cut quite through the urine will extravasate into the cavity of the pelvis, and this is, doubtless, frequently the cause of death after lithotomy. The fourth step is that in which the stone is removed from the bladder by the forceps. The entrance of the knife into the bladder in the last step is generally indicated by the escape of the urine through the wound; but it does not always happen, however, if the opening in the prostate be no larger than the knife,—that is, if the knife have only pierced the gland and not divided it to any extent. Having opened the bladder, the surgeon takes the staff from his assistant and inserts the forefinger of his left hand through the wound to ascertain the extent of the incision, and, if he is able, the situation of the stone. If the opening in the prostate be too small, it may be easily enlarged by the finger, as the substance of the gland may be readily torn in the direction of its laminae. When the forceps are introduced into the bladder it is not always easy to seize the stone at once; from its form and smoothness it may elude the grasp of the forceps, or, if it be seized, it may, in consequence of its friable nature, be crushed to pieces in attempting to withdraw it. In the three first steps of the operation no serious difficulties can arise, at least none that are insurmountable; but in extracting the stone the most formidable and anomalous obstacles will sometimes be encountered,—obstacles which the best surgeons have found it impossible to overcome. After the operation of lithotomy, as, indeed, after severe operations of any kind, the patient should not be restricted too much in his diet,—irritability is invariably a concomitant with want of power,—and in such cases constitutional support should be early prescribed, as the only means of enabling him to withstand the depression produced in the vital energies during the progress of reparation of such a severe constitutional and local lesion.

ORIGINAL COMMUNICATIONS.

DYSMENORRHŒA.

BY EDWARD RIGBY, M.D., &c.;

Senior Physician to the General Lying-in Hospital; Examiner in Midwifery in the University of London.

Miss B., aged 36

June 3, 1847.—Complains of constant severe pain of back, loins, and lower part of abdomen, frequent desire to evacuate the bladder, and considerable difficulty in doing so. Bowels confined. Digestive organs much deranged. Has been in the habit of taking brandy and water to relieve the pain. Has always suffered severely at the menstrual periods; the pain obliging her to remain in bed. The catamenia of late have become irregular and too frequent. Says she has had a constant discharge, tinged with red, for the last ten months.

Exam. per Vaginam.—Os and cervix very small. The body of the uterus appears distended. The uterine sound passed rather more than $2\frac{1}{2}$ inches. I dilated the os slightly, and some brownish, bloody-coloured fluid came away.

℞ Pil. hydrarg., extr. coloc. co.; extr. hyosc. aa. ʒi. M. ft. pil. xij.

℞ Acidi. nitro. mur. del. mxxv., bis. die.; ex. infus. aurant. co.

℞ Sodæ potassio tart., ʒi.—iss. o. m. ex. aquâ.

June 10.—Much better; has lost the discharge and pain. Idilated again, and introduced a small sponge tent.

Rep. mist. et sodæ potassio tart.

℞ Pil. hydrarg., gr. iij., ferri. sulph. gr. ij., extr. lupuli, gr. v. M. ft. pil. ij. h. s. s.

July 1.—The tent caused a good deal of pain, which continued for three or four days, when the catamenia appeared, a week before the proper time. The discharge produced great relief; it was attended with exsudations.

Exam. per Vaginam.—Os uteri and canal of the cervix well dilated. No tenderness is felt, except in the direction of the ovary.

℞ Pil. hydrarg., extr. coloc. co., extr. hyoscyami, aa. ʒi. M. ft. pil. xij., sumat ij. h. s. p. v. n.

Decoct. cinchonæ, ter. die.

℞ Linim. camphoræ ʒiiss., tinct. opii. ʒss. M. ft. linim. inguini sinistro applicand.

July 9.—Writes that she is much better; her strength daily increasing.

Rep. med.

℞ Extr. lactucæ., extr. lupuli., camphoræ, aa. ʒi. M. ft. pil. xij. sumat ij. dolore incipient., et rep. post horas, ij. p. v. n.

In this case there was the same evidence of pressure upon the bladder, from the distended uterus, which I have before noticed. The pain of back, loins, &c., was partly the result of the distended uterus pressing upon the neighbouring parts, and the increased strain which was thrown upon its ligaments, and partly also an effect commonly observed where the uterus is suffering from irritation. The uterus did not appear to have been much increased in size, the sound passing but to a slight distance beyond the ordinary measure of $2\frac{1}{2}$ inches; still, however, some catamenial secretion of the previous period had evidently been retained in its cavity, as was shown by the quantity of brownish-bloody fluid which escaped when I dilated the os. To the same cause (retained menses) must also be attributed the constant discharge, tinged with red, to which she had been subject for the last ten months, and which stopped as soon as the uterus was able to evacuate its contents by means of the slight degree of dilatation which I had effected.

That a considerable amount of irritation had been produced by this state of obstructive dysmenorrhœa is seen by the fibrinous exsudations which had latterly appeared in the catamenia, showing that the ovaries were beginning to suffer also. Uterine irritation seldom exists long without one or both ovaries sympathising; we see it well marked in many cases of retroversion, but particularly so in cases of the sort now under notice.

The derangement of the digestive organs was doubtless much aggravated by her frequent recourse to the use of stimulants for the purpose of allaying her sufferings at the menstrual periods; and it was therefore necessary to clear

out the bowels by an alterative purge, before attempting any local measures.

Having again dilated the os and cervix, I introduced a small sponge tent; and, on removing it the following morning, found that a sufficient amount of dilatation had been effected, which continued for some time.

A well made sponge tent is a most effectual means for dilating the os uteri to a considerable extent, with but a moderate degree of force, and but trifling pain; indeed, some patients appear to suffer nothing more than a sensation of pressure from it. But a well made sponge tent is a great desideratum, and I believe that the medical man must make them himself if he wishes to insure them of the requisite quality; for it is very difficult or impossible to get them made so firmly, that they can be introduced without breaking, and yet be capable of expanding to the necessary amount.

A piece of tolerably fine sponge, previously well dried, should be soaked in mistura acaciæ, and rolled up into a cylindrical form, somewhat in the shape of a small cigar, tapering to a point at one end. The other, or thick end, must be rolled round a middling-sized awl, partly for the purpose of leaving a central perforation into which the end of the instrument which carries it is to be inserted, and partly to fix it, while a piece of stout cord is wound tightly and closely round it from the thick end up to the point. By this means, the sponge is powerfully compressed into the cylindrical form above mentioned, and, if well dried, becomes as hard as a piece of wood, and retains its compressed state perfectly when the cord is removed. Any little projections or roughnesses may be trimmed off with a sharp knife; and, lastly, the tent is to be dipped several times in melted tallow rendered harder by the admixture of a little white wax, until it has become thickly coated. A piece of string or tape is fastened to the lower or thicker end to assist in removing it from the os uteri when expanded. The heat of the part soon melts the unctuous covering, and thus enables the tent to slide up in its own grease as it gradually melts, when otherwise it might have been difficult to introduce it. The secretions of the part slowly pervade the sponge, and dissolve the hardened gum with which it has been soaked, and the sponge gradually expands as it returns to its full size.

Twelve hours is usually a sufficient period to effect this in; and the degree of dilatation produced will guide us as to the introduction of a larger tent on the removal of the first.

Mrs. C., aged 30, married three years, never pregnant.

May 30, 1848.—Pale, haggard.

Has suffered from dysmenorrhœa since her marriage, never before. The pain begins a week before, and increases up to the commencement of the period, when the discharge appears with a gush accompanied with clots. The pain continues all the time, which is usually five days, although it is more or less relieved after the first twelve hours. Pain in the right groin; no exsudations in the discharge. Has suffered from a disposition to hæmorrhoids. Urine high-coloured and turbid; bowels irritable and easily purged; tongue clean and pale; constant pain at the lower part of abdomen; was habitually constipated before marriage.

Examination per Vaginam.—Os uteri and cervix very small; uterus of the natural size. I dilated the os uteri.

℞ Acidi hydrochlor. dil., acidi nitrici dil. aa. ʒi., extr. tarax. ʒi, infusi gentianæ ʒviii. M. ft. mist. cujus sumat cochl. magn. ij. bis die.

June 14.—Catamenia appeared on the 7th. She had little pain the first day, but severe pain afterwards. The discharge came freely, and with no clots; bowels open; evacuations dark; tongue dry and red. Rep.

It is to be regretted that I saw no more of this case after her second visit, as there could be no doubt that further treatment was necessary to improve the general health. The os and cervix, although small, do not appear to have been sufficiently so to obstruct the discharge of the menses previous to her marriage. We may, therefore, I think, safely infer, that the greater amount of uterine congestion which probably existed after marriage was sufficient to close the opening, already more contracted than natural, and cause the dysmenorrhœa from which she suffered. The manner in which the catamenia made their appearance, showed, that when once the os yielded, the whole uterine contents came away rapidly with a gush.

The pain which she suffered during the whole time, in

spite of a considerable degree of relief being experienced by the discharge, must be attributed rather to uterine irritation than any other cause, and, indeed, this must be looked upon as the source of her dysmenorrhœa after marriage. A similar condition appeared to exist in the bowels, which had become irritable and disposed to diarrhœa since marriage, although she had previously been of an habitually constipated habit.

There is no reason to suppose that the pain in the right groin was of an ovarian character, for otherwise there would have been exsudations in the catamenial discharge.

Although relief to a certain degree was decidedly produced by the dilatation, still, as I before said, it is to be regretted, that I had not the opportunity of continuing the general treatment.

ON THE PATHOLOGY OF THE UTERUS; ITS ANATOMY AND PHYSIOLOGY.

By T. SNOW BECK, M.D. Lond., F.R.S.,

Fellow of the Royal College of Surgeons of England,
Physician to the Farringdon General Dispensary and Lying-in Charity.

(Continued from page 456.)

THE TREATMENT.

IN the treatment of uterine disease, all authors recognise the principle of attending (a) to the constitutional symptoms, and (b) to the local disease. It is possible that former authors may have laid too much stress on the constitutional treatment of these diseases, or, in other words, on the treatment of these diseases by attending to the general health; but, if they erred on this point, some practitioners of the present day seriously err in the opposite extreme,—in the amount of interference with the uterus which they counsel and practise. The examination of the assertions regarding the frequent existence of ulceration of the uterus at all periods of life, having led to the conclusion, that neither the anatomical nor the pathological facts upon which this statement is based, nor the clinical history of the cases, are at all to be depended on,—naturally leads to the inference, that the treatment founded on these premises will be incorrect likewise. And such, no doubt, is the case. The principles of treatment recommended, may be gathered from the following quotation from Dr. Bennet's work:—"The various symptoms indicating disordered digestion, assimilation, nutrition, circulation, and enervation, being entirely sympathetic,—that is, the result of the re-action of a diseased organ on the functions of organic and animal life, with which it is connected by its nervous system,—it stands to reason, that when the cause of all the mischief is removed, the system must rally, even unassisted, unless too far depressed by disease. Fortunately, this is very seldom the case, the system appearing almost always to retain the power of rallying, even when it has been depressed by a long life of disease." P. 453. And following this line of argument, these diseases have been locally attacked after the most heroic fashion. Were the operations of nature so simple as the above extract would lead us to infer, we might suppose, that "when the cause of all the mischief is removed the system must rally, even unassisted." But such is not the case. "The various symptoms indicating disordered digestion, assimilation, nutrition, circulation, and enervation," whether they be "entirely sympathetic," or produced by any other cause, cannot exist for any length of time, and certainly not for "a long life of disease," without producing constitutional states which are in themselves important diseases, and require the careful attention of the practical physician. Nay, further, the constitutional condition, when once induced, reacts upon the local affection, which may even have produced it, and requires to be treated *pari passu* with the local disease, before this can be overcome. So true are these remarks, that I doubt not, all who are engaged in the treatment of uterine diseases must have observed that, often, when the uterine element of the affection is removed, the constitutional condition remains, and constitutes a most troublesome affection to treat, although it may have been secondarily induced. I have no intention of arguing the question here brought forward, whether uterine disease can be better treated by local applications to the affected organ, or by the medication of the general system,

for that would lead me beyond the limits of this essay; yet I may state, what I am sure will meet with general confirmation, that many uterine diseases are found in practice to be more readily and more perfectly cured by general than by local treatment; that other uterine affections can only be cured by medication of the general system; whilst some diseases resist all general treatment, unless this be combined with local applications; and, when not of long standing, and occurring in a previously healthy female, may even be cured by local means alone. But because some diseases require local applications for their complete subdual, this is no reason for the assumption, that all uterine affections require this treatment, nor for the very heroic practice which has of late been employed. Nothing, it appears to me, can be further from correct than the following:—"The general medical treatment of a patient suffering from inflammatory disease of the neck of the uterus, may be considered accessory to the local treatment. That such is the case, is proved by the fact, that general treatment alone is totally powerless to subdue the disease; whereas, by local means, the uterine inflammation may be entirely subdued, and its sympathetic secretions removed." (Page 453.) Passages similar to these can only be explained by referring to the incorrect pathology which has been previously examined; for undoubtedly such statements are contrary to clinical experience.

The constitutional symptoms already detailed being induced by the influence of a local disease upon the various functions of the body, and by the secondary derangement of the functions, producing various disorders of the general health, it must be evident, that an essential and most important part of the treatment will consist in removing the functional derangements of the various organs, and by thus enabling them to perform their proper functions, to restore the general system to a state of health. It ought not, however, to be forgotten, that similar conditions of the general system, or, if you will, similar blood diseases, as those induced by long-continued uterine affections, may be produced by other causes than uterine disease; and that when these conditions are met with in practice, it becomes a most important point in diagnosis, to determine whether they are original states of the general health induced by hygienic and other causes, or whether they have for their origin and maintenance a local uterine affection. The importance of this point in diagnosis cannot be overrated, yet it is too lengthy a subject to admit of being discussed at this time. I may, however, state, that all the constitutional symptoms, even to the presence of the local pains, may exist and yet depend upon a condition of the general health following a protracted parturition, which, by inducing, or being attended with, congestion of the pelvic viscera, will closely simulate the symptoms of uterine disease, and yet not only does not require any local treatment, but is aggravated by it.

The general debility, languor, and depression, together with the sleepless nights, the soft, moist skin, and the quiet pulse, for some time prevented these symptoms being recognised as the result of local inflammation. They were considered to be symptoms of "weakness," or of an "hysterical state," and treated by exercise, tonics, and chalybeates. And there can be no doubt that this plan of treatment was attended with success in many cases; but it is equally certain, that in others it only aggravated and perpetuated the disease. In many of the conditions of health following laborious parturition, induced by much suffering and loss of blood, this treatment would be attended with great success. In low, inflammatory affections of the uterus, in females who had never conceived, where the disease had existed for a length of time, had nearly worn itself out, and become eminently chronic,—in this class, again, it would be attended with benefit; but, in cases of a more recent date, or of a more active character, this treatment would be followed by an aggravation of all the symptoms; for, however powerful chalybeates may be as remedies to remove various conditions of the system, or chronic blood diseases, yet, by exercising a direct stimulant effect upon the uterine organs, they aggravate any inflammation, unless the inflammation be of that low, congestive character, which is so well known to be benefited by the application of stimulants. As a general rule, the employment of mild antiphlogistic measures is first required, in spite of the apparent debility present, whilst the stimulating and tonic remedies become very useful, and frequently complete the cure, when employed near the end of the disease. All of these questions, however,

will be better discussed in the treatment of the individual diseases; at present I can only consider, in a very general manner, some of the leading principles.

The amount of rest or exercise which ought to be permitted, admits of no general rule. In severe affections of the uterus, the patient lies constantly on the back, with the knees drawn up, and the shoulders usually low; or sometimes she turns on the side, with the knees drawn towards the abdomen, and the shoulders bent forwards. Not unfrequently she will be found resting on her hands and knees, with her head bent forward upon a pillow, in order to gain a little respite from the severe pain she suffers, by change of position, and by removing all weight of the surrounding viscera from the inflamed organ. In severe affections of the vagina, however, the sufferer cannot rest on the back, by reason of the great pain and tenderness in the sacral region: nor can she lie on the side from the pain round the hips, and "a dragging sensation from the side." The easiest position, which she instinctively takes, being that of sitting on a moderately hard seat, with the body bent forward, and the elbows resting on the knees. In this position she will sometimes spend the whole day, and the greater part of the night. When the seat is soft, it presses like a pad against the perinæum, and causes much increase of pain, as well from the tenderness of this part as from the secondary pressure excited on the vagina. In several cases, I have known the patient regard with dread the time for retiring at night, and, after a few hours of disturbed sleep, feel thankful when the hour in the morning came that she could again arise, and resume the sitting posture. In other cases, the irritation of the nervous system is so great, that the patient declares she cannot remain quiet, but must move about; here it appears more judicious to permit of this, than to induce further irritation by enforcing restraint. Again, in less urgent cases, the propriety of the rule of keeping the patient constantly in the bed or couch is very doubtful. That it is not absolutely necessary for the cure, is abundantly proved by the results of Dispensary practice, where the patients are obliged to attend to their families and household duties, and yet recover nearly as quick as patients in private practice. Whilst the effects produced upon the nervous system, already irritated and weakened by the influence of the disease, the want of refreshing sleep, &c., by constantly reclining, killing time by reading, or some light female occupation, is injurious in its secondary effects; for this further increases the general weakness and irritability, sours the temper, debilitates the mind, and renders the sufferer less capable of bearing the usual accompanying pains. That all unnecessary exertion should be strictly interdicted, and that the patient ought to take a considerable amount of rest in the reclining posture during the day appears to be undoubted; still it has appeared to me the most advisable course to allow her to engage in the minor duties of her household, to walk a little about the house, to make a light pudding, if so disposed, or other similar employment: always, however, enjoining, that these duties must never be carried to fatigue, and that when tired she must return to her couch and rest for a time. However advantageous constant resting may appear in a theoretical point of view, I have always thought, that the injurious influence it exerted on the general health, and on the mind, more than counterbalanced the good produced upon the local disease. When the affection is so far overcome as to allow with impunity gentle exercise in the open air, it ought always to be enjoined, unless some special reasons exist to the contrary.

The nervous system requires equal if not more attention than the bodily exertion. Where it can be obtained, the mind should be engaged in some light, cheerful employment, and all emotional excitement is to be avoided. When possible, the patient ought not to be irritated by the other members of the family, although this is often extremely difficult to avoid, by reason of the great increase in the irritability of the temper of the patient. The evil effects of mental irritation are frequently shown in the course of treatment. With a patient previously progressing in a satisfactory manner, perhaps some cause occurs for disagreement with the husband, child, or even with the servant; and although the local pains have been previously trifling, they now recur with much severity, and the night is usually passed without sleep. For the same reason the temporary separation from the husband is advisable. The use of narcotics to soothe the nervous irritation, to relieve the pain, and to procure sleep is of much importance. They may be em-

ployed locally at the decline of the disease, with great benefit, either in the form of opiate or belladonna liniments, or of opiate or belladonna plasters, &c., or as vaginal lotions or enemata. When administered by the mouth, they are given in small repeated doses during the day, or in a full dose at bedtime. In small doses, combined with other medicines, narcotics relieve the nervous irritation; but, the exciting influence of these small doses is apt to be induced, and to be followed by a full and heavy feeling in the head; whilst by a full dose, the sedative influence of the remedy, as well as some sleep and quiet repose during the night, is usually obtained. Various substances have been employed. Dr. Gouch recommends "one-third camphor and two-thirds extract of henbane, or hemlock, or poppy, divided into pills of five grains, of which one may be taken two or three times a-day; or about ten grains of extract of poppy, dissolved in an ounce of gruel, may be injected into the rectum every day, immediately after the bowels have acted." P. 322. One drachm of tincture of henbane, combined with twenty or thirty drops of comp. spirits of sulphuric ether, or eight or ten drops of tincture of Indian hemp mixed with a little milk and aromatic water, given each night, or each second or third night,—all of these will be found useful remedies, which can be modified according to the individual case. Opium is only occasionally beneficial, as it is apt to increase the distressing feeling in the head; yet ten or twelve drops, administered each night, as an enema, with a small quantity of thin gruel, has been of great service. The action of the Indian hemp seems to be specially indicated in these affections, for, in addition to acting peculiarly upon that condition of the nervous system which occasions the frightful dreams, it also exerts a special influence upon the uterus itself. In some cases of uterine tormina, I have known it act almost as a charm; and by the aid of this remedy I have been enabled to remove, in a few hours, spectra which had harassed the patient night and day for some time previous, "murdering sleep" and preventing repose, from the frightful dreams which they occasioned; whilst the special action on the uterus is again shown by the marked manner in which it arrests the profuse flow of the catamenia, when depending upon an affection of the uterus. Should this, however, be occasioned by an affection of the vagina, I have not observed it to exercise any marked good effect; nor has the administration of it been followed by relief of the pains reflected from the vagina to nearly so great an extent as of those reflected from the uterus itself.

As a part of the general medical treatment, change of air is often of essential service. It is most beneficial at the end of the treatment, and imparts tone to the general system, and removes the irritation of the nervous centres. Whether this is effected by the improved condition of the blood, as a consequence of the different air inspired, or the tone communicated to the nervous system by the impression on the surfaces of the body, aided by the effect of change of scene on the mind; or the improvement in the digestive and other secretory organs, it is not my present object to inquire. There can be no doubt but that the general health is much improved by a change of air at any stage of the affection; but when it is recommended at an early period, it only raises delusive hopes in the patient, to be again dispelled in a short time by the former symptoms returning through the influence of the local disease. Such a plan of treatment is obviously beginning at the wrong end, and, when repeated several times, greatly depresses the mind of the patient, already suffering under much depression. Yet it must not be overlooked, that often, in the endeavour to cure these affections, it is necessary to omit, from time to time, the means directed to the local affection, and to attend to the general health, the deranged condition of which is the cause of the prolonged illness. Where the sea air agrees with the individual, I have known it have a marked beneficial effect. Among other influences, I may mention, that patients who previously had been unable to obtain any calm repose for a length of time, have slept, and slept soundly, after a short residence near the sea; and again, patients who have suffered at each catamenial period with distressing nervous affections, have had these affections completely removed by the same influence, when this has been employed at the decline of the complaint. It sometimes, and this not unfrequently, happens, that the sea air does not agree with the individual, and in these cases it is necessary to remove her to a short distance from the sea coast, or, if need be, to an inland part, where the air is dry and bracing. General states of the

health, which closely simulate the effects of uterine disease, are not unfrequently removed by these means; but it must be borne in mind that this is not curing a uterine affection, but a general condition of the health which closely simulates these affections, and it may be, that has been induced by them.

Sea bathing, or the cold hip salt water bath each morning for about five minutes, or the shower-bath occasionally, are all valuable means of restoring the health, when employed at the proper time. Sponging the body with cold salt water is also of great service; the chest, back, abdomen, and extremities, especially where the pains are or have been seated. The parts should be first rubbed with a coarse towel, or horse-hair rubber; and after a glow of warmth is produced, the sponge is then lightly passed over the part, which is afterwards quickly dried with a rather coarse towel. This may be repeated each morning, or each other morning, according to circumstances, and made preparatory to the cold hip bath or sea-bathing. In all cases it is necessary to impress the caution, that neither long walks nor too much exercise is to be taken. Patients are apt to forget, that in endeavouring to do good they may do too much, and, consequently, do harm. They may remain as much in the open air as possible, sitting by the side of the sea, or gently strolling along the shore; yet they ought especially to avoid over-fatigue, either of the body or the mind.

9A, Langham-place.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

GUY'S HOSPITAL.

By F. W. PAVY, Esq.,

Clinical Clerk.

HYDATIDS OF THE LIVER EXPECTORATED THROUGH THE LUNG.

HYDATID is a disease of not unfrequent occurrence, yet of sufficient rarity to render it, from its peculiar nature, one of much interest. It is a humiliating fact, and one equally revolting to our more refined notions as it is true, that man should be liable to be infested with living animals; that his body should not only be devoured by worms when vitality is extinct, but his tissues exposed as a prey to their ravages while carrying on the ordinary functions of life. Of all the animals which inhabit the human frame, the hydatid is, perhaps, the most curious. Unlike the other entozoa, its abode is not confined to one particular tissue or organ, being met with, sometimes in the brain, sometimes in the lungs, the spleen, and so on, but by far the most frequently in the liver. Attention was early directed to the nature of the hydatid cyst, and, as much as two centuries ago, its animality was discovered. One point, however, in its history still remains to be cleared up. We know the animal invades various organs of the body, but how it originally gets into these organs, or why it should sometimes select one and sometimes the other, are facts the explanation of which we have yet to learn. In the human subject, the hydatid tumour consists of a number of vesicles of very various sizes enclosed within a cavity, the walls of which are formed of a distinctly-organised membrane. The vesicles, or small cysts, contain in their interior the animalculæ—Echinococci—peculiar to the disease. They may usually be seen, with the unassisted eye, on careful examination, and look like white specks or grains of sand, which, under the microscope, are shown to consist of several vermiculi, clustered together into a bunch. The microscopical appearance of the Echinococcus is easily recognised, and quite distinctive; it is, therefore, a pathognomonic indication, in a diagnostic point of view. Those interested in the subject will find an excellent description of it, accompanied with drawings, in the "Transactions of the Microscopical Society," for February, 1846, by Mr. Busk. It frequently happens, in a microscopical examination, that a claw, or hooklet, is the only vestige of the animal which can be discovered; but, being a member or part of its body, is as certain an indication of the nature of disease as though the entire animal were found. Mr. Bransby Cooper men-

tions an instance in which his diagnosis and treatment were founded entirely on the evidence afforded him by the microscope. It was the case of a lady with an obscure, fluctuating tumour seated in the gluteal region. With a trocar and canula he punctured it, and drew off a considerable quantity of fluid, in which he discovered a hooklet or claw of the Echinococcus. This was quite sufficient to induce him to meddle with it no further; otherwise, however, he had previously intended to have injected it. A somewhat similar example occurred within the hospital about a year ago. A patient was admitted with an immense tumour occupying the epigastric and right hypochondriac regions. The history of the case pointed to hydatid as the nature of his disease, which was most satisfactorily confirmed by the exploring needle and the use of the microscope. It is only the positive evidence which the microscope affords us that can be regarded as of any value or importance; for it must be remembered, that because no trace of an hydatid is discoverable, is merely negative evidence, and no proof that it is not an hydatid tumour. In the instance just referred to, that occurred within the hospital, the fluid was most minutely and carefully examined by Dr. Gull, and the field of the microscope hunted over several times before he discovered the only evidence—a single claw of the hydatid—this instrument afforded; but which, at once conclusively indicated the nature of the tumour. I examined an hydatid cyst for Dr. Addison, a few months back, and placed several specimens under the microscope before obtaining the evidence I desired. The following are the particulars of the case to which this report refers:—

Eliza Woodbridge, aged 33, a married woman, of a slender frame, a delicate and rather emaciated appearance. Has given birth to three children, and is at the present time six months advanced in pregnancy. Follows no occupation, being only engaged in her domestic affairs; has enjoyed until lately exceedingly good health, and has never to her knowledge received a blow or other external injury of any consideration to her chest or abdomen. Her menstrual functions were performed quite regularly, until her last confinement, a year and nine months ago; since then, however, she has observed no appearance of the catamenia. Four months ago she experienced a severe pain in the right side, sharp in character, and much increased on coughing or breathing deeply. A few days afterwards her skin was jaundiced, and she became the subject of frequent attacks of vomiting of a bilious fluid, extremely bitter to the taste, but not containing, as far as she noticed, any of those peculiar bodies which she has observed in her expectoration. Soon after the appearance of the jaundice, she was seized with cough and expectoration, in addition to the other symptoms of her complaint. Her sputa was at first quite yellow; afterwards less so; tasted bitter, smelt offensively, and contained some strange-looking bodies; which, according to her own language, resembled small bladders, or the outside skin of grapes. This peculiar appearance of her expectoration induced her to apply as an out-patient to the hospital; and, accordingly, she was under Dr. Rees' care until her admission as an in-patient under Dr. Babington. About two months ago she discovered a small diffused swelling, situated over the seat of pain, on the right side. It was not, however, of any considerable extent, for she did not herself notice it, until Dr. Rees directed her attention to it, and, lasting for about three weeks, it entirely disappeared. She has also complained of pain over her right shoulder, which, she remarks, has varied with the condition of her expectoration, being more severe, on this secretion being free from hydatids, than under the opposite state. When she first observed the hydatids, she continued uninterruptedly every day, for some time, to evacuate a considerable quantity of them; lately, however, she has sometimes gone for days together, and once even a fortnight, without expectorating any. At these times her sputa is frequently streaked with blood, and, as before referred to, the pain over her shoulder increased.

Through the kindness of Dr. Babington she was transferred from his care into the clinical ward, under Dr. Addison, and at this time presented the following symptoms:—Pain over the right shoulder; pain in the right side on attempting to breathe deeply; cough, much increased when in the recumbent position; considerable expectoration, and occasional vomiting. No swelling over the liver or elsewhere, except that arising from her pregnant condition. Appetite good; respiration unembarrassed except by her cough, and excre-

tions natural. Expectoration copious, thick, tenacious, of a dirty yellow colour, and slightly offensive smell. Mixed with it, are a number of different-sized bodies, varying from that of a pea to that of a filbert, which, when separated and placed in clean water, appear as membranous, rounded cysts; some entire, especially the smaller ones; others ruptured. Most of them are colourless, but others on the contrary are deeply tinged with yellow, which gives the characteristic re-action of the colouring matter of bile, when treated with nitric acid. On submitting the contents of one of the entire cysts to microscopical examination, a great number of echinococci were visible, but were rather smaller than those usually met with.

One of the most striking and remarkable circumstances connected with the case, is, that notwithstanding the mischief that must have taken place in the right lung, through which there is a constant discharge of hydatids from the liver; there is so little constitutional disturbance, and the only auscultatory signs audible are puerile respiration over the left chest, and deficient respiratory murmur over the base of the right lung, accompanied with universally diffused mucous râles.

The diagnosis of the nature of disease in this case is sufficiently obvious and certain. A woman tells you she is affected with a troublesome cough, and shows you in her expectoration some membranous bodies, having all the appearance of hydatid cysts, and displaying under the microscope a minute animal,—the echinococcus hominis. So far everything is clear and decisive; but the question next arises, where have these cysts originally come from? They have been expectorated from the lung; but have they come from this viscus, or have they merely come through it, *in transitu*, from some other organ? Taking into consideration the fact, that hydatid of the liver is a comparatively common disease, and hydatid of the lung an extremely rare one, combined with the lesion; disclosed by auscultation of the lower part of the right lung; which it must be remembered is situated in close proximity to the liver; one would be naturally led to give an opinion that they came from this organ, and not from the lungs. In the present instance, the additional evidence afforded by the colouring matter of the bile, being detected in some of hydatid cysts, completely removes all doubt on this point. But Dr. Addison relates a case, in which he was consulted during the summer by a lady whose symptoms precisely corresponded with those of the woman whose report we have given, except in this particular, that the hydatid cysts were entirely free from a bilious tinge. Still, however, he had no hesitation in giving his opinion, that they came from the liver, and merely passed through the lung.

The treatment of hydatid is in an extremely unsatisfactory state. Iodide of potassium, and chloride of sodium or common salt, have been recommended as curative agents for the disease; but it is doubtful if any known remedies have the power of controlling or arresting the growth of the animal. The physician's object, therefore, is to employ palliative measures, and thus endeavour to mitigate or relieve symptoms. With this view, the treatment adopted in the present instance consisted in the administration of oxymel, nitrate of potash, and tincture of hyoscyamus, with five grains of the compound conium pill night and morning.

There is another aspect under which the treatment of hydatids must be viewed. Medicine being unavailing, some surgeons have recommended the destruction of the animal by puncturing its cyst and evacuating its contents. Most, however, I think at the present day, are in favour of leaving it alone. Mr. Bransby Cooper speaks in strong terms against meddling with it, and says, that according to his experience, as long as an hydatid cyst is left untouched, and the animal retains its vitality, it creates but little constitutional disturbance. Immediately, however, you disturb it, death takes place, and it then acts like any other extraneous matter, creates a great amount of irritation, which, in a short time, leads to extensive suppuration of the walls of the cyst, under which the patient is too often unable to survive.

Mr. Hilton, on the other hand, speaks in favourable terms of the operation, from the experience he has had of its efficacy. He has operated in four cases, two of which proved completely successful.

HYDATIDS (OF THE LIVER?) VOIDED PER RECTUM.

Since the above report was forwarded for publication, another case of hydatid, of an exceedingly interesting nature,

has occurred in the same ward. It is that of a woman about 30 years of age, who was admitted with obscure pains over the region of the liver, accompanied with a slightly jaundiced condition of her surface. She had been confined about three months previously, and had never completely recovered, complaining of great debility, and occasional severe pains in the right side, where there was also a decided fulness and tenderness. A week previous to her admission, her pain became materially aggravated, and her skin jaundiced. These symptoms induced Mr. Massey, the clinical clerk, to examine her fæces for gall-stones. The result of this examination was the detection of several hydatid cysts, some of which were deeply tinged of a yellow colour. It is probable, as Dr. Addison remarked, that, in this case, the hydatid tumour is in connexion with the concave surface of the liver, and has formed an opening into some part or other of the intestinal canal; while the previous case, on the other hand, seems to be one connected with the convex surface of the liver, having made its way upwards and opened through the lung.

UNIVERSITY COLLEGE HOSPITAL.

By ST. JOHN EDWARDS, Esq.,

Physician's Assistant, University College Hospital.

ANEURISM OF THE ASCENDING AORTA OPENING INTO THE RIGHT AURICLE.

CHARLES ROWES, aged 30, was brought to University College Hospital on the night of Friday, the 26th of September, about half-past ten. He was then dead.

But little could be ascertained with regard to the previous history of the man. His landlady considered him a perfectly healthy individual, while his sister affirmed that he had for a long time complained of pain in the anterior part of the chest, that this pain was much increased whenever he assumed a stooping posture, and that in the discharge of his duties as an ostler he was frequently obliged to assume this posture.

On the evening of the day of his death, a fellow-workman who lived in the same house, heard him groan, and, on asking him the reason, deceased answered, that "he would soon be better." Directly after this, he partook of some tea, and at nine p.m. had a small quantity of gin at a public-house.

From hence he set out to walk to his employer's; and, when on his way, about ten p.m., he suddenly fell down, and died almost immediately.

Post-mortem Examination.—The brain was healthy, perhaps a little more congested than usual.

The mucous membrane of the stomach presented a few patches of punctiform redness, and the upper part of the small intestines was highly congested.

The lungs, especially the left, were small, and retracted beneath the ribs, leaving a large amount of pericardial surface uncovered. The pericardium seemed covered with a false membrane, which contained masses of fat in folds suspended near the diaphragm. The folds and contained fat very much resembled appendices epiploicæ.

The pericardium was adherent to the surface of the heart; and on attempting to dissect it off while the viscera were *in situ*, the scalpel entered what appeared to me to be the right auricle, and a considerable quantity of dark fluid blood escaped.

The pericardium, heart, and commencement of the great vessels were taken out in a mass.

The pericardium was carefully dissected from the heart, to which it was universally adherent by means of a highly vascular false membrane of gelatinous consistence.

The supposed right auricle into which the scalpel had entered turned out to be an aneurism of the ascending aorta, which extended upwards behind and to the right of the aorta as high as the left vena innominata. The left innominata vein, that is to say, crossing its upper border. To the left it lay in contact with the aorta and pulmonary artery, pushing the latter to the left; to the right with the vena cava, which had evidently been pushed to the right, and had its walls thickened. It lay in contact with the vena cava, as high as the entrance of the right vena innominata into that vessel. Inferiorly it reached to the line of junction

between the right auricle and ventricle, lying in front and to the left of the former, which it concealed from view and thrust to the right. Passing backwards, it detruded the right auricle considerably to the right, and lay in contact with the left auricle, compressing and pushing upwards the right branch of the pulmonary artery. The diameter of the aneurism was 3 inches; its extreme length 4 inches; the diameter of the arterial opening into it $\frac{3}{4}$ of an inch.

It had opened into the right auricle. The opening was jagged on its aneurismal, smooth on its auricular surface. Its edges consisted of muscoli pectinati, and measured when *in situ* half an inch by a quarter of an inch. When opened out, it was about as large as a fourpenny piece. The opening from the aorta into the aneurism was smooth, thick, hard, and rounded; somewhat square in shape, and its lower border was exactly on a level with the free edge of one division of the sigmoid valve. Close to another of its edges lay the right coronary artery, which was much enlarged at its origin, being about the size of a goose quill; it sprung from a pouch, and had very thick walls.

The left coronary artery was natural in size. The lining membrane of the aorta appeared to be continuous with that of the aneurismal sac.

Heart.—The circumference of the mitral orifice of the heart was $4\frac{1}{2}$ inches; of the pulmonary artery over the valves, $2\frac{1}{2}$. The pulmonary and mitral valves, as well as the lining membrane of the left auricle and ventricle, were perfectly healthy. The wall of the left ventricle measured in its thickest part $\frac{3}{8}$ of an inch, and its cavity was larger than usual. The cavity of the left auricle was natural. The circumference of aorta over the sigmoid valves was 3 inches; at the upper border of the opening into the aneurism, *i.e.*, $1\frac{1}{4}$ inches above the upper edge of the sigmoid valves, 2 inches. These valves were slightly more opaque, perhaps, than natural; in all other respects healthy. The circumference of tricuspid orifice was $5\frac{1}{2}$ inches; the valve was natural. Both the right auricle and ventricle were extremely flabby. The lining membrane of the large vessels was perfectly natural; there was slight atheromatous deposit in the aorta, commencing just above the aneurism, and extending upwards of $\frac{3}{4}$ of an inch.

The sac of the aneurism, I ought to add, contained no trace of coagulum.

TERMS OF SUBSCRIPTION.

	£	s.	d.
Twelve Months (<i>pre-paid</i>)	1	5	0
do. (<i>do.</i>) stamped for post	1	10	0
Six Months (<i>do.</i>)	0	16	0

Regularly transmitted by Post throughout Great Britain, and to the most distant of the British Colonies.

Post-Office Orders to be made payable at the Post-Office in Coventry-st., to Mr. JAMES LUCAS, 46, Princes-st., Soho.

TO ADVERTISERS.

Terms for advertisements (*which should be sent to the Office before 2 o'clock on Thursday*):—

	s.	d.
For eight lines or less	6	0
Each additional line	0	6

TO SUBSCRIBERS.

Portfolios for holding the Numbers of the current Volume have been prepared, price 2s. 6d. each. May be had by order of any Bookseller.

Cases for binding the Volumes, in cloth, gilt lettered, are now ready. Price 2s.

Orders should be given, without delay, for back Numbers or Volumes that may be required to complete Sets.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Dec 6.—MEDICAL SOCIETY OF LONDON. Subject:—Mr. J. B. BOWEN, "On Rupture of the Perinæum and its Treatment." Eight o'clock.

Tuesday, December 9.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY. Half-past Eight o'clock.

Saturday, December 13.—MEDICAL SOCIETY OF LONDON. Subject:—Dr. OGIER WARD, "On Compression of the Fœtal Head at Birth." Eight o'clock.

THE MEDICAL TIMES.

SATURDAY, DECEMBER 6.

THE NEW CHARTER OF THE COLLEGE OF SURGEONS.

AFTER many years of doubt and hesitation, the London College of Surgeons has taken an important step in the right direction. We live in times, the characteristic of which is progress. Neither institutions nor men are permitted to remain stationary, under pain of certain decadence; and the only way of avoiding a fall, is to keep constantly in movement. Far more prudent is it to set the house in order and trim the lamp while time permits, than imitate those foolish politicians who refuse every concession to popular feeling until the tide of public opinion sweeps them away for ever.

The New Charter of the College of Surgeons, which we this day publish in full, will, we are inclined to believe, be received with much satisfaction by the members of the Profession. It satisfies legitimate requirements, recognises the just rights of a large body of practitioners, and supplies a want long and universally acknowledged. It is, however, far from being a complete settlement of the question of medical reform; but it is, nevertheless, an instalment, and as such we are disposed to accept it with gratitude, determined at the same time to demand the rest, until the full debt be duly discharged.

The provisions of the new Charter mainly relate to the constitution of the Council and the election of Fellows. Members of twenty years', and Fellows of fourteen years' standing, are eligible to seats in the Council, provided they be in *bond fide* practice as surgeons, and do not practise as apothecaries; while any member of fifteen years' standing may be elected a Fellow of the College without examination, even though he be an apothecary, provided he do not sell or supply drugs otherwise than in the due practice of his profession.

Fellows, Members and Licentiates of the Colleges of Surgeons of Edinburgh, Dublin, and Glasgow, are to be admitted, without examination, to the Membership or Fellowship of the London College, provided they be in *bond fide* practice as surgeons in England or Wales.

Finally, a Board of Examiners in Midwifery is constituted, of not less than three persons, who, it will appear, may be chosen from beyond the precincts of the College.

Such are the principal enactments of the new Charter. They are, as will be seen at once, rather concessions to just demands, than attempts to settle in a general and complete manner the complex question of Medical Reform. Such a settlement, indeed, involving a great variety of conflicting interests, and embracing every department of medicine, is beyond the power of the College of Surgeons, which, after all, is but one among many. In the mean time, it has shown proof of prudent foresight, in throwing open the Fellowship to all its members, and in giving, what was so long and ardently desired, a status in its walls to practitioners in midwifery.

The admission to the Fellowship of all members of fifteen years' standing will increase, to a very considerable amount, the elective body of the College. This is wise as well as just. Privilege only begets discontent; and the College of Surgeons, if it desire to preserve the high rank which it has hitherto occupied, must rally all its members under the common bond of equality. Englishmen, it is true, are not

vet prepared for so revolutionary a principle; but we have something nearly approaching it. All members of fifteen years' standing may obtain the right of franchise. By-and-by the standard will be lowered, and all members will be permitted to have a voice on the decision of their own affairs. But *festina lente* has ever been the motto of corporate bodies; and we cannot, perhaps, expect the College of Surgeons to move more rapidly than traditional authority will permit.

The restriction of the Fellowship to General Practitioners in the true sense of the term, that is to say, to surgeons who merely supply their patients with such remedies as the case requires, will meet the approbation of every reflecting man. Surgeons are no longer barbers. As a part of medicine, surgery must be raised to the rank of a profession; and its members, if they aspire to honour, must avoid mercantile speculations; for the interests and dignity of the Profession forbid an occupation into which science does not enter. We are, therefore, rejoiced to find, that the Council, in thus encouraging General Practitioners to confine themselves strictly within the limits of their calling, have marked with merited disapprobation a practice which "necessity" can alone excuse.

By stretching their liberality a little further, the College might have omitted the restriction applied to candidates for a seat in the Council. It is not easy to understand why, if all members of fifteen years' standing, may become Fellows, all Fellows of fourteen years' standing may not become Councillors. The Council, however, as heretofore, is to be composed exclusively of "pures." The General Practitioner is good enough for the Fellowship; but, though he may have been a Fellow for twenty years, and whatever may be his status in the Profession, he is not considered worthy of a seat in the Council. This remnant of Mediæval legislation will, we trust, disappear before the next edition of the Charter.

As a set-off against this blot, however, we have a measure which has justly been regarded as one of the corner-stones of Medical Reform. We allude to the provisions whereby Members of the Scotch and Irish Colleges are admitted, without examination, Members of the London College. This liberal enactment does away, in a great degree, with many of the arguments brought forward against a multiplicity of licensing bodies: at least, it obviates the objection raised on the score of inequality; and we rejoice it is now virtually admitted, that a surgeon holding a diploma from the Scotch or Irish Colleges is fully capable of practising his profession in England, and does not require any further test of qualification.

A few, perhaps, may be inclined to think that the College has been too liberal in its admission of Fellows and Members. The Fellows, by virtue of examination, may, in particular, complain at being placed on a level with Fellows in virtue of age. But the honour of the former diploma cannot be diminished by a measure which only confers on a portion of the members corporate rights which have hitherto unjustly been withheld from them. The Fellowship by examination will ever remain an object of high ambition to young men, and the public will never confound the two sources of distinction.

We are not of those who think it a duty to carp at every act of men, merely because they are in authority, or do not, haply, come up to our preconceived ideas of perfection. Practitioners ourselves, we are disposed to view men and things in a practical point of view. We would not spurn benefits offered, because we may imagine them doled with a

sparing hand; nor would we require more from the Council of the College of Surgeons than the circumstances in which it is placed enable it to perform. Hence we look upon the proposed Charter as a benefit, and receive it with feelings of gratitude, being convinced that the Council will not swerve from the liberal path upon which it has now seriously entered. *Macte virtute!*

THE COLLEGE OF SURGEONS AND THE HOMŒOPATHS.

THAT discretion is the sounder part of valour, is true not only with reference to the doings of individuals, but also with regard to the acts of corporate bodies. Those in authority, especially, must avoid making a threat they cannot execute. Let them strive to put down an evil by force, and fail, and the powers that have made that abortive attempt are no longer in the position they were, while the evil has itself made progress,—the former has lost what the latter has gained.

The Council of the Royal College of Surgeons has been on several occasions directly and earnestly urged to take some step with reference to the subject of Homœopathy. Men bearing the name of Surgeons have, it has been alleged by the remonstrants, disgraced themselves by pandering to the quackery-loving tastes of the public; while the College itself has suffered in the estimation of the world by retaining such men within its walls; and still more, by publishing a list of its members, in which the names of these men are retained, the College, it is averred, lends the colour of its name to their nefarious doings, and enables them the more easily to beguile the uninitiated public.

After mature deliberation, the Council of the Royal College of Surgeons has replied to the requisitionists by a resolution to the effect, that the Council attentively considered the communication they have received on the subject of homœopathy, and that it is not expedient to interfere in the matter; i. e., they refuse to move a step, to utter even a note, whereby their own opinions may be known; and thus have given support to the assertion so current, that some among themselves have a leaning towards the Hahnemannian foolery.

On the part of the Council it may be pleaded, that they have not the power to expel, or even to expunge from the list of members those who practise homœopathy. Let us see if this is so? We quote the whole of the clauses of the Bye-laws bearing on the subject.

MISCONDUCT OF MEMBERS.

"1. No member of the College shall advertise a secret method or process of cure relating to his practice as a surgeon; or put forth, or publish, in whatever way, any indecent advertisement or notification relating to the said practice; and any member of the College, who may in any manner offend herein, shall be liable to removal by the Council from being a member of the said College; and every member of the College who shall thereupon be removed as aforesaid, shall forfeit all his rights and privileges as a member thereof.

"2. No member of the College shall advertise or publish any matter or thing prejudicial to the interest, or derogatory to the honour of the College, or disgraceful to the profession of surgery; and any member of the College who may offend herein shall be liable to removal by the Council from being a member of the College; and every member of the College who shall thereupon be removed as aforesaid, shall forfeit all his rights and privileges as a member thereof.

"3. Should any member of the College render himself, in the judgment of the Council, disgraceful to the College, his name may be omitted in the printed lists of the members thereof."

Now, let our readers calmly ask themselves, Would these clauses justify the Council in a legal point of view in expel-

ing or omitting from the printed lists the names of the homœopathic members of the College? For our part, we are unwillingly compelled to own that they would not. Suppose the Council disenfranchised the homœopaths; and one of these persons applies to the Court of Queen's Bench for a *mandamus*, to show cause why the rights and privileges of the College are denied to him. The *mandamus* is granted; the President and Council plead that the practice of homœopathy is disgraceful, and that the offending member, having practised homœopathy, is legally disenfranchised. The homœopath brings an action at law to recover his rights, the case is brought into Court, and the question turns on the strict legal meaning of the word "disgraceful," twice employed in the clauses of the Bye-laws. The judge and jury, who often hold very different notions on matters medical, from those held by members of the Medical Profession, apply themselves to the strict meaning of the term "disgraceful" in connexion with the general tenour of the Clause; they inquire whether the use of larger or smaller doses of medicines than those ordinarily employed can be considered a disgraceful act, and ten to one but they arrive at the conclusion, that such disputes are unimportant, and that the member has not disgraced himself in such wise as to be amenable to the punishment declared in the Bye-laws. It must be remembered, that the knavishness of these humbugs cannot be exhibited in a light which would carry conviction to a lay jury. Their "cooked" statistics—their downright mis-statements—the absurdity of their dogma—the nonsense of infinitesimal doses and didymization—these and many other points, to us clear as the sun at noon-day, would be impenetrable darkness to the judge and jury. The immediate result of the failure in the Court of law would be, that the names of the homœopaths would have to be restored to the College-list; the public would believe that they had been unjustly treated, and they would gain at once the advantage to be derived from the victory, and that to be derived from the credit of being persecuted men; the illusions of homœopathy would spread more widely, and its reign over its victims be indefinitely prolonged.

The Council, then, have acted wisely in refusing to disenfranchise the homœopathic members, for this reason, that they have not legally the power to do so; yet taken as a whole, the resolution with which the Council of the College has answered the requisitionists is far from satisfactory. Three other courses than the one they have adopted were open to the Council:—

1st. They might have proceeded at once to expel the members whose conduct is really disgraceful—at least, we hope so—in their opinion;—this might have been bold, but it would not, as we have just seen, have been discreet practice.

2nd. They might have expressed their conviction, that it was desirable to expel the men complained of, and their regret that the present Bye-laws would not justify them legally in disenfranchising them; but that they would endeavour to obtain the sanction of the Secretary of State to such alterations of the same as would enable them to effect that which they desired as earnestly as the requisitionists themselves. This would have been a popular course; it would have afforded satisfaction to a large section of the Profession; but unless certain that it was practicable to frame Bye-laws to meet the case—of the difficulty of which, let those who doubt try their hand,—and also, that the Secretary of State would sanction these Bye-laws, when framed, the decision of the Council not to make such an answer was one dictated by sound sense.

3rd. They might have declared their regret that any member of the College should have lent his name to favour the propagation of the species of quackery termed homœopathy; and, at the same time, have pointed out the practical difficulties that lie in the way of defining a homœopath, and of proving a surgeon to be one; and have expressed an opinion on the question of meeting notorious homœopaths in consultation. This would have been a real service to the cause of truth, would have afforded some satisfaction to every member of the Profession, and would have freed the Council from the suspicion which now attaches to it.

On the whole, then, while we commend the prudence of the Council in declining to do that which would inevitably have led them into an action in which they would have been worsted, we deeply regret that they have not seized this opportunity to express their opinion on a subject to which Whately and Bunsen have lent the prestige of their names.

VACCINATION, AND THE QUERIES OF THE EPIDEMIOLOGICAL SOCIETY.

THE earnest appeal in behalf of the "Small-pox and Vaccination Committee" of the Epidemiological Society, contained in Dr. Seaton's letter, which appears in another part of our columns, will, we trust, speak effectively to every member of the Profession.

To ascertain correctly the amount of protection afforded by vaccination against small-pox; the conditions to be observed to render the operation effectual; the tests which should satisfy us that the operation has been properly performed; how much of the present mortality from small-pox is due to the imperfect performance of vaccination; how much to the neglect of it; and how much, if any, is to be accounted for by its protective powers being of limited duration, or by the lymph employed suffering deterioration in passing through a succession of human beings,—are, as Dr. Seaton informs us, a few only of the important points which it is the object of the Committee satisfactorily to adjust.

For the proper solution of these important questions, interesting not merely as matters of scientific inquiry, but as bearing directly upon a measure, the hygienic value of which has no parallel in the annals of human discovery, the Committee felt the necessity of being furnished with data from all sources whence authentic information was likely to be obtained, and they, therefore, drew up an elaborate and well-arranged series of queries, (which have already appeared in our Journal,) embracing every essential point connected with the subject of their investigation.

It was in every respect desirable, that the diffusion of these queries should be upon the most extensive scale; but financial considerations, which but too often cramp the operations of young institutions, obliged the Committee to limit their issue to hospitals, public dispensaries, medical officers of Unions, and such other members of the Profession as were personally known to the Committee and Council.

Out of one thousand copies of the queries, distributed so far back as the month of April last, three hundred only have as yet been returned answered,—a proportion small indeed, and but little in harmony with the arduous and disinterested zeal manifested by the Committee, who have been assiduously engaged in consulting former authorities, as well as in making a careful analysis of the documents that have now been furnished them, with the view to the framing of a full and comprehensive Report on the subject they have undertaken to investigate.

In an age when the force of authority has long ceased to be estimated by its antiquity—when old institutions and opinions long held unassailable, are undergoing a closer and more searching inspection—when precedent is no longer considered the test of excellence, it was not to be expected that the splendid legacy which the genius of Jenner bequeathed to mankind should escape the general spirit of scrutinizing inquiry. And, although the value of the discovery of our illustrious countryman has, by all but universal consent, stood unquestioned for above half a century, it is but right and just, that it should now be fairly weighed in the most delicate balance which modern science and experience can supply.

The Committee are making every endeavour to accomplish this great end; and we therefore trust, that the outstanding papers will be speedily filled up and returned to the Honorary Secretary of the Society. To the public the Committee may look for generous support; but in a work which combines science with benevolence, the Profession ought to occupy the foremost ranks.

The magnitude and importance of the inquiry which the Committee have voluntarily undertaken, and the amount of labour involved in the proper adjustment of each of the points under their consideration, entitle them to the gratitude of all, and in an especial degree to the sympathy and cordial co-operation of their medical brethren.

AUDI ALTERAM PARTEM.

THERE is a grave and very serious evil well illustrated in the late case of Dr. Holland, of Brook-street, springing up from the homœopathic discussions so rife at present, which it is desirable should be arrested at the outset. We allude to the reckless manner in which accusations are cast upon men of unblemished character and reputation, without the slightest attempt being made, in the first instance, to ascertain their truth or falsehood. Journalism is a great good, but may be made a great evil; and the wholesale manner in which some journals open their columns to slander cannot be too strongly deprecated. It is no light matter to bring charges against honourable men merely upon rumour. 'There is a trite saying, "throw plenty of mud, and some of it will be sure to stick,"—so, when a serious charge, however unfounded, is brought, there will always be persons too willing to propagate it. Our Profession has been called a "liberal" Profession; but, alas! the illiberal manner in which some of its members act towards their brethren bids fair to deprive it of its claim to that title. Bishop Butler truly says, that a tongue willing to slander "is like a sword in the hand of a madman; it can scarce possibly do any good, and for the most part does a world of mischief, and implies, not only great folly and a trifling spirit, but great viciousness of men, great indifference to truth and falsehood, and to the reputation, welfare, and good of others." It is to be hoped, that professional men will be guarded in future how they circulate reports against others, of discreditable acts or motives, either directly or by implication; that they will pause ere they rob another of his good name; and, above all, that, instead of spreading strife and discord, they will bear in mind, that it is more Christian-like to aim at being kind and charitable one towards another.

THE WIDOW OF THE LATE DR. D. D. DAVIS.—Her Majesty has been pleased, within the last few days, to grant out of the Privy Purse an annuity of fifty pounds to the widow of the late Dr. David D. Davis, of Russell-place, Fitzroy-square, who was the Physician Accoucheur in attendance at the birth of Her Majesty. Dr. Davis' death took place in 1841.

DRAFT SUPPLEMENTAL CHARTER OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AND whereas, it appears to us expedient that the right of admission to the fellowship of the said College be extended to such persons as were members of the said College at the date of our said letters patent, subject to certain conditions and regulations hereinafter mentioned, and that the Council of the said College have power annually to elect certain members of the College to be fellows, without examination, in manner hereinafter mentioned. That certain restrictions now existing upon the eligibility of fellows to be members of the Council of the said College be removed, and that certain other qualifications be required of fellows offering themselves as candidates for the Council. That certain alterations be made in the electing of members of the Council. That power be given for admission to the College, as hereinafter mentioned, of fellows, members, and licentiates of certain other corporate bodies, as hereinafter mentioned. That certain alterations be made as to the continuance in office of all future Examiners of the said College, and as to the continuance of the President, in certain cases, as a member of the Council, and that a Board of Examiners in Midwifery be established, as hereinafter mentioned. Now know ye, that we of our especial grace and mere motion, at the humble petition of the said Royal College, have willed, ordained, constituted, and declared and granted, and by these presents, for us, our heirs and successors, do, will, ordain, constitute, and declare, and unto the said Royal College of Surgeons of England do grant in manner following, to wit,—

1. That it shall be lawful for the Council of the said College at any time or times hereafter, by diploma or diplomas under the seal of the said College, in such form as the said Council may think fit and direct, and without any previous examination, to appoint any person or persons who, at the date of our said letters patent, was or were a member or members of the said College of fifteen years' standing; and also any person or persons who, being at the date of our said letters patent a member or members of the said College of less than fifteen years' standing, shall have attained at the time of such appointment the standing of fifteen years, to be a fellow or fellows of the said College, subject to the regulations hereinafter mentioned and directed.

2. That the appointment of every person to the fellowship of the said College under the powers herein contained, shall be determined by the vote or ballot of the Council, and be decided by a majority of votes or balls, and that every such person seeking to be admitted to the fellowship shall transmit or deliver to the Secretary of the said College, at such time before the day appointed for the ballot, or election, as the Council may think proper, and direct, a certificate, signed by such persons as hereinafter mentioned, of the moral character and professional attainments of the person applying for admission to the fellowship, and that he does not sell or supply drugs or medicines otherwise than in the due exercise or practice of his profession of an apothecary; and shall also at such time, so to be appointed as aforesaid, transmit or deliver to the said Secretary a declaration signed by himself, to the effect that he does not sell or supply drugs or medicines otherwise than in the due exercise or practice of his profession of an apothecary; and such certificate and declaration shall be in such form as the Council of the said College shall from time to time direct.

3. That the certificate to be produced by the persons seeking admission to the fellowship of the said College, as last aforesaid, shall be signed by six fellows of the said College; or in the case of persons absent from the United Kingdom in the service of our Royal army or navy, by two fellows of the said College, and by the Director-General or other officer superintending the medical department of the service to which such persons shall respectively belong; or in the service of the Honourable East India Company, by two fellows of the said College, and by the Secretary to the military department of the said Company; or, in the case of persons resident in any of our colonies, plantations, or dependencies, by two fellows of the said College, and by the governor, lieutenant-governor, or superintendent thereof, whose signature shall be certified by our Secretary, or one of our Under-Secretaries of State for the Colonies.

4. That the fee to be paid upon the admittance of every fellow of the said College, to be appointed under the powers hereinbefore contained (over and besides any stamp-duty on his admittance or diploma,) shall be the sum of ten guineas.

5. That it shall be lawful for the Council of the said College, by

diploma or diplomas under the seal of the said College, in such form as the Council may think proper, to admit to the fellowship of the said College in each and every year from the date of these our letters patent, without examination, but subject to such conditions and regulations as the said Council may think fit, and by any bye-law or bye-laws direct, any two persons, being at the time of such admittance members of the said College of not less than twenty years' standing; and that the fee to be paid upon the admittance of each such fellow as last aforesaid shall be the same as the fee payable upon the admittance of members of the said College to the fellowship under the authority of our said letters patent.

6. That it shall be lawful for the Council of the College, by diploma under the seal of the College, to admit without examination to the membership or fellowship of the said College, on such conditions, and on the payment of such respective fees as the Council of the College shall by bye-law determine, the fellows, members, and licentiates respectively of the Royal College of Surgeons in Ireland, the Royal College of Surgeons of Edinburgh, and the Faculty of the Physicians and Surgeons of Glasgow, provided such fellows, members, and licentiates shall be, at the time of their application for admission, in the *bonâ fide* practice of the profession of a surgeon in England or Wales, and shall have obtained their respective diplomas or licenses after examination, and such persons so admitted to such membership or fellowship shall take rank among the members or fellows of the said College, according to the date of such last-mentioned diplomas or licences.

7. That from henceforth no fellow of the said College who shall not have been a fellow of the same for fourteen years, or a member of the same for twenty years, and no fellow of the said College who at the time of election shall not be in the *bonâ fide* practice of his profession of a surgeon, or who shall be practising as an apothecary, shall be eligible as a member of the Council of the said College; but every fellow of the said College of such standing as a fellow or member of the same as last aforesaid, and who at the time of such election shall be in the *bonâ fide* practice of his profession of a surgeon, and shall not be practising as an apothecary, shall be eligible as a member of the said Council, any restriction or disqualification in respect of the practice or residence of such fellow or otherwise in the said letters patent contained to the contrary notwithstanding. But if any member of the Council shall at any time after his election cease to be in the *bonâ fide* practice of his profession of a surgeon, or shall practise as an apothecary, he shall thereupon cease to be such member of the Council, and shall forfeit all his rights and privileges as such member thereof; and it shall be lawful for the Council of the said College to declare the place of such member in the council to be vacant, and the same shall be filled up in manner hereinafter directed respecting vacancies in the Council.

8. That all vacancies which shall from henceforth occur in the Council of the said College, either by reason of any of the members thereof going out of office by rotation or from any other cause, shall be filled up in manner hereinafter mentioned on the first Thursday in the month of July in every year, or within one calendar month afterwards, unless at any time the number of members of the said Council shall be reduced below eighteen, in which case it shall be lawful for the Council of the said College to appoint such day for filling up the vacancies as they may think proper; and that the Council of the said College shall cause a notice of the day appointed for the election of members into the Council to supply the vacancies occasioned either by members going out of office by rotation, or by any other cause, and of the number of vacancies to be filled up, to be advertised in the *London Gazette* at such time as the Council shall from time to time direct, before the day appointed for such election, and shall also cause such notice to be published or announced in such other manner as the said Council may from time to time direct.

9. That every eligible fellow who shall intend to offer himself as a candidate for a seat in the Council of the said College, shall within such time as the Council shall from time to time direct from the publication of the *London Gazette*, in which the day of election shall be announced, transmit or deliver to the Secretary of the said College a notice signed by himself of such his intention, together with a nomination, signed by six fellows, of such person as a fit person to be elected into the Council, and a certificate that he is in the *bonâ fide* practice of his profession as a surgeon, and that he does not practise as an apothecary, which certificate shall be signed by three fellows of the said College; and the person so intending to offer himself as a candidate for the Council shall, at the same time, transmit or deliver to the said Secretary a declaration signed by himself, that he is in the *bonâ fide* practice of his profession as a surgeon, and that he does not practise as an apothecary; and such nomination and certificate, and also such declara-

tion as last aforesaid, shall be in such form as the Council of the said College shall from time to time direct.

10. That no fellow shall have power to nominate at any one election any greater number of persons as candidates for the Council than the number of vacancies which shall be to be filled up at such election; and if any fellow shall at any such election nominate any greater number of candidates than as last aforesaid, then such fellow shall be incapacitated from voting at that election.

11. That no member of Council shall go out of office by rotation whilst holding the office of President; and that as often as it shall happen that the President shall be one of the members who would at any annual meeting go out of office by rotation, two members of Council only, instead of three as prescribed by the Charter, shall be elected at such meeting; and that at the next annual meeting such member shall go out of office in addition to any other members of Council going out of office by rotation according to our said letters patent; but any member whose going out of office shall have been postponed as above provided, shall, in case of his re-election into the Council on his going out of office at such succeeding annual meeting as aforesaid, on all future occasions go out of office in the same order as if he had been re-elected at the time when he would, but for this provision, have gone out of office.

12. That the Council of the said College shall cause lists of the names of all eligible fellows of the said College who shall in manner hereinbefore directed be nominated as candidates for the Council, and shall have complied with the provisions hereinbefore contained respecting the notice, certificate, and declaration to be transmitted to the Secretary of the said College, as and together with the names of the fellows by whom they shall respectively be so nominated, to be published in the *London Gazette* and in two London daily newspapers, at such time before the day appointed for the election as the Council shall from time to time direct.

13. That henceforth, instead of the name of every fellow eligible to be elected being announced to the meeting in the order and according to the priority in which his name shall stand in the register of fellows, as directed by our said letters patent, the names of all fellows included in the lists so published as aforesaid, shall be announced to the meeting as the candidates for election.

14. That the names of the members of the Council who shall in each year retire from office by rotation, shall, if they shall be desirous of re-election, and shall intimate such their desire in writing to the secretary of the said College within such period as the Council shall determine before the day appointed for the election, be placed at the head of the lists of candidates to be published as hereinbefore directed; and that such persons, if re-elected into the Council, shall take precedence of all other persons who shall be elected into the Council on the same day, and shall with respect to each other take precedence according to their former seniority in the Council.

15. That any nomination and certificate or declaration hereinbefore required to be made or produced upon or previously to the election of any fellow into the Council of the said College, being transmitted or delivered in the manner hereinbefore required, the same (as regards the matters or particulars so to be certified and declared as aforesaid, but no further) shall be final and conclusive as to the eligibility of such Fellow. But if it shall afterwards appear to the satisfaction of the Council of the said College, that any such nomination or certificate or declaration is in any respect untrue or fraudulent, then it shall be lawful for the Council of the said College to declare the member of the Council, to whom such nomination and certificate may relate, or by whom such declaration may have been made, to be no longer a member of the said Council; and thereupon every such member of the Council of the said College shall cease to be such member thereof, and shall forfeit all his rights and privileges as such member thereof; and it shall be lawful for the Council of the said College to declare the place of such member in the Council to be vacant, and the same shall be filled up in manner hereinbefore directed respecting vacancies in the said Council.

16. That every fellow of the said College who shall from henceforth be elected to the office of examiner of the said College, shall go out of office at the end of five years from the day of his election; but that it shall be lawful for the Council of the said College immediately to re-elect such person to the said office, and every such person being so re-elected, shall take precedence in the Court of Examiners, according to his former standing as a member thereof.

17. And it is our further will and pleasure, that a Board of Examiners be appointed by the said College for the purpose of testing the fitness of persons to practise in midwifery, and of granting certificates of such fitness; and that such Board shall consist

of not less than three persons. And we do hereby authorise and require the Council of the said College, within twelve months from the date of these our letters patent, to appoint not less than three persons to be such examiners in midwifery, who shall continue in office for such period, and shall conduct the examination in such manner, and shall grant certificates in such form as the Council of the said College shall determine and from time to time direct. And it shall be lawful for the Council of the said College, from time to time, as vacancies shall occur in such last-mentioned Board of Examiners, to appoint any persons to fill up the same.

18. And we do hereby further declare our will and pleasure to be, that all and every direction, provision, regulation, clause, matter or thing whatsoever, in the said several recited letters patent of our Royal predecessors and ourselves, or in any bye-laws or bye-law of the said College, contained, which may be repugnant to or inconsistent, or at variance with the several directions, provisions, and regulations herein contained, or any of them, in so far as the same are repugnant thereto, inconsistent, or at variance therewith, shall be, and the same are hereby abrogated, repealed, and rendered of none effect. But that, except in the respects hereby altered, the said College and the Council of the same shall continue to have all such and the same jurisdiction, powers, authorities, and discretions for and with respect to the Government of the said College, and the election and choice of the officers of the same, as well as the admission and expulsion of members and fellows, and for the making, ordaining, confirming, annulling, or revoking bye-laws, ordinances, rules, and constitutions, and transacting and ordaining all other matters and things whatsoever, for the regulation, government, and advantage of the said College as such College and the Council thereof respectively now have, under or by virtue of the said three several hereinbefore recited Charters or Letters Patent, or either of them respectively, or in any other lawful manner.

And we do hereby for us, our heirs and successors, grant and confirm unto them all such jurisdictions, powers, authorities and discretions accordingly.

And we do hereby for us, our heirs and successors, further grant unto the said College, that these, our letters patent, or the enrolment or exemplification thereof, shall be in and by all things, good, firm, valid, sufficient, and effectual in the law, according to the true intent and meaning thereof, notwithstanding the not fully or not duly reciting the said several letters patent, or the dates thereof, or any other omission, imperfection, defect, matter, cause, or thing whatsoever, the same or any rule or law to the contrary thereof, in anywise notwithstanding. In witness whereof, we have caused these our letters to be made patent.

Witness ourself at our Palace at Westminster, this _____ day of _____ in the _____ year of our reign.

REVIEWS.

Guy's Hospital Reports. Vol. VII. Part II. Pp. 201. London.

This part of the seventh volume contains a paper by Drs. Addison and Gull, on a rare skin affection. It is doubtful whether this disease—Viteligoidea—has been hitherto described. One on fracture of the cervix femoris, by J. B. Hodgson. Cases in surgery, viz.: one of nævus on the right arm; one of nævus on the side face; one of a tumour of adipose tissue, in which an abscess formed; one of hernia, the signs of which were imperfectly marked; and one of mammary tumour, by Mr. Birkett. Select surgical cases from the out-patients of Guy's Hospital, by Mr. A. Poland. A paper on the treatment of anasarca by puncturing the legs, by Mr. Hilton. Remarks on death from strangulation, by Dr. S. Taylor. Two cases of pregnancy with cancer of the cervix uteri, in one of which the Cæsarean section was successfully performed, by Dr. Oldham. A case of palsy of the third nerve, adduced as evidence in proof of the dependence of the contractility of the pupil upon the integrity of that nerve, by Mr. J. France. Cases of lithotomy in India, by Mr. Coles.

The three first papers are illustrated by several well-executed plates. This part of the reports will fully sustain the reputation of its predecessors. We would direct our readers' especial attention to the very masterly paper by Dr. Taylor; it consists of an examination, in a medico-legal point of view, of the evidence given at the trial of Thomas Drory for the murder, by strangulation, of Jael Denny. In addition to the consideration of the evidence in favour of

or against homicide or suicide in the case referred to, Dr. Taylor has, in his paper, discussed at full the question of the value of chemical and microscopical examination of stains on clothing, for the purpose of determining whether they are due to blood, and, if so, to what kind of blood, etc.

The Paper by Mr. Coles is also one of considerable interest, as showing very clearly, that there is no relation between the food taken by an individual, and the chemical constitution of the calculus of which he is the subject. Mr. Coles's patients being men whose religious prejudices compelled them to adhere to particular kinds of food, he was placed in a favourable position for obtaining trustworthy evidence on this point.

God in Disease, or the Manifestation of Design in Morbid Phenomena. By JAMES F. DUNCAN, M.D., Physician to Sir Patrick Dun's Hospital, Dublin. P. 224. London: 1851.

This little work was written not merely to extend our knowledge of the works of God; but, says its author, to correct two great errors, viz., the idea, that the visitation of sickness is a casual occurrence; and the idea, that it is a punishment specially inflicted for some previous misconduct:—

"Whoever," adds Dr. Duncan, "entertains the first of these opinions labours under a mistake, which necessarily prevents his deriving the slightest benefit from the affliction. Whoever, on the contrary, adopts the second, falls into an error of an equally dangerous description; he not only loses the benefit that the visitation is calculated to produce, but also runs the risk of forming a wrong view of the character of God."

A tone of unaffected piety runs through the whole of the book, and the examples selected to illustrate design in the repair of injuries, &c., which, situated as man is in reference to the external world, could not fail occasionally to occur, are apt and judiciously selected. Dr. Duncan's "God in Disease" will become a standard work.

An Epitome of the London, Edinburgh, and Dublin Pharmacopœias. By W. CULVERWELL, L.S.A. London. 12mo. Pp. 64.

So long as we are blessed with a London, an Edinburgh, and a Dublin Pharmacopœia, so long shall we need books such as that by Mr. Culverwell.

"In this little work," says its author, "the formulæ of each College for all the compounds usually prepared by the apothecary and retail chemist, are given in a contracted form. The medicinal properties, dose, and incompatibles are stated."

Here is a specimen of the book, and an illustration of its importance:—

"Liq morphiæ acetatis, L. D. M. acet 4 drachms, ac. acet. 15 mins., aq. dest. 1 pt. Prof. sp. ½ pt. L. M. acet. 82 grs., aq., dest. 15 oz., sp. R. 5 fl. oz. D.

"Narcotic—Dose of the London, 10 min. to 20 min, London 1 gr.; Dublin, ½ gr. to 1 fl. dr."

If a noble lord or a bishop—Sodor and Man, as the witty Canon said, would do—would only be kind enough to be poisoned through this want of agreement between the Pharmacopœias, a United Kingdom standard would be issued in a month.

Until something of the kind happens, the difficulties are, we fear, insuperable; and the physician who prescribes half a grain of acetate of morphia in Dublin, may have his patient *correctly* poisoned in London. Let all who are not homœopaths beware.

The Pocket Formulary, and Synopsis of the British and Foreign Pharmacopœias, comprising Standard and Approved Formulæ for the Preparations and Compounds employed in Medical Practice. By HENRY BEASLEY. Fifth Edition. Pp. 546. London, 1851.

A book that has reached its fifth edition is independent of criticism; it has found a want, and supplied it.

Mr. Beasley's Formulary contains, in addition, he says, to the formulæ and processes of the last editions of the three British Pharmacopœias, a copious selection from foreign Pharmacopœias, and from the well-known formularies of Majendie, Dunglison, Foy, etc.; from the Pharmacopœias of the principal hospitals, and from the various periodicals.

The doses of the preparations are annexed, for the first time, to this edition.

Lectures on the German Mineral Waters, and on their Rational Employment for the Cure of Certain Chronic Diseases. By SIGISMUNDO SUTRO, M.D., Senior Physician to the German Hospital, etc. Pp. 431. London. 1851.

Some of Dr. Sutro's lectures were published in the *Institute*, being almost the only things worth reading our departed friend furnished to his subscribers, and we are glad to see them again in their present complete form.

The work before us consists of nineteen lectures. The first three treat of mineral waters generally, their value, the importance of a knowledge of their properties to the physician, a comparison of the natural and simulated waters, contra-indications for their employment, etc. The remaining sixteen lectures are devoted to the consideration of the several German spas.

A description of the locality in which the spa is situated, and the mode of reaching it, precede in each chapter the account of the spa itself, its constitution and uses.

The materials for Dr. Sutro's lectures are in a great measure derived from the large work of Wetter, but he is evidently himself well acquainted with the various spas, and speaks of them like a practical man. Thus the spas of Wildbad, Pfäfers, Gastein, and Teplitz, are useful in gout, rheumatism, arthritic paralysis, and contraction from wounds; and of them he writes:—

"It was painful to witness, at every watering-place, individuals who were cured of their complaints by the spas, but who constantly declaimed against their medical advisers for not having chosen this place in the first instance, instead of having previously sent them to several others where they found no relief."

To determine the various forms of the before-mentioned diseases benefited by these different spas, Dr. Sutro devoted some considerable time last year.

To the medical practitioner these lectures will be found invaluable. They contain by far the best, most condensed, and most practical account of the German spas with which we are acquainted; moreover, they are written in a style which renders them agreeable reading.

Bradshaw's Companion to the Continent; a Descriptive Handbook to the Chief Places of Resort; their Characteristic Features, Climates, Scenery, and Remedial Resources; with Observations on the Influence of Climate and Travelling. By EDWIN LEE; Honorary Member of the Principal Continental Medical Academies and Societies; Author of "The Baths of Germany," etc. 8vo. Pp. 408. London: 1851.

This, like most of Mr. Lee's works, is a very useful one, and is written in a light and agreeable style. It is intended, as its name indicates, for the use of the great public. But here is a little information which, we think, will be interesting to our readers.

At the time of his first visit to Leipsic Mr. Lee was anxious to see the Homœopathic Hospital, Leipsic being then the head-quarters of the Hahnemannian doctrines. This hospital he found to be a small house containing eight beds, of which two or three only were occupied by patients. At his last visit to the same city Mr. Lee found that matters were going on badly with homœopathy, which, he adds, is now but little heard of in France or Germany, except at Vienna. A short time before Mr. Lee's second visit to Leipsic, the house-physician having become convinced, during a residence of some time in the hospital, of the nullity and danger of homœopathy, gave up his appointment, and published an exposition of the system pursued, with an account of cases, which clearly shows that the so-called cures were recoveries from ordinary ailments by the efforts of nature, which were frequently a long time under treatment; whereas, by a proper medication and attention at the outset, they might probably have been removed in a few days,—and that many of the most serious cases got worse instead of better for want of active treatment. The work referred to is called, "Ueber die Nichtkiet der Homœopathie,"—On the Nothingness of Homœopathy; and was published at Leipsic in 1840. Like most others of the same genus, the Hahnemannian humbug has flourished longer in England than elsewhere. John Bull hugs a humbug,—he loves it,—a rattle-snake globule is to him a veritable *bonne bouche*.

FOREIGN CORRESPONDENCE.

FRANCE.

SYPHILIZATION.

THE lecture-room of M. Ricord, at the Venereal Hospital, has recently become the theatre of a most interesting discussion, which threatens to swell into a regular scientific combat. The subject-matter of dispute is, the modern theory of syphilization; and the discussion proceeds, in the presence of some four hundred auditors, between Ricord and Dr. Auzias-Turenne, a gentleman whose experiments on monkeys have been already recorded in the pages of the *Medical Times*.

The question itself is not only most interesting, but of the highest practical importance, to say nothing of the theory, which runs directly counter to all our past experience in syphilis and other contagious maladies.

Ricord, as you can easily conceive, defended his doctrines with that clearness, variety of illustration, and inexhaustible fund of ready wit which renders him the most agreeable lecturer, perhaps, in the world. But, facts are stubborn things; and if the facts related by Dr. Auzias bear out the interpretation given to them by the disciples of the new doctrine, we shall be compelled to admit isopathy amongst the established principles of therapeutics, and confess that a disease may be cured by a ministration of its efficient cause.

A few words on the theory of syphilization may be useful, and will serve to explain the object of the experiments now in course of performance at the Hôpital du Midi.

The doctrine is the joint production of Dr. Auzias and Dr. Sperino, Physician to the Venereal Hospital at Turin. The experiments of M. Auzias have been performed on animals only. I shall, therefore, confine my notice to those of M. Sperino, whose position enabled him to operate on the human subject.

M. Sperino had long, it would seem, been struck by the facts, that secondary symptoms are much more frequent after a single chancre than after several chancres which succeed each other at short intervals; and that large, deep, virulent bubos healed readily on all occasions, whenever (in order to determine their virulent nature) he gave rise to several artificial chancres in the individual by inoculating the matter taken from his bubo. Reflecting on these and many other analogous facts, M. Sperino was induced to undertake a series of experiments on a large scale in the female wards of the hospital entrusted to his charge.

Having selected fifty-two prostitutes labouring under primary or secondary syphilis, he inoculated them with venereal matter taken from chancres in a state of development. Each patient was inoculated in four or five points, once or twice a week.

The products of the first inoculation were always perfect chancres; those of the second, less perfect; and so on until after a certain number (generally eight to ten) of inoculations, when no effect followed the introduction of the most mature virus, except an innocent pustule, which disappeared in a few days. From this time forward, inoculation produced no effect whatever.

When the venereal virus has been thus introduced into the system by several inoculations, repeated at short intervals, until the last inoculation gives rise to a simple pustule instead of a chancre, M. Sperino considers that the system is saturated with the virus. This saturated state he denominates syphilization. Its effects are remarkable. In the first place, the individual, as we have seen, is no longer susceptible of contracting primary syphilitic sores, either from inoculation or the contact of venereal matter. In the second place, it would appear that the patients thus saturated are preserved from the development of secondary symptoms. This, of course, is a point which extensive experience alone can decide in a satisfactory manner. As far as M. Sperino's cases go, it has been determined that not one of the 52 individuals alluded to presented secondary symptoms either during the six months' residence in hospital, or for two months after dismissal. This fact was demonstrated by the police records of Turin.

But this is not all. Saturation not only acts as a preventive but as a curative. Thus, as soon as the system becomes artificially saturated, the old inveterate sores heal up rapidly, and the secondary symptoms also disappear. It is unnecessary to add, that no local or constitutional treatment of any kind was employed in the cases alluded to, in order that the effects of inoculation might be followed separate from other influences.

The above facts, it must be confessed, are of a striking kind. No one pretends to dispute them. The good faith of M. Sperino is above all suspicion; the accuracy of his observations is admitted; but M. Ricord will not admit the deductions which the Italian professor would draw from the experiments made by him. The opponents of syphilization urge many objections against the theory of immunity derived from saturation. They plead, in the first place, the doctrine of unicity; that is to say, they assert the possibility of syphilis resembling small-pox, in being communicable once only, and they presume that M. Sperino's patients may have all been affected with constitutional syphilis before their admission into hospital, and, consequently, incapable of contracting the disease a second time.

This argument cannot be accepted as a valid one; for nothing proves to us the unicity of syphilis. Experience, unfortunately, demonstrates that the same individual may contract the disease more than once.

On the other hand it is alleged, that M. Sperino's announcement of the cures affected by saturation is so vague, that no positive judgment can be passed on them. Thus, the Italian Professor says, "Sinuous chancres, obstinate ulcers of the throat and pharynx, bubos, mucous tubercles, and other severe secondary accidents, yielded to the influence of repeated inoculation."

It is difficult to draw any precise conclusions from such general descriptions; but the memoir of M. Sperino was merely intended to draw attention to the subject; in this he succeeded. The Royal Academy of Turin has appointed a Committee to investigate the matter, and it is certain that a very great number of cases, noted down with all the details necessary, has been collected, and confirms the results obtained by M. Sperino.

Finally, the opponents of the new doctrine, admitting as true the facts on which it is based, are inclined to explain them on the theory of common pathological saturation. This law is not confined to syphilis, but extends to a very great number of maladies. It constitutes the principle on which the *vix medicatrix* effects a cure in innumerable cases. How many slow and intractable diseases are there which continue for a certain time and then disappear? Is it not evident that the constitution refuses to allow itself to be influenced too long or too often by the same morbid agent? That a cause which produced its effect to-day will not do so to-morrow, merely because the interval is too short?

The examples which might be given are innumerable. Indeed, there is hardly any disease which does not give rise to this immunity for some time after its occurrence. Two consecutive attacks, *coup sur coup*, is a circumstance almost unheard of. Even for contagious diseases the same holds good in a certain degree. A child who has recently had measles, whooping-cough, etc., may be exposed to the contagion with all but a certainty that he will not catch the disease again. Yet, let a few years elapse, and the susceptibility to be affected is renewed.

These arguments, however ingenious, are not extremely conclusive, and so it has been agreed to refer the matter to experience. The first and most simple point to determine, was the alleged possibility of saturating the constitution with syphilitic virus by a few inoculations practised at short intervals. M. Ricord naturally called on his opponent to give this proof of the faith which was in him; but M. Auzias funcked and refused. Two bold-hearted students then came forward, and, in the presence of the class, were inoculated on two successive days. If these experiments succeed so far, and saturation be produced, then M. Ricord proposes submitting a certain number of the patients in his hospital to the same method of experimentation as had been employed by M. Sperino. The results are looked forward to with the keenest interest.

Since the above remarks were written, I have had an opportunity of seeing one of the patients experimented on by M. Auzias. He has also, I understand, been presented to the Academy of Medicine. The poor man was certainly in a most deplorable state, —saturated with a vengeance, and presenting a condition anything but favourable to the theory of M. Auzias.

Ricord concluded his course on Friday last. Dr. Costello, the late proprietor of Wyke-house, addressed the students in an excellent speech, dwelling on the brilliant qualities of the Professor with such success, that the class rose in a body, voted a commemorative medal to Ricord, and agreed to present it at a dinner of 500 students.

COD-LIVER OIL.

M. Personne, Apothecary to the Venereal Hospital, has been endeavouring, for some time past, to introduce, as a substitute for cod-liver oil, an artificial compound of iodine with olive oil. It is by no means probable that the iodurated oil, though an elegant preparation, will ever take the place of the natural oil,—for experience proves, beyond doubt, that the latter is much more efficacious than the former.

M. Champouillon has been making, for the last two years, a comparative trial of the cod oil and of iodine, at Val de Grace, in the treatment of pulmonary tubercles. The results of his experiments are remarkable. 102 patients were treated with cod-liver oil. Omitting the cases which remained stationary, or were merely improved, and taking only those in which unquestionable results followed the use of the remedy, we find that, of 51 patients in the first stage of phthisis, 24 were cured, none died; of 37 patients in the second stage, 9 were cured, 3 died; of 14 patients in the third stage, 6 were cured, 4 died.

On the other hand, 75 patients, labouring under various stages of phthisis, were divided into groups, and treated with different preparations of iodine; yet in no single case was any improvement obtained that could be clearly traced to the remedy. This latter result is so contrary to those afforded by the practice of M. Lugol, at St. Louis, that a word of explanation is necessary. The pathologists of the French modern school now affirm, that the cases cured by M. Lugol, at La Pitié, with iodine, were not true cases of scrofula or tubercle, but what they denominate "syphiloids,"—that is to say, anomalous syphilitic symptoms, bearing much resemblance to those of scrofula, and exclusively confined to the children of persons who have had tertiary symptoms. According to this doctrine, the syphilitic virus, in disappearing from one generation to another, gives rise to a mixed form of scrofula and syphilis which yields readily to iodine; whereas true scrofula is never cured by that remedy.

DEATHS OF M. LUGOL, M. BARTHELEMY, AND M. DE SAVIGNY.

As for poor Lugol he is no longer among us to defend his doctrines. He died at Passy a short time ago, full of years, and carrying with him to the grave a profound conviction that he had discovered a specific for every form of scrofulous affection. We have also recently lost M. Barthelemy, an ex-President of the Academy of Medicine, and one of its most enlightened members; and M. de Savigny, member of the Institute, well known from his works on the anatomy of insects, the crustacea, &c., and his scientific researches during the Emperor's expedition to Egypt.

HONOURS CONFERRED ON MEDICAL MEN, &c.

The members of the Medical Profession here have received some recent proofs of a fact which I have long since noticed with pleasure, viz., that M. Bonaparte evinces great readiness to confer distinctions on medical men whose talents or services entitle them to honorary reward; but the principle, if pushed too far, or indirectly applied, loses all merit. Thus, it was with no little astonishment that the public read of the promotion to the rank of officer in the Legion of Honour, of Dr. Phillips, a young Belgian surgeon here; and of the nomination as chevalier, of Dr. Higgins, the respectable, but hitherto undistinguished, Physician to the College of Irish Priests, near the Pantheon.

Charrière, the instrument-maker, has also been raised to the rank of officer in the Legion of Honour, to console him, it is said, for the injustice of the English at the Exhibition.

This is the first time that the honour has ever been conferred on a person connected with trade; and when we consider that M. Orfila was the only member of the Profession up to 1848 who wore the *rosette*, we must regard Charrière as peculiarly lucky. In more ways than one, indeed; for his workmen having subscribed for and presented to him a cross, the President of the Republic, to show his affection for the working classes, immediately appropriated the cross to himself, giving Charrière in Exchange a diamond cross that had been the property of the Emperor. This is a little sprat thrown out to the operatives, and nothing more.

GENERAL CORRESPONDENCE.

VACCINATION AND THE QUERIES OF THE EPIDEMIOLOGICAL SOCIETY.

[To the Editor of the Medical Times.]

SIR,—The importance of the subject on which I am about to address you, and the interest which it excites at the present moment, render it unnecessary that I should offer any apology for trespassing upon your valuable time and space.

What is the extent of the protection which vaccination is capable of affording against small-pox? What are the conditions which must be observed to render the operation as effectual as possible? What are the tests which should satisfy us that it has been properly performed? How much of the present mortality from small-pox is

due to the imperfect performance of vaccination? How much to the neglect of it? How much, or is any, to be accounted for by its protective power being of limited duration, or by the lymph employed having been deteriorated in passing through a succession of human beings? These are a few, and a few only, of the questions which, for some time past, have occupied the attention of the Small-pox and Vaccination Committee of the Epidemiological Society.

To arrive at any definite and satisfactory conclusions, it was found necessary, not only to re-examine existing documents, but to obtain facts from the experience of men engaged in practice throughout the kingdom; and one of the first acts of the Committee was to draw up a set of queries for the purpose of eliciting the desired information. It was obviously [most desirable that these queries should be addressed to every medical practitioner, and this would have been done had the funds of the Society permitted. But the postage alone of 12,000 copies (a number, I believe, considerably short of what would have been required) allowing to each paper of queries a second penny stamp to frank the return, would have amounted to 100*l.*, and would thus have absorbed a much larger proportion of the annual income of the Society than could be spared for a single object; and the attempt was, on this account, obviously impossible. The committee were, therefore, obliged to limit their applications to members of the Profession who were known to them, and to the council, as likely to afford the information desired, to hospitals and public dispensaries, and to Union Medical Officers, as a class of men having probably the largest experience of the subjects of inquiry. The distribution to Union Medical Officers, which had been suspended for a long time for want of funds, is now going on, and will soon, it is trusted, be completed. Altogether, the number of papers sent out up to the present time, amounts to above 1000, and to these, between 250 and 300 answers have been received. Even the penny stamp, affixed to each paper, has failed to bring back the remaining 700 and upwards. We have thus 700 who have been applied to and not answered, and at least 10,000 more to whom, not from personal disrespect, but simply from want of means, no application whatever has been made.

Yet there is not one medical man in the kingdom who has it not in his power to give information worth possessing on some one or other of the points involved in this inquiry. And if the paper of queries be well examined, each would find two or three of them, at all events, to which he would be able to give an answer. The eighteenth question, for example, is one to which every one could reply; and if to this alone we had two, three, or five thousand answers, we should have acquired information, valuable by its extent, and by its being of that definite kind which we so much want. And I may further remark, that the important bearing of many of the facts communicated in the returns we have received, has proved to us how much may be elicited by such inquiries as we have instituted, and has made us more and more urgent for additional replies, that we may be enabled to fix our conclusions on the widest possible basis.

But how are these replies to be obtained? We have ourselves no further funds to devote to this object, and, without assistance *ab extra*, it cannot be done; but with such help, and in the way I am about to point out, I believe that it may be accomplished.

If you, Sir, would republish, in a conspicuous place of your widely circulated Journal, twice—at intervals, say, of a fortnight—the whole of these queries, and exhort with your powerful editorial pen, which has more than once been wielded on behalf of this inquiry, each and every member of the Profession before whom they may come, for the sake of our science, and in the interests of humanity so deeply involved in the solution of the points in dispute, to forward replies to such of them as he may feel able satisfactorily to answer to the Honorary Secretaries of the Society, 38, Berners-street, much of what we desire would certainly be done. We do not doubt of obtaining your help, and we feel ourselves entitled to call upon the whole Profession for their assistance to enable us to complete labours undertaken solely in the cause of truth, which task our energies, absorb our thoughts, and trespass upon our means; but through the instrumentality of which we trust to arrive ultimately at conclusions based on irrefragable facts, which shall determine many questions now disputed. Foremost among these is that all-important one, upon which we have been lately informed, (on what is generally considered high authority,) that the majority of the Profession, in all latitudes and hemispheres, are in doubt, but on which their doubts cannot be too soon set at rest,—Are the advantages, present and prospective, to be found on the side of variolous inoculation or of vaccination?

I am, &c. EDWARD C. SEATON, M.D.,
Honorary Secretary to the Small-pox and
Vaccination Committee of the Epidemiological Society.

77, Sloane-street.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY AND HOMŒOPATHY.—LETTER FROM DR. CORMACK IN REPLY TO DR. BASHAM.

[To the Editor of the Medical Times.]

SIR,—As Dr. Basham is a universally respected physician, and a man beyond any suspicion of a leaning to charlatanism, I have read with surprise and sorrow his letter in your last Number, in which he suggests and urges several pleas for the Royal Medical and Chirurgical Society expressing no opinion on the subject of homœopathy; and in which he specially proclaims the impropriety of the Council, (the executive body,) being memorialised on the subject.

Dr. Basham says:—

“Many (Fellows) refuse to sign this memorial, not because they are friends to quackery, but because they think the Medical and Chirurgical Society is not the proper channel through which an opinion should be expressed on the subject of homœopathy. It would be engaging the Council in the discussion of a matter entirely foreign to the sphere of their duties.”

The requisitionists, Sir, do not seek a barren demonstration, a mere opinion upon the subject of homœopathy; they “request the Council to take the subject into consideration, with the view to prepare regulations, whereby all homœopathic, mesmeric, and similar irregular practitioners, shall be excluded from the Fellowship” of the Society; and the reason they give for desiring the exclusion of these persons is, that the object of our Society is “the promotion of a sound knowledge of medicine and surgery.” If the requisitionists have rightly defined the object of the Royal Medical and Chirurgical Society, it is surely our imperative duty to free it from the pollution of men, whose trade it is to impede the progress of sound medical and surgical science, and who, from the platform, the pulpit, and Mr. Renshaw’s weekly press, proclaim that medicine, as practised by our Brights, our Lathams, our Williamses, our Watsons, and our Brodies,—and by every member of the Medical and Chirurgical Society, save one,—is a system, not simply of scientific heresy, but of unprincipled knavery, and wholesale murder. Any Fellow may satisfy himself that I am not over stating the case, by reading some homœopathic publications, which I recently presented to the library of the Society.

To fear that the elimination of homœopathic or any other class of quacks may be regarded as an act of “condescension,” seems a most extraordinary fancy; and I do think Dr. Basham would not have put in this as a plea against signing the requisition, had he seen a tithe of the personal calumny and mendacious vituperation lavished upon those prominent at the Brighton meeting. Never before, at least, was *condescension* so ungraciously received!

Believing that this is not a question of expediency but of inevitable duty,—feeling that it is an entire dereliction of moral integrity, as well as of common sense, to allow the friends and foes of medicine to be voluntarily associated together, I some time ago signed the requisition to the Council; and I am firmly resolved to act to the end with those who are determined, at all hazards, and notwithstanding any difficulties which may arise, to complete a separation.

Dr. Basham complains of the non-signing Fellows being “by implication condemned, either as ‘abettors of homœopathy,’ or as ‘favourable to the lax and supine behaviour of the Colleges;’” but I venture to say, that, when I now make these charges in explicit and unreserved terms, I carry with me 999 out of every 1000 of the medical practitioners of England. If the English Colleges had “condescended” to do what was lately done by the Provincial Association in imitation of the Edinburgh Colleges, homœopathy would long ere now have been placed without the pale of the Profession.

In conclusion, I trust, that when the signatures to the requisition are published, Dr. Basham’s “many” will turn out to be *the very few*, who are already committed to the support of Collegiate silence, which, though aristocratic and well meant, is not calculated to maintain a high tone of professional honour.

Putney. I am, &c. JOHN ROSE CORMACK.

PUERPERAL DROPSY, WITH ADHERENT AND PARTIALLY-RETAINED PLACENTA.

[To the Editor of the Medical Times.]

SIR,—As the subject of retention of the placenta has lately excited considerable remark, the following case may not be without interest.

Mrs. W., aged 29, of fair complexion, healthy aspect, and

robust conformation, on the 29th of Sept., requested me to attend her in her confinement; she stated that she thought she was then about six months advanced in pregnancy, and called my attention to some very slight œdema of the ankles, about which she seemed uneasy. I ordered her to bandage, and when sitting down to keep them in an elevated posture; but I found, on visiting her shortly after, that the swelling had greatly increased, and was extending above the knees. I prescribed 3i. doses of potassæ bitart., and confinement to the sofa. This treatment was efficient only for a short time; the potassæ bitart. lost its effect, and I found, to my great annoyance, that rapid effusion was taking place into the peritoneal cavity. I at once ordered her to bed, and put in force the usual treatment by diuretics, purgatives, etc., recommended by Denman and others, but with very unsatisfactory results, as the effusion became greater, and she had now extreme difficulty of breathing, livid countenance, inability to sit up even for an instant, with coryza, and a loud mucous râle over the whole surface of the chest. The thoracic cavity was much encroached upon, and, fearing an extension of the disease to the pericardium and pleuræ, I requested my friend Dr. Kane to see her with me. He recommended a continuation of the diuretic treatment, and agreed with me that it would be justifiable at the first symptom of thoracic effusion, to puncture the membranes, and induce premature labour; at the same time, he advised me to use acupuncture in the legs. I accordingly put this in force with some degree of relief to the more urgent symptoms; but a few days after I found that a violent attack of diarrhœa had set in, and that there had been a very slight uterine hæmorrhage. I made an examination, and found the os uteri high up, and only slightly patulous, with the membranes protruding, but the presentation not to be felt. I gave her an anodyne, and left, promising to call early next day; this another midwifery case prevented my doing, and when summoned in the afternoon, I found the membranes already ruptured, with the head presenting, and the funis cold and pulseless, lying external to the vulvæ. Feeling then the inutility of any interference, I left matters to nature, and in a few hours she was delivered of a dead foetus, certainly not nearly so large or so well developed as I should have expected from her statement as to the duration of the pregnancy—seven months. After the usual interval, the placenta not being expelled, I inserted my finger and found it still in the uterus, and the origin of the funis not to be felt; I therefore continued the abdominal frictions, gave her a dose of ergot, etc., without success; so, as she was much exhausted by her labour and previous illness, and there was a considerable amount of flooding, I determined to extract it. On introducing my hand into the uterus, and trying to peel off the placenta from the parietes, I found the adhesion so close between the opposed surfaces, and, from the great peritoneal effusion, the utter impossibility of steadying, or even feeling, the uterus externally, that I was compelled to desist, fearing that a greater degree of force would rupture the uterine walls. I therefore plunged my finger into the placental mass, and managed to remove about three-fourths of its bulk. I again introduced my hand, but was only able to bring away a very small portion of the remainder, which I now determined to leave in the uterus, thinking even that course safer for my patient than any further effort for its removal in her present exhausted condition. On visiting her next day I found her with a pulse 120, weak and small; brown tongue; thirst and headache; she had passed no urine; I therefore used the catheter and drew off about half a pint of dark ammoniacal fluid; I ordered her good nourishment, stimulants, and gentle saline laxatives, and, as there was some abdominal tenderness, warm fomentations, and the vagina to be syringed out frequently with an elastic tube and enema apparatus. Not to be further tedious, I will add that, after a week's most anxious watching, during which I several times almost despaired of my patient's recovery, the kidneys, which had been for some weeks almost inactive, began to secrete most copiously; every bad symptom, dropsy, hectic sweats, cough, etc., disappeared rapidly, and she is now, with the exception of extreme debility, nearly convalescent. I must state, in conclusion, that the remainder of the placenta has never been expelled, nor has there been any unusual fœtor of the discharges.

I am, Sir, &c. T. M. WARD, M.R.C.S.E., &c.
Parade, Exmouth.

RETAINED PLACENTA.

[To the Editor of the Medical Times.]

SIR,—As the accumulation of facts bearing upon an especial point may tend to the formation of a rule in practice, I may, perhaps, be permitted to state, in corroboration of several of your Correspondents, but contrary to Dr. Robertson's dictum, that during the past summer I had under my care a patient who aborted

about the fifth month, the embryo being discharged with abundant hæmorrhage. The placenta, however, remained in the womb, and, notwithstanding the most diligent examination of all the fluids and coagula which afterwards came away from the uterus, no trace of it could be discovered. Hæmorrhage continued to recur from time to time for some weeks after the birth of the foetus; and it is probable that the placenta was either absorbed, or discharged piecemeal in the ejecta from the uterus. At all events, no ill effects accrued from its remaining in the womb, unless the occasional occurrence of hæmorrhage be so considered. My patient, although she had a long convalescence, has completely recovered.

I am, &c. JOHN FOOTE, M.R.C.S.L.
36, Tavistock-street, Covent-garden.

PARLIAMENTARY FRANCHISE FOR THE MEDICAL PROFESSION.

[To the Editor of the Medical Times.]

SIR,—I was glad to see that my letter to the *Spectator* on the propriety of having direct representatives of the medical profession in Parliament had a notice in your spirited Journal. Whether medical practitioners can be roused to a due sense of their social importance in the existing state of society, and to a right perception of the means whereby they can render their science and art the most available to the welfare and advancement of mankind, I know not; but, with your kind permission, I will give them a few short hints as to the advantage of being directly represented in Parliament, and consequently as to the necessity of their seeking a permanent position in the body politic under the new Reform Bill. I say directly represented, for I do not think it possible so to influence any constituency (although you mention the Tower Hamlets as likely) that a warm advocate of medical art, and a proficient in medical science, but especially in public hygiene and medical organisation, may be returned to Parliament. What we want is, members returned directly by ourselves without any lay interference whatever.

Suppose, for example, the Profession in Great Britain and Ireland had to return nine Members to the House of Commons, the elections might be distributed in districts, thus: The medical profession in the Metropolis and adjoining counties would return one; those in the Midland counties, including Wales, two; in the Northern counties (Lancashire and Yorkshire to the Tweed) two; Scotland, two; Ireland, two: total nine.

What would be the first step in the process? Need I say that it would be the legal definition and registration of the medical practitioner? And is not this one of the great points for which all classes of reformers have been vainly contending and agitating for years? The Parliamentary Franchise would then settle the question of legal qualification and registration.

The legally-qualified practitioner having been placed on the roll of election of fit persons to serve in Parliament, after a due scrutiny and verification of their diplomas and licenses by a revising barrister, he would next have to record his vote, and for this purpose polling places would have to be fixed, with districts assigned to them. But, with the tender of his vote, there would be conjoint results of considerable importance. He would meet his brethren at the polling-place; and they could hardly meet without agreeing to have "a crack" on the material and scientific interests of their common pursuits, and would soon instruct their representatives to obtain for them a charter of incorporation, whereby the respective practitioners of the district or county might be legally bound together, and have municipal or corporate legislative powers. Now the desire for union and communion is almost a passion with the Profession. I need only refer to the various societies and associations that have risen up within it; but its object, namely, a good government and scientific advancement is continually balked by the want of a *point d'appui*—a firm basis of action. A recusant member need only to disown the association with which he is connected, to escape from all control, whether moral or professional, to the infinite injury of the public.

Registration in districts, and local municipalities for business, (not mere colleges of most unbusiness-like habits,) might therefore be attained forthwith by my plan. These are good results for the Profession directly, yet for the public equally good, although indirectly. For the public, however, still greater results would follow. Suppose I were to mention nine medical representatives, *exempli gratia*—nine genuine medical M.P.'s—for Ireland, who should I say? Graves and Jacob. For Scotland, who better than Alison and Christison; for North England, Fife and Bardsley; for Mid-England, John Forbes and Hastings; for London, Clark. If we could get the Presidents of the Colleges seats in the House of

Lords *ex-officio* (like bishops), we should do better still; but I think the nine good men and true whose names I have mentioned would carry so much weight in the Commons House, that medicine and medical affairs would no longer be a scorn and a bye-word in that most imperial assembly. Would the medical atrocities of the Poor-law withstand such a phalanx over three sessions? Would the namby-pamby doings of local boards of health as well as of boards of guardians (names of humbug!) withstand for a septennium the mighty public opinion nine such men might raise throughout the empire, speaking wisely and well, and with authority, as the chosen representatives of 30 000 medical practitioners, from their seats in the House of Commons? Let your readers bear in mind, that the House of Commons is the great imperial school of political economy, and that the professional demand for a medical polity has never been heeded by the nation, because it has never been advocated in that school.

Such are some of the mere professional results which might be expected from this measure: what would be the political? 1st. There would be no St. Albans bribery and bribers, and so nine politically honest men would find their way into the House of Commons. This, as times go, is no trifling result. But the medical representatives would not only be probably honest: they might be expected to be dispassionate speakers and voters on questions of general politics—moderate men, equally opposed to democratic haste and to aristocratic obstinacy. They would form an admirable check on the too-rapidly revolving wheel of political movement. They would—but your readers must think the rest for themselves.

A PROVINCIAL PHYSICIAN.

MR. SYME'S "SUCCESSFUL CASES."

[To the Editor of the Medical Times.]

SIR,—I have read your comments on Mr. Syme's latest contributions to surgical science with much pleasure, and I should like to inquire, through your widely-circulating Journal, if the following forms one of Mr. Syme's "twenty successful cases of ligature of the femoral artery"? It is contained in a clinical lecture delivered by him, and published in the *Edinburgh Monthly Journal*, for April of this year. I am, Sir, &c.

INQUIRER.

"A middle-aged woman in a country town, while walking up a steep and slippery ascent, and carrying a knife with which she had just killed a pig, fell, and thrust the sharp point of the blade completely through her leg, a little below the knee, entering between the tibia and fibula, and issuing at the lower part of the popliteal space. . . . At the end of a fortnight, the wounds having healed, she attempted to walk, and found that a swelling had taken place at the seat of the injury, on account of which, by the advice of her medical attendant, she came here to be under my care. On examination I found a large pulsating tumour in the fore part of the leg, immediately below the knee, and another of equal size in the popliteal cavity.

"Feeling unable to determine whether the anterior or posterior tibial, or the popliteal artery itself was the vessel wounded; and on the whole, being inclined to think that the one last mentioned was most probably concerned, in which case ligature of the femoral would be the proper course, I adopted this measure. No bad consequences followed the operation; the tumour ceased to pulsate, and favourable expectations were entertained of the result for two or three weeks, when the anterior wound below the knee opened and bled profusely. I dilated it freely, evacuated the cavity of its fluid and coagulated contents, and applied firm pressure between the tibia and fibula, whence the blood was found to issue. Mortification followed, and I performed amputation without saving the patient's life."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. HODGSON, Esq., F.R.S., President, in the Chair.

A SUCCESSFUL CASE OF PARTURITION IN A PATIENT WHO HAD PREVIOUSLY UNDERGONE OVARIOTOMY BY A LARGE INCISION.

By JOHN CROUCH, Esq., M.R.C.S., Bruton, Somerset.

Communicated by SAMUEL SOLLY, Esq., F.R.S.

THE subject of this case was a healthy young woman, twenty-six years of age. Two years ago a multilocular ovarian cyst, weighing

fourteen pounds, was removed by a long incision. Five weeks after the operation, she walked a distance of five miles. During the next winter the catamenia appeared at regular intervals, and her health was good, except that she had an occasional pain in the left groin, and a slight difficulty in micturition, sometimes followed and relieved by a muco-purulent discharge in the urine. In 1850 she married, and on the 9th of October last she was delivered of a male child, after a lingering labour. It had been feared that the expansive powers of the parietes of the abdomen would be impaired by so large a scar passing through their centre; but it was found that the skin dilated naturally, and that the cicatrix itself had increased in length three inches, and in breadth one-sixth of an inch, during the period of gestation. Seven weeks after the delivery, the cicatrix in the abdomen had returned to the same dimensions as before the pregnancy—five inches and a half in length, and a quarter of an inch in breadth.

ON THE DIAGNOSIS AND TREATMENT OF OVARIAN DISEASE,

WITH THE HISTORY OF ONE HUNDRED AND FIFTY-SIX CASES.

By ROBERT LEE, M.D., F.R.S.,

Fellow of the Royal College of Physicians, &c.

The author commences with a description of the human ovarium, its coats and stroma, and the structure of the Graafian vesicles; and he then notices the condition of the organ before puberty, and the changes which take place at that period, after impregnation, and when the catamenia have ceased. Adhesions of the ovario-Fallopian tubes and uterus are very common. In the unimpregnated state this arises most commonly from inflammation of the peritonæum only; but in puerperal women all the component structures of the ovaries suffer. Thickenings of their coats are sometimes found when there has been apparently no inflammation. Inflammation of the parenchymatous structure terminating in suppuration, in the unimpregnated state, is rare; and the author believes that in those cases where abscesses of the ovaria have burst into the bladder or rectum, they have been the results of scrofulous disease, and not of simple inflammation. Fibrous tumours are sometimes met with in the stroma of the ovaries, which have the same structure as those of the uterus: malignant or cancerous disease also affects the stroma. Both fibrous tumours and malignant diseases are most frequently met with in combination with disease of the Graafian vesicles, though they may occur without this complication. The greater number of the complex, compound, or multilocular cysts met with in connexion with the ovaria originate in the Graafian vesicles; but it is probable that cystic diseases of a different nature are sometimes set up in the walls of enlarged Graafian vesicles. The author refers to the dissection of an ovarian cyst, published in the last volume of the "Transactions," to show that compound cysts are formed independent of each other, and that the smaller cysts do not grow from the inner surface of the larger ones, but are formed in the stroma of the ovaries external to each other. After noticing the varieties observed in the course of ovarian tumours, the author refers to the Table of 156 cases of these diseases. In 41, or more than a quarter of the whole, sterility existed, showing a previous unhealthy state of the uterine organs. In 92, the disease occurred between twenty-four and forty-four years of age, while the uterine system was in the most active state. In several cases tapping was performed eight or more times, and in no instance was followed by an immediately fatal result; where death took place after tapping, it was attributable rather to the advanced state of the disease than to the operation. The difficulties of diagnosis in some cases of ovarian tumours are pointed out, as in cases of death of a foetus. The general symptoms may be the same; and it is only by a careful examination of the lower segment of the uterus internally, that in any case it can be positively determined whether the symptoms depend on pregnancy or on some ovarian disease. The soft and thick state of the lips of the os uteri, the shortening of the cervix, the expansion of the body, and the floating of the foetus, would allow of a positive opinion being formed. "If the uterus be unimpregnated, drawn up, and turned to one side, or pressed forward, backward, or downward, and the cavity of the pelvis be filled more or less with a mass which can be felt occupying the brim—and more or less of the abdominal cavity—hard, or soft, and irregular in some portions, with fluctuation in others, we may conclude that the disease is ovarian." For the diagnosis of ascites as distinguished from ovarian dropsy, the author refers to the description given by Dr. Watson, and adds to this the fact, that in ascites the fluctuation is usually more distinct, and that there is an absence of that irregular hardness usually felt in the abdomen when enlarged with ovarian cysts, as also of any unhealthy feeling in the contents of the pelvis. In the latter stages of ovarian disease these diagnostic

signs become more obscure. The diagnosis of fibrous tumours of the uterus and ovarian cysts and tumours can, according to the author, be drawn with sufficient accuracy without the use of the uterine sound; and he instanced cases in which the employment of this instrument has been productive of evil. Where fibrous tumours are embedded in the walls of the body of the uterus, the whole organ is felt enlarged and heavy, and the cervix is sometimes shortened, as in pregnancy. Attacks of menorrhagia occur, the functions of the bladder and rectum are disturbed, and there are usually pains, with signs of interrupted circulation of blood in the lower extremities. When cavities filled with fluid exist in the deeper parts of fibrous tumours, the diagnosis is sometimes rendered extremely difficult, if not impossible. With regard to treatment, the author does not put much confidence in any of the usual remedies. Opening and injecting the cysts has generally been followed by fatal consequences; but a cure has sometimes been effected by leaving a small canula or bougie in the opening after tapping; and a case is related, communicated by Mr. Phillips, in which the plan of drawing off only a small quantity of the fluid, and fixing a small elastic gum catheter in the wound for five days, was followed by a gradual diminution of the tumour. In a few cases the long-continued use of iodine and liquor potassæ has produced a diminution of the tumour; but, in the majority of instances, these remedies have done no good or have done harm. The author prefers treating the disease by the use of saline purgatives and diuretics, light diet, and the avoidance of much exertion, and of every cause likely to irritate the morbid structures. In conclusion, he refers to an analysis of 162 cases of ovariectomy, published in the last volume of the *Transactions*. In 60 there was either no ovarian tumour, or the removal was impracticable; 19 of these proved fatal. Of the remaining 102, in which the operation was completed, 42 terminated fatally, and the present condition of the 60 patients who recovered is very imperfectly known.

After the lapse of several minutes, the President having intimated that the Secretary would read another communication, if there were no remarks to be made on those just read,

Dr. Aldis said, he should regret much if such a paper as that of Dr. Lee's should pass unnoticed by the Society. He would wish to offer a few remarks respecting the diagnosis between ascites and ovarian disease. The two diseases could not always be distinguished. In ovarian disease, the dulness generally existed anteriorly and laterally; while the reverse obtained in ascites; but he remembered a case under the care of Dr. Seymour, in St. George's, where dulness was evidently anteriorly, and yet there was no ovarian tumour. The case was discovered after death to be one of encysted ascites.

Dr. Meryon remarked, with respect to the introduction of the uterine sound, that there was no doubt it was often employed without there being any necessity for its use. He (Dr. Meryon) had seen many cases of severe constitutional irritation caused by its application, which had been subdued with difficulty. He had not, however, met with any case in which so much mischief was induced as had been stated by Dr. Lee.

Mr. Streeter expressed his regret, that the surgical fellows of the Society, more particularly the surgeons of the metropolitan hospitals, did not rise and state their opinions respecting the propriety of the performance or non-performance of this operation. Having been present at three operations where ovarian cysts had been removed, (in one case both ovaries had been excised,) and knowing, too, that two of the women had recovered, he did not feel himself justified in preserving silence. He had also seen four cases where the small incision had been made with the view to complete extirpation, if the nature of the adhesions, so far as discoverable by that incision, should warrant further proceedings. This proved not to be the case, and consequently three were only tapped. The incision healed in all four cases, and left the patients not worse than before. Without wishing to dogmatize from such limited experience, he would say, that the conclusion he arrived at was, that, as a general rule, the operation was not admissible; but there were many cases of exception to the rule—cases in which the small incision might be safely practised, and in some of which, from the knowledge that might be gained, the operator would complete the extirpation. Other surgeons may arrive at opposite and equally conscientious conclusions; but he thought it not creditable for those who are qualified by reputation and experience, to decline the responsibility of advising patients on this operation. He had certainly expected, that those among them who had performed the operation would have frankly told the Profession what their experience had added to the former grounds for adopting or refraining from it. How otherwise can the difficulties attending the diagnosis be lessened, or the dangers of the operation be narrowed to the smallest amount? The causes of failure in the operations hitherto recorded can hardly

be considered as essentially inherent in it. The slipping off of the ligature from the pedicle certainly is not, and other dangers may be prevented in future operations by more precaution and experience. It was to be regretted that he, a private general practitioner,—one who had been so solemnly proclaimed as only competent "to the ordinary exigencies of surgery,"—should have as it were to lead the way, and induce the discussion of this important surgical proceeding. He had thought deeply and anxiously upon ovarian pathology, and on this operation, ever since it became his professional duty to advise a patient upon the subject. For all the cases he had seen, and most of the knowledge he had acquired of ovariectomy, he was indebted to Dr. Frederick Bird, who had afforded him many opportunities to gain knowledge on this point. He would not detain the Society with the detail of the reasons which favour its performance, but would say that they were, on the whole, perhaps, best expressed in the *American Journal of Medical Science* for 1844, by Dr. Atlee, in recording a case in which he successfully removed both ovaries. The operation remains as the patient's only chance when all other hope has passed. It is a rock upon which, as it is there prettily and feelingly expressed, there "beams a beacon of hope towards which the unfortunate subject of diseased ovarium may turn as from the grave." He should always feel it a duty to give an opinion, and not say to a patient, "Decide for yourself, for I cannot." That was not the way to meet the difficulties of practice, and only tended to bring discredit on the Profession. The paper of Dr. Lee was so far defective, that it afforded no information as to the anatomy of the pedicle. The success and difficulty of the operation in many cases depended on the length and vascularity of this part of the tumour. When long, the vessels were for the most part simple, and the ligature was facilitated; but when the vessels were plexiform, the tumour was more sessile, and the space for ligaturing this part much limited. The paper was equally deficient in determining the average duration of life after the occurrence of ovarian disease. Dr. Bright, in "Guy's Hospital Reports," states, as the result of his inquiries and observations, that cases which continue "above four years" from the first tapping, "bear a small proportion to those which prove fatal before that time." This is a point to be decided by accurate statistics. He asked those surgeons—and there were many—who were connected with life-assurance offices, to bring the knowledge of the expectation of female life to bear on the consideration of the propriety of this operation in each case. This expectancy was quite calculable. Women, according to Mr. Finlaison's table, at 20 years of age, had an expectancy of nearly 44 years of life (43.99.) At 40 it was over 31 years (31.12.) Contrast this expectation with the average duration of life after the operation of tapping, according to Dr. Bright, and consider whether it does not favour, rather than forbid the operation. The sufferer, at 20 years of age, risks four years of a miserable life against 40 of existence and renewed capacity for happiness, and so on according to her age. Mr. Streeter concluded by expressing his regret that so much personal ill-will had been mixed up with this question,—a course of proceeding which must necessarily be very injurious to the Profession.

Mr. Phillips said, the reason why there seemed to be an indisposition to enter upon a discussion this evening was, he apprehended, because Dr. Lee had not clearly raised any issue. He had not decidedly advocated one plan of treating ovarian disease, nor condemned another. It was hardly fair then to charge surgeons with indisposition to enter upon the question, because it seemed to be equally felt by physicians. He (Mr. Phillips) had risen, therefore, to explain why he was disposed to be silent, because, as on other occasions, he had taken part in the discussion on ovarian operations; it might seem that he thought the interest of the subject was exhausted. There had been laid before them, by Dr. Lee, two plans of treatment—one palliatory,—the other may be called radical; and, if he might guess the object of the paper, though it is not stated, it is to induce the Fellows to pronounce that one plan of treatment should be always followed, and that the other should be always discarded. This, no doubt, many persons would think convenient, not only in this, but in other diseases, because it would get rid of all responsibility. All that would be necessary, would be to say—a disease being given—the remedy is also given, and there is no occasion for anxious thought. But their Profession is not yet so far reduced. Some necessity for thought still exists, and the decision may be wrong or right, even when the disease is known. As to ovarian diseases, taking the results of treatment, as laid down by Dr. Lee, to be correct, what is the conclusion come to in reference to the duration of life under the palliatory treatment? Nothing definite. But, assuming that Dr. Bright's average was correct, and that four years was the duration of life after the first tapping, this rule cannot be applied to the case before them, for the four years does

not apply to every case; but is the result of adding together all the cases that have been under observation, and the time they lived, and then dividing it by the number of persons observed; the average may be four years for each. But of the whole number, one may live a day, one a month, one a year, one twenty years. If we come to apply this information to a case, we cannot tell whether the patient may live only a week, or whether she may live twenty years. He (Mr. Phillips) thought the Fellows of this Society were not prepared to say, with respect to ovarian disease, that they will be satisfied with this palliatory treatment, and will not attempt to do something better for the suffering patient. He himself was not prepared to say that ovariectomy is better; but if Dr. Lee's tables be taken as their guide, it appears that out of 162 cases in which the operation had been attempted, 102 have survived; and that out of 92 cases in which the tumour has been removed, 56 have survived. He (Mr. Phillips) would not pretend to say that such a result would justify any one in deciding that it should be an accredited operation, though on little better results those for hernia, stone in the bladder, and the ligature of arteries are so. And in the case of the ligature of the innominate surgeons have felt themselves justified in doing it a thirteenth time when it had already failed in twelve. Terms of opprobrium have been applied to this operation, but they are not admissible as elements of decision in scientific questions. He (Mr. Phillips) has seen this operation performed ten times; three times the patients died, once the patient survived, though the tumour could not be removed; and six times in succession the tumour was removed, and the patients recovered. What their ultimate fate may be, of course he could not tell. In the face of those facts he could not say that the operation should never be performed; but he would say that, to justify its performance, there must be the means of pronouncing that the tumour is not so adherent as to prevent its easy removal. Can that be done? He would say, unhesitatingly, No. We cannot tell with certainty, in any case, whether there may not be, practically, insurmountable objections. He knew that it is assumed that the diagnosis is now very refined; but he also knew that those who have paid most attention to the perfection of diagnosis have commenced the operation, and on 61 occasions they have not been able to proceed with it. But it is possible that the diagnosis may be improved; it would therefore be arrogant to say that the operation should be absolutely discarded because the diagnosis is not yet perfect, for it is certain that in the case of a simple non-adherent cyst, the removal may be successfully practised with wonderfully less disturbance to the system than might be expected.

Dr. Tanner would wish to ask Dr. F. Bird the number of cases in which he had performed this operation, and, also, the number of cases in which he had performed any operation at all.

Dr. Frederic Bird said, that he had listened with surprise to the paper just read, and had waited in vain for some new fact in diagnosis or pathology, or at least some sufficient reason for introducing the subject to which it had reference to the notice of the Society; for it was surely unnecessary to describe the elementary anatomy of the ovary, or to occupy time by an imperfect allusion to its morbid changes; that the ovary was invested by a serous and a fibrous membrane containing stroma and vesicles, were facts associated, in the present instance, with no other novelty than the poverty of their description. The whole paper was so destitute of any addition to the knowledge already possessed of ovarian disease, and its section on diagnosis so singularly poor and deficient, that it rather detracted from, than contributed anything to, the means of investigation. To such cause, he presumed, the difficulty to elicit discussion was to be attributed; and he believed, moreover, that the words of the paper had fallen familiarly on the ears of many beside himself, as they had already been rehearsed at the Western Medical Society several weeks ago. It was difficult to select any point in the paper for argument, as the selection lay between the simple enumeration of familiar facts, and the results obtained from statistical tables of which not even a summary was given; for the present tables, like the last presented by the same author, had not been read with the paper, and would probably pass to seclusion until published in the Society's *Transactions*; and yet Dr. Lee required that the evidence furnished by such tables should be admitted in support of his views. If the present statistical table resembled that presented last year, it would be found fraught with fallacy and error. Before alluding further to the table, he would advert for a moment to that portion of Dr. Lee's essay relating to diagnosis of ovarian tumours; the chief object of which, however, appeared to be that of seeking to cast ridicule upon the use of a very valuable instrument, properly called the uterine sound, but which Dr. Lee had absurdly designated an iron weapon. It was lamentable to observe the spirit of exaggeration which pervaded such statements; it was but a few weeks since, when previously reading his paper at the Western Medical Society, Dr. Lee held in

his hand a uterine sound composed of soft metal, which can alone render it a useful instrument, and yet he had now described it as being formed of iron. Unfortunately, Dr. Lee, in speaking of the sound, as of ovariectomy, spoke of that of which practically he was profoundly ignorant, or he would not have stated, that the application of the sound was to push the womb out of the pelvis and cause its dislocation,—as absurd was it to affirm, that an instrument introduced by so able an authority as Professor Simpson, and extensively employed by obstetricians, was always useless and dangerous. Without its aid, the diagnosis of adhesions between the basic portions of ovarian tumours and the uterus, and the form of the pedicles of such growths could not be completed; and, rightly employed, it was, in many other points, a valuable addition to practice. If its use were to be rejected in the diagnosis of ovarian tumours, and the investigation of such diseases were to be conducted solely by the aid of the symptoms enumerated by Dr. Lee, errors would without doubt be as frequent as his erroneous statistics sought to make them. To the statements of the author in relation to the operation of excision, similar observations would apply; and no one could read his table of alleged cases of ovariectomy, without regret for the manner in which it was compiled and the faults it contained; that regret, however, was somewhat lightened by an admirable little notice, emanating from the Council of the Society, and published in the present volume of the *Transactions*, which contains Dr. Lee's tables, in which the Council state, that the Society does not hold itself in any way responsible for the statements, reasonings, and opinions set forth in the papers. This notice happily precedes Dr. Lee's statistical record of 162 cases of so-called ovariectomy, but which in truth should have been a much smaller number. Among these cases would be found five instances in which no tumour was present, five others in which the tumour was not ovarian, twenty-one cases in which small exploratory incisions only were made, either for the purpose of perfecting the diagnosis, or of removing unusually viscid secretions, one case in which a fistulous opening was made after the suggestion of Mr. Bainbrigge, of Liverpool, and four cases which have no better testimony than a little idle gossip; there is nothing recorded about them, save that a certain gentleman stated, that in a certain town certain cases had been operated upon by a certain practitioner, and that they had ended fatally. There is no word about the operation, the nature of the tumours, the date, place, or period of their occurrence; and yet Dr. Lee would ask the Profession to base opposing arguments upon such vague and worthless evidence. Here, then, was a table of 162 cases, from which 36 at least ought to be struck off. In seeking to test truthfully the value of ovariectomy, those examples in which death resulted from a positive accident connected with the operation,—as, for example, the imperfect ligature of arteries, ought also to have been excluded. But let the statistics of Dr. Lee be accepted; bad as they were, they did but establish the success of the operation. With regard to the propriety of sometimes making exploratory incisions, experience had convinced him of their safety and value in proper cases; but such incisions were generally small, often not much larger than might be required for paracentesis; they were not cases of ovariectomy, and should not have been classed as such. By small incisions the presence of adhesions could be at once discovered, without passing the hands in amongst the bowels, as Mr. Lawrence had once stated, and for the very sufficient reason that the bowels are always out of reach—for in ovarian disease they lie compressed in the hypochondria. The safety with which such incisions could be made was not remarkable; for, when adhesions existed, the peritoneum would be virtually wanting, being so changed in character by the deposition of adventitious membrane, as to be far less prone than in a natural state to inflammatory action. To what the present table, compiled by Dr. Lee, really referred was unknown; but certainly it was not supposed to furnish evidence against ovariectomy; while the paper on ovarian disease to which it was appended was so wanting in new views, so meagre in the narration of what was already known, and so deficient in detail, as scarcely to reflect credit upon the labours of a junior student.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. P. M. LATHAM, President, in the Chair.

Mr. Fergusson presented,

A DISEASED LARYNX AND TRACHEA SEVEN DAYS AFTER THE OPERATION OF TRACHEOTOMY.

The mucous membrane of the larynx is in a state of ulceration; the vocal chords and the laryngeal pouches having disappeared, and the whole inner surface of the larynx is one large

ulcer. The disease was of four months' duration. Latterly the patient could speak only in a whisper, and the difficulty of breathing was occasionally so great as to threaten immediate death. Tracheotomy gave great relief, but the patient died of erysipelatous inflammation of the subcutaneous cellular tissue. There was no disease of the lungs.

The President asked Mr. Fergusson whether the disease were acute or chronic?

Mr. Fergusson replied, that it was rather acute. If the patient had not been threatened with suffocation on several occasions, the operation would not have been performed. He thought as such danger existed, it was advisable to give him a chance of relief.

Mr. Toynbee presented a specimen of

CONGENITAL MALFORMATION OF THE EXTERNAL EAR AND MEATUS ON EACH SIDE.

M. A. J., aged 22, was sent to Mr. Toynbee by Dr. Theophilus Thompson, in order that he might examine her ears, and give an opinion respecting the propriety of an operation. Upon examination the right ear was observed to consist of a fold of integuments about an inch and a-half long, the upper portion being somewhat curved; about the middle of this fold anteriorly was an orifice which admitted the rounded extremity of an ordinary-sized probe; it terminated in a *cul-de-sac* at the depth of a line and a-half. On placing the finger over the situation of the external meatus a shallow depression was felt. The left ear, like the right, consisted also of a fold of integument, which contained a small portion of cartilage; it was much smaller, but it had more of the form of the natural ear. There was no appearance of external meatus, nor was any depression felt in its ordinary situation. The mastoid process on each side was fully developed; the zygomatic arch appeared to be absent. The distance between the mastoid process and the molar prominence was remarkably short, and the patient had a peculiar square-shaped face. Upon experimenting respecting the hearing power, Mr. Toynbee found that, at the distance of a foot from the head, the patient heard ordinary conversation perfectly well; beyond that distance, she could not catch the voice. It did not appear that she heard better in the vicinity of the ears; on the contrary, she stated that, when the voice was directed to the back of the head, she heard better than when it was at the same distance opposite to the ears. Mr. Toynbee observed, that it would be remembered by the members of the Society that he laid before them in the session of 1847, the account of a dissection of a child in whom there existed a deformity similar to the present. In that case and in two others which have been dissected, one by Dr. Jager, and the other in the Anatomical Museum of the University of Edinburgh, a similar condition of parts was manifest, *i.e.*, the tympanic element of the temporal bone was absent, and the only vestige of the external meatus was a narrow fissure, at the bottom of which was a dense membrane. There was no appearance of *membrana tympani*. From what has been stated, it could not be anticipated that much relief is to be gained by the performance of an operation; indeed, when it is borne in mind, that dissections of similar cases have shown that the tympanic cavity is covered in externally by a firm layer of bone, and that the only rudiment of a meatus is a narrow fissure, filled by a dense fibrous membrane, it is not to be supposed that the removal of the integuments could materially improve the power of hearing. In the present case, a crucial incision had been made over the site of the external meatus, and the surface of the bone exposed; the improvement to the hearing was, however, very slight; it did not materially facilitate her communication with those around her, and consequently the margins of the incision were allowed to unite. The only cases of this malformation in which it appears desirable to perform an operation are those where the external ear hangs forward, and a considerable amount of deformity is produced.

Mr. Toynbee also presented

A SPECIMEN OF CALCAREOUS MATTER IN THE CAVITY OF THE VESTIBULE.

This was taken from an old man who had been very hard of hearing for a considerable time. The stapes was ankylosed to the fenestra ovalis. The masses of crystals in the vestibule were very much larger than natural, and among them were found portions of calcareous matter, having an irregular shape and a cellular surface, on which were observed some of the crystals.

Mr. Mitchell Henry presented a specimen of

ABSCCESS OF THE LIVER, WHICH OPENED INTO THE LUNG, CONSECUTIVE TO DYSENTERY.

William Lift, aged 45, a carpenter, and usually in the enjoyment of good health, was admitted into the Middlesex Hospital on

October 28, 1851, under the care of Dr. Seth Thompson. Eight weeks previously he had been seized with violent purging of blood and mucus, which continued for fourteen days, at the expiration of which period the diarrhoea decreased somewhat, but was succeeded by a constant gnawing pain in the right hypochondrium. A week previous to admission, he had been following his employment, but, finding his symptoms grow worse, sought refuge in the hospital. On the third day after admission, he passed some blood and slime from the intestines, and, having been taken with a violent fit of coughing, brought up about two ounces of discoloured, but not fetid, pus. These symptoms continued, with little abatement, until his death, which happened three days afterwards.

Post-mortem.—The liver was found excavated by an abscess, the size of a large orange, filled with natural-looking pus. This abscess having contracted an adhesion to the diaphragm and base of the right lung, had made its way into one of the smaller bronchial tubes, and thus partially discharged its contents during life. There was another smaller collection of matter in the liver, distinct from the larger one, about the size of a marble, but in other respects the organ was healthy. The right lung was the seat of lobular pneumonia in various parts, but there was no collection of pus anywhere to be found. On the left side there was some pleurisy, and the lung was in much the same state as its fellow, but at the apex of its upper lobe were scattered various tubercles; and there was also a small cavity, containing cretaceous tubercular matter. The other internal organs, and the small intestines, presented no traces whatever of disease. The large intestine, from one end to the other, was in a state of acute dysenteric inflammation, the disease being most severe at the opposite ends of the canal, the cæcum, and the rectum. These portions of the bowel were sphacelated, the mucous membrane being entirely disorganised, and of a dark purple or bluish colour. In many parts there hung down long sloughy masses, such as are found in phlegmonous erysipelas of a limb. The intermediate portions of the bowel exhibited the effects of the disease in a slighter degree only; small portions of the mucous membrane being dead and in process of separation, and the glands being occupied by ulcers of variable size and depth. Throughout the whole track of the bowel, there were masses of disorganised epithelium and lymph lying on the inflamed surface. The case exhibits a much more severe form of dysentery than is usual in temperate climates, and is hardly to be distinguished from the more acute disease of the tropics. There is a clear history of bowel affection, antecedent to the disease in the liver, and it therefore affords a confirmation of the correctness of Dr. Budd's views of the formation of such secondary abscesses. It is an interesting circumstance in connexion with the disease, that at the Millbank Penitentiary, where the English form of dysentery is so common, Dr. Baly has not met with a single example of suppuration in the liver, though he has found the intestine in all stages of the disease, and the records of the prison extend back to the year 1824.

REPORT ON TUBERCULOUS(?) DEPOSIT IN THE UTERUS AND FALLOPIAN TUBES.

Dr. West, on being called on by the President, said, that at the last meeting he had made an inquiry with reference to the microscopic characters of the matter in the uterus which had been shown by Dr. Bristowe, partly because we are so very much in the dark still with reference to disease of the lining membrane of the uterine cavity, partly because some doubt has been thrown on the nature of supposed tuberculous disease of the uterus, not merely by a general discrepancy of opinions concerning it, but also by some remarks by M. Robin, in the *Archives Générales*, (for August, 1848, p. 406,) where he speaks of having found the peculiar appearances supposed to be due to tuberculous ulceration of the os uteri, really produced by an enormous accumulation of epithelium cells. He had further stated, that in undertaking to report on the case, he should avail himself of the assistance of some gentleman possessed of that familiarity with the use of the microscope to which he himself could not pretend; Dr. Brinton had, therefore, kindly examined the matter, and, whilst he referred to that gentleman for an exact description of the appearances presented, he stated generally that they certainly were not such as one ordinarily observes in tuberculous matter.

Dr. Brinton then added that, in conjunction with Dr. West, he had examined the caseous-looking substance occupying the uterus and Fallopian tubes. He found it to consist almost entirely of epithelial cells with inter-cellular substance in a moderate quantity. The cells were for the most part of the cytoblast form, from a 2 to a 4 or 5-1000th of an inch in diameter; they were shrunken and wrinkled by the action of the alcohol in which the preparation had been immersed. The

intercellular material was gelatinous and clear, and was, doubtless, also exaggerated in quantity from the same cause. These appearances were very similar to those usually seen in the inflammatory exudation of a mucous surface. A glairy mucus occupying the os tincæ had also the same microscopic structure, but the cells were larger and more distinct; being apparently more recent. The tumours on the peritoneal surface, which had also been examined by Dr. West and himself, exhibited a structure which was very unlike the small amount of organisation usually found in tubercle. They were distinctly fibrous, both to the naked eye and to the microscope. Their texture was tough and semi-cartilaginous; their fibres long, irregular, and branching. Very few cell-forms could be seen in and among them, and granular matter was also but sparingly present.

Dr. Baly asked Dr. Brinton what were the grounds on which he declared the deposit not to be tuberculous.

Dr. Brinton considered that the matter in the preparation was not tuberculous, because it consisted principally of an accumulation of epithelial scales, and had a more fully organised structure than tubercle.

Mr. Adams inquired if any of the members had seen this diseased condition of the uterus, unaccompanied by a tuberculous state of the peritonæum or of the lungs.

Mr. Prescott Hewett had been present at the *post-mortem* examination of a young girl, in whom both the Fallopian tubes and the ovaries, together with the liver and the lungs, were affected with tuberculous disease. He had seen three or four such cases at St. George's.

Mr. Adams had met with several such cases, but had never seen any which was not accompanied by similar disease in the lungs, liver, or peritonæum. He then referred to scrofulous disease of the kidneys, and added, that he had always hitherto regarded the deposit as being of the nature of tubercle.

Dr. Baly thought, that the presence of the epithelial scales, observed under the microscope, did not show that there was no tuberculous matter. In examining some intestines lately, he had found much fibrous matter mixed up with epithelial scales, and he thought, therefore, that in a case of scrofulous inflammation of the uterine membrane, it was possible the epithelial scales might be thrown off into the scrofulous matter. He did not see why the cystoblasts spoken of might not partake of the tuberculous character.

MEDICAL SOCIETY OF LONDON.

DR. MURPHY, President, in the Chair.

Dr. Snow Beck read a paper on

THE ENLARGEMENTS OF THE UTERUS WHICH REMAIN AFTER PARTURITION OR ABORTION.

The object of the author was, to draw attention to a condition of the uterus which resulted from the deficient absorption of the tissues after the expulsion of the ovum, and which formed the basis of subsequent morbid changes; also to suggest a means by which these enlargements may be avoided, by insuring the firm contraction of the uterus after labour or abortion. The symptoms which indicated this condition soon after the expulsion of the ovum were described as—the patient feeling weak, languid, and low-spirited, the nights being disturbed, slight headache, or perhaps more a heaviness on the head, with a general feeling of weariness. On inquiry, the character of previous labours would be usually found to have been severe or lingering, to have been attended with a considerable loss of blood, followed by a free discharge of the lochia, which continued red-coloured longer than the usual period. After the lapse of two or three weeks, a slight oozing of blood still continued, which, upon slight exertion, or frequently without any such exertion, recurred from time to time in greater quantity, a slight pain being felt in one or both of the iliac regions, with or without a pain in the lumbar region, and in a short time the expulsion of a few coagula of blood; the pain was then relieved; the patient hoped it would not return; the oozing of blood continued, and the same sequence of symptoms occurred again and again; whilst the appetite was good, the pulse quick, the bowels regular, though the patient did not regain her strength, was troubled with pain in the sacrum, a weight or heaviness in the hypogastrium, with a feeling of bearing down on attempting to stand, and complained that the stomach remained very large. It being requested to examine the uterus, it was enlarged, the orifice open, so as to admit the index finger into the cervical canal, the rugæ of which were strongly marked, the walls being soft and

elastic; the lips were small, smooth, and formed a ring round the orifice, projecting into the vagina; the neck and body of the organ were both enlarged, smooth, and elastic, no tenderness, no increased heat nor pulsation of the arteries being perceived; the vagina was unusually large and lax, the mucous membrane feeling soft and thick. The pathology of the affection was illustrated by the minute details of the condition of a uterus taken from the body of a female who died from typhus fever. The walls measured 7-16ths of an inch; the organ contained a larger amount of blood in the vessels than was natural, and the muscular tissue was developed to a medium position between the unimpregnated and grand uterus, which caused the organ to be much increased in size, but no other morbid product was discovered. In the subsequent course of these affections, irregular discharges of blood from the uterus occurred, and when the catamenia returned, it occurred suddenly, the flow was abundant, continued longer than was the previous habit of the individual, and was attended with the expulsion of clots. As one of the sequelæ, a clot formed in the uterus, which increased the discharge of blood, gave rise to uterine pains, and was expelled as a pyriform coagulum, which was frequently mistaken for an abortion, or a portion of placenta which had been retained from the previous parturition. This idea received confirmation from the custom of soaking them in water, by which the outer layer became partially blanched. A case illustrating these points in practice was given, as also another case, where the hæmorrhage, consequent upon this condition of the uterus following an abortion, proved fatal in a lady afflicted with phthisis. Further morbid changes were glanced at, as congestion of the uterine organs, which was increased after each recurrence of the catamenia, and followed by attacks of congestive inflammation of the uterus or vagina, which, by inducing secondary functional disturbance in the digestive and nervous systems, gave rise to symptoms and appearances in the uterus which had been erroneously attributed to, and described as, ulceration. In the treatment the question was proposed, Can any method be adopted at the time of the expulsion of the ovum, by which the absorption which takes place may be completed in a healthy manner, and not arrested in any part of its progress so as to leave these enlargements? By a process of analytical reasoning, based upon previous experience, the cause of this arrest in the healthy absorption was traced to the want of firm contraction of the uterus, which allowed a larger amount of blood to circulate in the part than was consistent with the actions going on in a healthy manner after parturition. It was, consequently, considered of much importance to insure the contraction, not only to that degree to prevent any hæmorrhage, but even further, to prevent any hurtful circulation of the element by which the necessary absorbent processes might be interfered with. How was this to be effected? Was it advisable to administer the usual opiate after delivery? The soothing influence of this plan to the nervous system, already overstrung by the toils and pains of labour, was fully recognised; but had it any tendency to prevent the after-contraction of the uterus, as well as stopping the "after-pains," which were known to be caused by this contraction? If this was found to be the case in practice, to administer an opiate would be but to gain a short advantage for a lengthened and protracted evil. Again, would the "after-pains" not be better prevented by insuring the firm contraction of the uterus directly after delivery? If so, then, how was this to be effected? Various means suggested themselves to the mind; but the administration of the ergot of rye, combined with borax and tincture of henbane, was the method selected for trial, and had, so far as it had been tested, been followed by the most happy results. It usually much increased the severity of the pains after delivery for the first few, or even for twenty-four, hours; but this evil was more than compensated by the expulsion of all coagula, the firm contraction of the uterus, the absence of any future oozing of blood, the freedom from subsequent pain, the speedy disappearance of the lochia, and the general comfort and quick recovery of the patient. On more than one occasion, doubts had been expressed by the patient and her nurse, "that all was right," seeing that there was no after-escape of blood, and that the lochia so quickly and permanently disappeared. A case illustrating the success of this practice was given with some amount of fulness. A woman aged 30, the mother of three children, after the two last of whom she suffered from uterine symptoms, and had been treated for "ulceration of the os uteri," each of the labours being followed by the symptoms indicated, became pregnant for the fourth time, and suffered from severe shooting pains from the spine, beneath the scapula, and downwards and forwards to the left hypochondrium; also pains in the lumbar region, inside of the thighs and calves of the legs, with a yellow discharge, attended with great disturbance of the nervous and digestive functions. The vagina was large, the membrane feeling swollen, was moist and

rather tender; the body and neck of the uterus was notably enlarged; the lips large, swollen, round, and irregular; the orifice closed; yet a cleft was formed by the projection of the lips into the vagina. The whole firm to pressure, but not tender, nor did the arteries perceptibly pulsate. With the speculum the vagina was of a deep, dull, red colour; the lips of a dull, dusky, violet red, with a raw appearance surrounding the orifice, the edges of which gradually fused into the surrounding colour; the surface smooth. The pains in the side of the chest were not influenced by the remedies employed, but gradually passed off as the pregnancy advanced, whilst pains in the lumbar region, over the whole of the abdomen, and inside of the thighs, took their place. She was confined at the full period, and had a good labour. The ergot of rye, borax, and henbane, were administered with the usual intensification, for a time, of the "after-pains," and the suppression of all oozing of blood, and the quick disappearance of the lochia. She quickly got about again, and was better than she had been for some years before. Five months and a half after her confinement, she again applied for advice, looking stout and well. She stated her feelings to be very different to what they were previously, and complained of aching in the groins, much irritation in the pudendum, a "great deal" of yellow discharge, pain on the passage of a motion, some pain in the sacral region, in the perinæum on sitting down, and down the back part of the thighs. On examination, the vagina was soft, velvety, lubricated with moisture, warmer than natural, and tender to the pressure of the finger; the mucous membrane felt swollen, and the arteries pulsated considerably beneath the finger. The uterus was high in the pelvis, the body could not be felt, the neck small and healthy to the feel; the orifice closed; the lips small, and the membrane puckered. The speculum gave some pain on its introduction. The vagina was of a deep dark red, and the lips and orifice of the uterus to all appearance healthy. Independent of the value of this case, as illustrating the importance of attending to the female during the period of parturition, in order to avoid the troublesome uterine affections which may follow, it offered many interesting points for reflection, some of which may be thus stated. The condition of the uterus which remains after a previous parturition may be such as to give rise to much disturbance at a subsequent pregnancy, so much so as to induce great pain and much constitutional disturbance,—the enlargement consequent upon deficient absorption of the gravid uterus has been mistaken for, and erroneously treated as ulceration,—that an affection of the fundus of the uterus, as in very early pregnancy, may give rise to severe pain in the intercostal nerves,—that as the pregnancy advanced, these pains disappeared, and gave place to pains reflected from the middle and lower part of the organ, and felt in the lumbar region over the whole of the abdomen and inside of the thighs,—that the secondary constitutional disturbance of uterine disorder affects chiefly the nervous and the digestive systems,—that the chief points of diagnosis between a uterine and a vaginal affection, are: in an affection of the uterus the reflected pains are seated in the intercostal nerves, in the lumbar region, over the surface of the abdomen and the inside of the thighs; whilst in a vaginal affection they are felt in the groins, hypogastric and sacral regions, down the posterior part of the thighs, and in the perinæum.

UNIVERSITY OF LONDON.—1851.

SECOND EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE.

MONDAY, Nov. 3.—Morning, 10 to 1.

PHYSIOLOGY.

Examiner, Prof. CARPENTER.

1. Give a general account of the history of the development of the human teeth, both of the temporary and permanent series; point out the analogies between its successive stages and the modes of dentition of the lower vertebrata; and describe the organic structure and chemical composition of the dentine, enamel, and cementum.

2. Describe the principal forms under which the liver and the pancreas present themselves in the animal series; and state what, according to recent investigations, may be considered as their respective offices in the operations of digestion and assimilation.

3. Describe the movements of the alimentary canal in man, from its commencement to its termination; and point out how far these are dependent on the nervous system, or are influenced by it, and how far the mind participates in them.

4. Describe the structure, chemical composition, properties, and mode of development and repair, of the white and yellow fibrous tissues; and give an account of their general distribution in the human body, and of the functions to which they are respectively subservient.

5. Enumerate the actions of the different muscles of the human larynx, and show how these are employed in the production of vocal sounds and in the regulation of the respiratory movements; and state what are the respective functions of the nerves by which they are supplied, as determined by the results of their section.

6. Describe the typical plans of the circulation in the fish and in the reptile, the mode in which the one is transformed into the other in the metamorphosis of the Batrachia, and the transitional forms which remain permanent in the Perennibranchiate family; and state how far any analogous conditions are presented during the embryonic development of man.

MONDAY, NOVEMBER 3.—Afternoon, 3 to 6.

GENERAL PATHOLOGY, GENERAL THERAPEUTICS, AND HYGIENE.

CELSUS DE RE MEDICA.

Examiners, Dr. BILLING and Dr. TWEEDIE.

1. Define what is generally understood by the term atrophy. Explain the circumstances under which atrophy of organs may take place, giving examples in illustration.

2. Enumerate the principal remedies employed as diuretics. Explain the theory of their operation, and how their selection in particular diseases should be determined.

3. Describe the different modes of bathing employed either with reference to the preservation of health or the treatment of disease. Specify the diseases in which particular forms of baths are beneficial as curative agents, with such precautions as it may be necessary to observe in their application.

Translate the following passage into English:

Si cui verò dolere nervi solent, quod in podagrâ chiragrâve esse consuevit, huic, quantum fieri potest, exercendum id est quod affectum est, objiciendumque labori et frigori: nisi quàm dolor increvit, sub quo quies optima est. Venus semper inimica est. Concoctio, sicut in omnibus corporis affectibus, necessaria: cruditas enim id maximè lædit, et quoties offensum corpus est, vitiosa pars maximè sentit. Ut concoctio autem omnibus vitiiis occurrit, sic rursus aliis frigus, aliis calor: quæ sequi quisque pro habitu corporis sui debet. Frigus inimicum est seni, tenui, vulnere, præcordiis, intestinis, vesicæ, auribus, coxis, scapulis, naturalibus, ossibus, dentibus, nervis, vulvæ, cerebro. Idem summam cutem facit pallidam, aridam, duram, nigram: ex hoc horrores tremoresque nascuntur. At prodest juvenibus, et omnibus plenis: erectiorque mens est, et meliùs concoquitur, ubi frigus quidem est, sed cavetur. Aqua verò frigida infusa, præterquam capiti, etiam stomacho prodest: item articulis doloribusque qui sunt sine ulceribus: item rubicundis nimis hominibus, si dolore vacant. Calor ortem adjuvat omnia quæ frigus infestat: item lippientes, si nec dolor nec lacrymæ sunt; nervos quoque qui contrahuntur, præcipueque ea ulcera quæ ex frigore sunt. Idem corporis colorem bonum facit, urinam movet. Si nimius est, corpus effeminat, nervos emollit, stomachum solvit. Minimè verò aut frigus aut calor tuta sunt ubi subita insuetis sunt: nam frigus lateris dolores, aliaque vitia; frigida aqua strumas excitat. Calor concoctionem prohibet, somnum aufert, sudore digerit, obnoxium morbus pestilentibus corpus efficit.

TUESDAY, NOVEMBER 4.—Afternoon, 3 to 6.

MEDICINE.

Examiners, Dr. BILLING and Dr. TWEEDIE.

1. Describe the morbid breath sounds, their physical causes, and pathological significations.

2. Describe the pathological causes and treatment of ileus. When invagination of a portion of intestine has taken place, explain the process by which the continuity of the canal is occasionally restored.

3. Sketch the diagnostic symptoms (general and physical) of inflammation, as it occurs in the different tissues of the lung.

4. Describe the different forms, complications, and treatment of rheumatism.

5. Sketch the differential diagnosis of arachnitis, delirium tremens, febrile delirium, and mania.

6. Describe the symptoms and treatment of the different forms of angina (inflammation of the throat).

TUESDAY, Nov. 4.—Morning, 10 to 1.

SURGERY.

Examiners, Sir STEPHEN HAMMICK and Mr. HODGSON.

1. What is an ulcer? Describe the processes by which ulcers are formed and repaired. Give the names and classification of those ulcers which are found on the surface of the body. Describe the appearances and symptoms which enable you to discriminate between the different varieties. Write down the mode of treatment to be pursued, both locally and constitutionally, of each, whether in a simple or aggravated form. You need not enter on the management of such as are of a syphilitic or cancerous nature.

2. What are the symptoms and appearances attending a fracture of the skull which requires the operation of the trephine either immediately after the receipt of the injury, or at any subsequent period? Give the method of performing the operation, with the local and general treatment of the patient up to a favourable or fatal issue.

3. Describe the process of ossification by which the union of a simple or compound fracture of a cylindrical bone is accomplished. State the various causes which may not only retard but finally prevent the union, for instance, of a simple fracture of the thigh-bone, about its middle third. Enumerate the different modes of treatment which are employed for the cure of ununited fractures.

WEDNESDAY, Nov. 5.—Morning, 10 to 1.

MIDWIFERY.

Examiner, DR. RIGBY.

1. Enumerate the signs of the child's death before and during labour.

2. What is the treatment of labour where the funis presents?

3. Describe the treatment of hæmorrhage arising from uncontracted uterus after labour.

4. Give the diagnosis between retroversion, (during pregnancy,) inversion, polypus and prolapsus uteri.

WEDNESDAY, Nov. 5.—Afternoon, 3 to 6.

FORENSIC MEDICINE.

Examiners, Prof. BRANDE, Dr. PEREIRA, and Dr. RIGBY.

1. What are the chemical peculiarities of the colouring matter of the blood; and how are stains of blood upon linen and upon woollen clothing to be distinguished from those of red paint, and of other colouring matters?

2. What are the uses of arsenious acid in the arts, and of what substitutes does it admit? What inconvenience would ensue from the entire prohibition of its sale? If necessary that the public should have access to it, under what restrictions should it be furnished?

3. Describe the symptoms and treatment of poisoning by hydrocyanic acid.

4. Describe the symptoms and treatment of arsenical poisoning, both acute and chronic.

5. A young unmarried woman, whose respectability is unquestioned, has a considerable abdominal enlargement, which has been gradually increasing for some months; it is uniformly firm and elastic. What points of diagnosis would you endeavour to decide upon before having recourse to examination per vaginam?

6. What are the evidences during life that a female has been pregnant?

MEDICAL NEWS.

THE LATE MR. GEORGE.—We are extremely sorry to record the death of Mr. Durancé George, Lecturer on Dental Surgery in University College. Mr. George died after a few days' illness. His friends had for some time been alarmed by symptoms of threatened phthisis; lately, however, he seemed to have recovered his former health; and few of those who met him in society, or in his consulting-room, would have fancied that the germs of an approaching death were already rapidly maturing in a frame apparently so vigorous and strong. Mr. George received his medical education at University College, and was one of the most able students of his time. His fellow-students, often the keenest judges of each other's

powers, were unanimous in expecting from him a professional career unusually brilliant. Nor did this expectation appear unfounded. Mr. George's abilities were not only of a very high order, but were of that kind which are most easily displayed by the possessor, and most readily acknowledged by the public. He possessed extraordinary quickness and readiness, considerable wit and fancy, and a natural eloquence which training and cultivation might have developed into oratory of a high order. Whether he possessed the more sterling qualities of judgment and depth, could only be known by the experience of his future career, and, unfortunately, perhaps, his path was not destined to lie in the direction his brother students anticipated and hoped. Immediately after the completion of his studies in 1839, Mr. George became a candidate for the office of Assistant-Surgeon to University College Hospital, but the late Mr. Morton was the successful applicant. Soon afterwards, Mr. George received an offer from his uncle, Mr. Cartwright, to join him in the management of his extensive practice. After some hesitation, he decided on accepting this offer, which, if it diverted him from the path of regular surgery, yet tempted him with the prospect of a brilliant and rapidly-acquired fortune. From 1840 to the time of his death, Mr. George became absorbed in an overwhelming practice as a dentist, and virtually disappeared from the professional arena. In 1843 he was appointed Lecturer on Dental Surgery at University College, and continued to hold this appointment till the period of his last illness. He had acquired a perfect knowledge of his art, and lectured upon it with great ability. The only literary production of Mr. George's known to us, is a short but admirable paper on the views of Prochaska, which was originally read before the Medical Society of University College, and was published in the *Medical Gazette* for 1838 or 1839. Mr. George died at the early age of 36. With the sorrow which his early professional friends feel for the loss of this man, so capable and so intelligent, is mingled a feeling that his real talents and powers were never displayed. In spite of his success in the path he had chosen, those who knew him as a student cannot but regret that he did not continue in the career he originally commenced. Useful and capable of scientific cultivation as his occupation was, it yet scarcely afforded him sufficient scope. He seemed so formed by nature and by education to occupy a commanding position in his Profession, that any other appeared unsuited to him. But it does not become us to question the decrees which assign to each man his appointed path. We wish only to do justice to the memory of one who was undoubtedly capable of greater things than it was his destiny to perform.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, November 27:—

BAYES, FREDERICK WILLIAM HART, Stiffley, Norfolk.

HALES, THOMAS, Ford-green, Staffordshire.

WALL, ALFRED, Stratford-on-Avon.

ROYAL SOCIETY.—The following is the list of officers for this Society, elected on the 1st instant:—President: The Earl of Rosse, K.P., M.A. Treasurer: Lieutenant-Colonel Edward Sabine, R.A. Secretaries: Samuel Hunter Christie, Esq., M.A.; Thomas Bell, Esq. Foreign Secretary: Captain W. H. Smyth, R.N. Other members of the Council: William Bowman, Esq.; Benjamin Collins Brodie, Esq.; Charles Brooke, Esq.; the Rev. Professor Challis, M.A.; William Clark, M.D.; Charles Giles Bridle Daubeny, M.D.; Sir P. de Malpas Grey Egerton, Bart.; The Very Rev. the Dean of Ely; J. P. Gassiot, Esq.; Marshall Hall, M.D.; Sir John Frederick W. Herschel, Bart.; Professor W. Hallows Miller, M.A.; Lieutenant-Colonel Portlock, R.E.; Edward Solly, Esq.; William Spence, Esq.; Nathaniel Wallich, M.D. This list shows that six medical men have been selected as officers of the Royal Society, the first Society for science in the three kingdoms. We are glad that the members of our Profession are attaining a position such as they have not held for many years; and we may at last congratulate Dr. Marshall Hall on his election as a member of the Council.

BOTANICAL SOCIETY OF LONDON.—The fifteenth anniversary of this Society was held on the 29th ult., at their apartments in Bedford-street, Covent Garden; Mr. Moore, in the chair. The report stated, that during the past year seventeen new members had been added to the Society, which now numbered 270. Many thousand specimens of British and foreign plants had been distributed to the members, and the donations to the library had

been extensive. Mr. Gray, F.R.S., was re-elected President, and Mr. Dennes, Secretary.

ROYAL MEDICAL SOCIETY OF EDINBURGH.—At a meeting held in their hall, on Friday, the 28th November, the following gentlemen were elected Presidents for the ensuing year, being the 115th session of the Society:—William H. Broadbent, Cheshire; Thomas Spencer Cobbold, M.D., Ipswich; William Murray Dobie, M.D., Chester; James M'Grigor MacLagan, M.D., Edinburgh.

TRINITY COLLEGE, DUBLIN.—It is reported that the Lord Primate of Ireland, who has long held the appointment of Vice-chancellor of this University, has a large portion of the collegiate authorities in favour of his election as Chancellor, in the room of the late King of Hanover. The friends of the Earl of Rosse are still sanguine as to his success. He was one of the students at the University.

NAVAL APPOINTMENTS.—Surgeon William J. Gruggen, M.D. (1850), to the *Rapid*, 8 sloop, for service on the East India station.

MEDICAL APPOINTMENTS AND VACANCIES.—A resident surgeon is wanted for the Bethnal-green Workhouse. Mr. Dagen has been appointed surgeon, and Mr. Dill, assistant-surgeon, to the Liverpool Southern Dispensary. The system of *concours* has been done away at this institution, on the plea that it was an invidious task for one medical man to examine another as to his professional competency; but the change has elicited some feeling of ill-will among those who consider that appointments involving professional rank as well as emolument should be granted to those only who can stand the test of a searching examination. *Ainsi soit-il.*

OBITUARY.—Lately, Mr. Ager, Resident-surgeon to the Bethnal-green Workhouse. On the 24th ult., at his residence, Quay-street, Manchester, aged 70, Peter Clare, Esq., F.R.A.S., the intimate friend and companion of the late Dr. Dalton, and for many years secretary, and afterwards one of the vice-presidents of the Manchester Literary and Philosophical Society.

THE MEDICAL BENEVOLENT COLLEGE.—On Friday week, the members of the medical profession in Liverpool, held a meeting at the Medical Institution, Mount-pleasant, for the purpose of directing attention to the Medical Benevolent College recently established in London; Dr. Bickersteth in the chair. Among other gentlemen present were Drs. Dickenson, Inman, Batty, Vose; Messrs. Ramsay, Lewis, Chalmer, Parker, Jones, &c. The Chairman urged upon the members of the Profession the desirability of availing themselves of the advantages of an Institution which he conceived was in every way entitled to their support. Dr. Dickenson moved the first resolution, which was,—"That the establishment of the proposed Medical Benevolent College, for distressed medical men or their widows, and a school for the education of their sons, was an object worthy of the active support and zealous co-operation of every member of the Profession, and had strong claims on the sympathy of the public generally." Dr. Inman proposed the second resolution,—"That the meeting, composed of members of the medical profession of Liverpool and its neighbourhood, pledged itself to aid to its utmost the accomplishment of so desirable an object." The resolution was seconded by Mr. M'Kee, and adopted. On the motion of Dr. Vose, seconded by Mr. E. Jones, a Committee was appointed, to co-operate with the Central Committee in London, and for receiving donations and subscriptions. Dr. Bickersteth was appointed Chairman, and Dr. Dickenson Honorary Secretary and Treasurer, and Treasurer to the Local Committee.

MEDICAL BENEVOLENT COLLEGE.—At a meeting held at the Suffolk General Hospital on Thursday, November 27, Dr. Hake in the chair; it was resolved unanimously:—That in the opinion of this meeting it is very desirable that a Medical Benevolent College should be established upon the principles proposed by the Council in London.—That it deserves the cordial support of the members of the Profession and the public generally, and that a list for donations and subscriptions be opened forthwith.—That prospectuses be circulated in the neighbourhood, requesting co-operation and assistance in this great and charitable undertaking.—That a Committee be formed for carrying into effect the above resolutions, to consist of the following gentlemen, with power to add to their number:—Dr. Hake, Mr. Smith, Mr. Image, Mr. Kilner, Mr. Wing, Mr. Martin.

KING'S COLLEGE HOSPITAL.—A quarterly court of the Governors of this hospital was held lately, and a Report read, which stated that on the 25th of March there were 116 patients in the wards, and 617 admitted during the subsequent half-year, making a total of 733. Of these, 549 were dismissed cured, 26 incurable,

and 9 disorderly; 51 died, and 98 were still under treatment. The out-patients for the same time numbered 15,978, making a total altogether of 199,436 since the hospital opened. The income was less than the expenditure by 950/. The charter of incorporation for the hospital has received the Royal assent. Much progress has been made in the new building. A donation from an old pupil of the hospital, amounting to 300/, was announced; and also another from the Rev. J. H. Fisk, of 100 guineas, which, with previous amounts, raises this gentleman's donations to the hospital funds to nearly 2000/.

CHARING-CROSS HOSPITAL.—At a recent meeting of the Governors of this hospital, the following donations to its funds were announced:—Mr. E. M. Chandler, 100/.; Sir Robert Fitzwigram, 100/.; J. W. C., 100/.; and a "Benevolent Lady," 105/.; making a total of 405/.—a very serviceable addition to the funds of a useful Institution.

RADCLYFFE INFIRMARY.—At a special court of this Institution, Mr. R. J. Hansard was unanimously elected surgeon to the Infirmary, in the room of Mr. G. Hitchings, whose decease we recorded lately.

KENT OPHTHALMIC HOSPITAL.—Mr. George P. Rugg has been appointed House-Surgeon to this hospital, in the place of Mr. Savery, resigned.

IMPORTANT TO PAROCHIAL SURGEONS.—**HART v. ARNOLD.**—The plaintiff, in this action, resides in Union-street, East, Spitalfields, and is parochial surgeon for the parish of Spitalfields. The defendant is a vestryman of the same parish, and a salesman in Spitalfields' Market. The action was brought to recover 7s. 6d. for attendance upon one John Stokes, at the request of the defendant. Mr. Hart's assistant proved to his employer being sent for by the defendant, and to Mr. Arnold's insulting behaviour towards Mr. Hart. Mr. Hart said, that early on the morning of October 15th, he was sent for to attend a man taken suddenly ill at, he understood, the defendant's shop. As soon as he dressed himself he went to defendant's house, and found that the man was at the Cheshire Cheese public-house, where he went, and found he had broken a blood-vessel. He prescribed for him, and as defendant had sent for him, he looked to him for payment. He was a parochial surgeon, but cases like this did not come under his contract with the parish. The man had not an order from the Relieving Officer, and he had to supply the medicine from his surgery. Mr. Arnold said he was informed that a man was dying, and that five or six people had been for Mr. Hart, who had refused to attend. He, as a vestryman, was entreated to send for him, upon doing which Mr. Hart came. He considered, that, as Mr. Hart was in the receipt of 120/. a-year from the parish, he had a right to attend to cases of such emergency as this. Had they waited for an order from the Relieving Officer, the man must have died at once. It was not the money he begrudged, but the principle; and he certainly spoke rather freely to Mr. Hart, upon which he instantly sent in his bill, and appended to it, "Mr. Hart has understood that Mr. Arnold is unwilling to discharge this account although responsible for it." He considered he was not responsible for it, and had a judgment of the Judge of the Clerkenwell County Court in his hand, where it was held that parochial surgeons were bound to attend to cases like this, and that the parties sending for a medical man were not liable for expenses incurred. The Judge said, he was of opinion the defendant had made himself liable; but, under the circumstances, he should not allow any costs. Verdict for plaintiff. To receive this 7s. 6d., plaintiff's assistant had been there all day, plaintiff part of the day, and the costs he is saddled with amount to 3s. It may be necessary to observe, that no medical claims are heard without the production of the certificate.

HOMŒOPATHY.—**CORONER'S INQUEST.**—An important investigation has lately been made at Totnes respecting the death of a lad named Search, reported to have occurred from jaundice, the inquest being held, as we understand, at the desire of the Rev. Jas. Shore, who had trenched on the province of the medical practitioner by treating the boy homœopathically,—a practice he had adopted in several other instances, and, as the newspapers state, with success. The nature of the diseases thus cured is not stated, but the homœopathic curability failed in the present instance. Mr. William Bowden, surgeon, having made a *post-mortem* examination, said, he found the brain, lungs, heart, and the other internal organs generally healthy. The stomach was empty, and bore no appearance of food having been taken lately; there was no bile in the gall-bladder, and the liver was healthy. He thought the child died from congestion of the membranes of the brain, which might arise, he said, from bile entering the circulation. There was not any bile in the bowels. Sickness would slightly increase the congestion,

but would not cause death. His evidence was confirmed generally by Mr. Kellock, surgeon, who, however, added, that violent sickness would increase the congestion. The father of the deceased proved, that when his child was taken ill, he applied to the Rev. Mr. Shore, who gave him some powders. He said, the boy went on satisfactorily for some days, but looked dull and mopish. He was then induced to apply to a druggist, who next took charge of the case. The disease continued to make progress; violent sickness and delirium set in, and, finally, Mr. Derry, surgeon, was sent for; but convulsions came on in a few hours, and the child died. The verdict stated, that the child died from natural causes, congestion of the membranes of the brain being specified as the death-dealing influence. Here, then, we have, in a serious case, first the homœopathic clergyman, and next the druggist, called in to furnish aid of a character which their education, position, and knowledge, tend to show they cannot render; and the more really qualified to furnish it not sought for until death is not merely knocking at the gate, but absolutely entering the house. It is really too bad: the *post-mortem* appearances show that there was no physical cause why the boy should not have recovered, had fair play been allowed him; but his system was unable to combat the disease, when the time in which it could have been successfully repelled was frittered away in the exhibition of homœopathic preparations, and the prescriptions (?) of a chemist. We trust sincerely that this will be the last appearance in a medical character of the Rev. James Shore, and of Mr. Butland, the druggist.

A MOCK SURGEON.—A fellow, named Milson, who called himself a Quaker, and who had assumed, at different times and under different names, the professions of a civil engineer, a surgeon, and a solicitor, was brought before the magistrate at Guildhall, charged with obtaining money under false pretences. In the course of the inquiry it appeared, that, after donning the character of an engineer, he had practised (?) as a surgeon at Hoxton, aided in his proceedings by an unqualified assistant to Mr. Young, a surgeon, residing in Islington; and, while there, he attended, in conjunction with Bellares, a child who died while under his care. (?) The parish authorities were applied to for an inquest to be held, but refused to interfere. Bellares sent in a bill, including a charge of 21s., said to have been paid by him to Dr. Harris (the prisoner). The magistrate directed Bellares to be apprehended, and the certificate of death to be obtained, as it might be an important document. Will this abominable case convince the Legislature of the necessity that exists for the revision of the laws regulating the practice of medicine, and for severely punishing all pretenders. Druggists who prescribe over the counter, as it is termed, many of whom visit the sick at their own residences, are not, in this respect at least, one whit better than Milson, and ought also to be punished for obtaining money under false pretences. Milson said he had studied at the Hunterian School of Medicine.

MORTALITY NOTABILIA.—Week ending Nov. 29.—The rate of mortality in the metropolitan districts, which was shown to have been augmented in the two previous weeks, has received a great additional increase in the week ending last Saturday. In the first week of November 989 deaths were registered, in the second 1022, in the third 1132, and in the last week of the month 1279. During the same period the weekly mortality of persons aged 60 years and upwards has increased in the following numbers: 202, 207, 242, and 277.

Great Increase in the Rate of Mortality.—If corresponding weeks of the ten years 1841-50 be taken for comparison, it will be seen, that the average was only 1044, and that, with the exception of 1847, when, in consequence of the commencement of epidemic influenza at the end of November in that year, the deaths rose to 1677, there is no corresponding week in which the mortality was so high as in last week. The average, as above stated, may be corrected for increase of population; and in this case it becomes 1148, compared with which the 1279 deaths now registered show an excess of 131. It appears that the mortality of young persons in last week increased 6 per cent., of persons in middle life 14 per cent., and of those of advanced age 19 per cent. above the average.

Influence of the Severe Weather.—As might be supposed from the early severity of the weather, the Table of Fatal Causes shows that diseases which affect the respiratory organs have been mainly instrumental in destroying life. During the last four weeks the deaths from this class of complaints have increased as follow:—148, 168, 256, and 298. Phthisis, which stands in the tubercular class, produced in the same periods 125, 123, 135, and 161 deaths; and hooping-cough 17, 22, 27, and 34. Phthisis or consumption now exceeds the ordinary amount of mortality.

Last week laryngitis carried off 6 persons, pleurisy 4, bronchitis 134, pneumonia 123, asthma 26, diseases of the same class not defined, 5. The fatal cases enumerated under these heads amount in the aggregate to 298, while the corrected average of corresponding weeks is 240. A woman aged 56 years died of chronic bronchitis at 26, Star-street, Paddington. The medical attendant states, that "the deceased was severely affected by the effluvia from the drains of the house."

Epidemics, Vaccination, and Nuisances.—The class of epidemics numbered last week 252, which is just about the average at this season. Small-pox, which appears to increase, was fatal to 32 children and 5 persons of 20 years or more. In the sub-district of Charing-cross, at 14, Bullin-court on the 25th of November, the son of a gunmaker, aged 2 years, died of "small-pox, natural (12 days), pneumonia (4 days)." Mr. Leonard states, that "the disease attacked all the children of the family; the child which has fallen a victim was the only one unprotected by vaccination. Small-pox modified by vaccination is very prevalent among children under 12 years of age in parts of his district, and the result is the strongest proof of the benefits of vaccination." At 1, Lower Sussex-place, Old Kent-road, two sons of a japanner, aged 6 years and 1 year, died of "variola," in one case after 5 days, and in another after 11 days' illness. Mr. Stevens, the Registrar, adds, that "in neither of these cases had the children been vaccinated, the parents having an aversion to it; and the disease is still prevalent in the family." At 4, Jordan-place, Islington, the son of a labourer, aged 2 years, died of "small-pox (6 days), not vaccinated." Mr. Butterfield remarks, that the disease, though not fatal in all cases, has much increased in his district. In the sub-district of St. James, Clerkenwell, at 6, White-horse-court, on the 18th and 24th November respectively, the twin daughters of a carman, aged 8 months, died of "variola, confluent (11 days), not vaccinated." In the sub-district of Hackney-road, at 46, Old Nichol-street, on 22nd November, the son of a packer, aged 4 years, died of "small-pox (12 days), vaccinated with doubtful effect four years ago." Mr. Murray describes the street as "crowded, close, and undrained." In the same sub-district, at 20, Vincent-street, which is also described as "a low, close, over-crowded street, and totally undrained," the son of a hawker, aged one year, died of "natural small-pox (9 days)." A court in Hackney-road sub-district, viz., Smith's-buildings, where the wife of a hawker died of peritonitis, is also stated to be "narrow, close, over-crowded, undrained, and wretched in the extreme."

Scarlatina is now on the decline; it was fatal last week in 38 cases. In the subdistrict of Mild-end, Old Town Lower, at Albert-road, Mr. Castleden registered the deaths of three girls in one family from scarlatina maligna, who died respectively on the 22nd, 26th, and 27th of November. He adds: "The situation of the house is very open, and the place, I believe, well drained. The father states his belief that the disease was caught at a preparatory school which one of the deceased attended. The whole family of eight children have been attacked, and there are now three not out of danger."

Typhus and Miscellaneous.—It is satisfactory to observe that typhus, continued fever, &c., have also declined; these which numbered 60 cases and upwards in previous weeks, having decreased to 50. One death occurred from intermittent fever, 2 from remittent fever, 3 from rheumatic fever, 3 from influenza, 2 from purpura, 6 from croup, 28 from diarrhoea, 21 from measles, 4 from thrush, 11 from erysipelas, and 7 from puerperal fever, besides 7 other cases of women dying after childbirth. At 5, Rutland-place, Holloway, the widow of a labourer, aged 53 years, died of "fever (15 days), exhaustion." Mr. Butterfield reports that "Rutland-place is decidedly unhealthy, and many deaths occurred in its neighbourhood during the time of cholera." No death has been registered from cholera during the last three weeks in the Metropolitan districts. On 22nd November, at 15, Denzell-street, St. Clement Danes, a painter, aged 33 years, died of "slow poisoning by lead during some years, which terminated in syncope." Two persons died of intemperance.

Temperature.—At the Royal Observatory, Greenwich, the mean temperature of the week was 35° 8', which is nearly 8 degrees lower than the average of the same week in ten years. On Wednesday, the coldest day in the week, the daily mean was 32° 1', or 11 degrees below the average of corresponding days; and on every other day the mean was from 4 to 10 degrees lower than the average. On Wednesday the lowest temperature of the air was 25° 9'; the lowest on the grass 22°; and the lowest of the water of the Thames 36° 8'. The wind blew generally from the north-west.

DEATHS in the Metropolis for the week ending
Saturday, November 29, 1851.

CAUSES OF DEATH.	Nov. 29.				Sum of Ten Weeks.
	0	15	30	All Ages.	
ALL CAUSES	575	426	277	1279	10439
SPECIFIED CAUSES	574	423	277	1275	10397
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	183	52	17	252	2332
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	27	22	54	514
3. Tubercular Diseases	80	138	10	228	1677
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses, ...	53	26	46	125	1233
5. Diseases of the Heart and Blood- vessels	5	33	25	63	333
6. Diseases of the Lungs, and of the other Organs of Respiration ...	153	74	71	298	2178
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	18	26	14	58	547
8. Diseases of the Kidneys, &c. ...	1	7	7	15	99
9. Childbirth, Diseases of the Uterus	...	13	1	14	110
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	4	3	8	82
11. Diseases of the Skin, Cellular Tis- sue, &c.	2	...	...	2	10
12. Malformations	0	1	...	7	43
13. Premature Birth and Debility ...	24	1	...	25	184
14. Atrophy	27	...	1	27	165
15. Age ... ..	...	...	53	53	553
16. Sudden	1	4	3	8	121
17. Violence, Privation, Cold, and In- temperance	16	17	4	37	265
Causes not Specified	1	3	...	4	42

TO CORRESPONDENTS.

The length at which we have given the Draft Supplemental Charter of the Royal College of Surgeons, as proposed to the Government, compels us to omit several important Articles and Communications.

A Student.—Any of the "intelligent savages" who cauterize the neck of the uterus for the cure of gonorrhoea, could possibly give you the information you desire.

Chirurgus.—A branch of the tree of liberty is an old remedy, but one of the worst. Seneca tells the manner in which it was used:—*Vides illam arborem, brevem, retorridam, infelicem? Pendet inde libertas.* Timon of Athens was so obliging that he would not cut down a tree of this kind that grew at the bottom of his garden, which had seen some service, till he had, in an assembly of the people, given due notice of his intention, so that no one who might afterwards betake himself thither and be disappointed, should have any pretext for accusing him of want of courtesy.

Dr. Boyd.—There is some mistake. The subject shall immediately be considered.

[To the Editor of the Medical Times.]

SIR,—I send the following narration to add one more proof for the purpose of convincing your readers of the necessity for an established code of medical ethics:—On Thursday, October 30, Mr. Curling drove up to the Mile-End Workhouse, and, making use of my name, asked after a patient (suffering from exfoliation of bone from injury long since inflicted upon the tibia), who had, many months previously, been under his care in the London Hospital. Mr. Barnett, the Master, allowed Mr. Curling into the ward with the express understanding that he would not interfere with the patient. When Mr. Curling saw the leg, he took hold of the projecting piece of bone, saying "that he would just see how loose it was;" the bone broke under his manipulation, whereupon he took out his pocket-case, saying, "that he might as well extract the remainder," which he did, and went off with his trophies, observing, at starting, that doubtless I should think it strange, but should hear from him. Had Mr. C. made the slightest excuse for his conduct I should not have troubled you with this; but as nearly a fortnight has elapsed, and I have heard nothing of Mr. C., would you kindly allow me a place for this in your Notices to Correspondents? I am, &c.

SAMUEL REYNOLDS, Medical Officer to Mile-end Workhouse.

[We have inquired into the circumstances of this case. Mr. Curling informs us, that the man from whom the piece of dead bone was removed had been a patient under him at the London Hospital nine months previously, with compound fracture of the leg; and when discharged he had promised to preserve the exfoliation, when it separated, for Mr. Curling, who, wishing to possess it, had caused his dresser to call several times at the workhouse to watch the progress of the case and obtain the specimen.]

[To the Editor of the Medical Times.]

SIR,—I should feel it unnecessary, were your Journal seen only by those who, amongst the distinguished members of the Profession resident in London, know my character, to take notice of the unfounded and ungenerous attack which appears under the Answers to Correspondents in the "Medical Times" of this week; but as strangers may construe my silence into submission to this charge, I thus briefly address you, and claim, from your sense of justice, a space for the insertion of this simple answer. Your Correspondent is told, that the advertisement of my pamphlet on "Cleft Palate," by the wording and punctuation, would lead ninety-nine men out of a hundred who read it to believe that Mr. Mapleson was Dentist to the Queen," &c. The blame rests with your printer; and I call upon you to state, whether I

did not write to you, on the appearance of the advertisement, to say that the punctuation in printing was likely to cause this misinterpretation, and to request that the error should be corrected. I enclose you the advertisement from one of your contemporaries, which will prove that I have not assumed anything that does not belong to me. In reply to a more than insinuation that my treatment of cleft palate is a copy of Mr. Saunders', I distinctly and unhesitatingly deny it to be the case. In one case only, out of very many that have recently occurred in my practice, have I thought proper to employ a contrivance nearly similar to one invented by the late Mr. Nasmyth, the predecessor of Mr. Saunders, with whom I had been on terms of intimacy for many years. I am, &c.

13, New Burlington-street.

JOHN MAPLESON.

Had we known that Mr. Mapleson was not a member of the Profession, his name would never have appeared in our pages. It is true, that Mr. Mapleson informed our clerk that the wording and punctuation of his advertisement were likely to lead to false conclusions; but that communication did not reach us till after the publication of our last Number. Had we not received Mr. Mapleson's letter, we should, nevertheless, have this week inserted the intimation. In justice, however, to our printer, we have to state, that he printed according to copy, as, we presume, did the printers of the other journals in which similar announcements appeared; and, moreover, in Mr. Mapleson's pamphlet, his name and titles stand thus:—

JOHN MAPLESON,

Dentist,

AND

CUPPER TO THE QUEEN.

And now we beg distinctly to ask Mr. Mapleson, whether Mr. Saunders did not lend him the model of the palate from which his patient was supplied; and whether he did not attempt to publish his case without the slightest acknowledgment of the source from which he had been enabled to complete the cure?

The Hardingsstone Cañ.—Our esteemed Correspondent from Bedford has taken a wrong view of our conduct in this matter. Our attention was directed to the erroneous opinion expressed by Dr. Robertson,—the more dangerous because of the justly-deserved high standing and respected character of that gentleman. Of the character and quality of the defendant we know no more than came out at the inquest, which we duly reported.

J. C.—Vesications about the seat of fracture, especially after injuries to the ankle-joint, are as common as pimples upon the nose after drinking. It belongs to the "dark ages" that such vesications are produced by fomentations.

Mr Thomas.—The word "deodorize" is from the Latin *de* and *odoro*. There are differences of opinion as to the acceptance of the word. It may be taken as synonymous with "anti-bromic" *αντι* and *βρωμος*; an agent that destroys offensive odours, or with "antiseptic," *αντι* and *σηπτος*, a preservative against decay. Dr. Lyon Playfair says that this class of agents may be divided into three,—true disinfectants, which act upon miasmata; secondly, disinfectants improperly so called, which prevent decay, or the emanation of miasm from organic bodies; and thirdly, deodorisers, or those which take away the odour without necessarily taking away the miasm or infection. To take chloride of lime as an example of a deodorising agent,—the chlorine gas which is here in combination with lime, decomposes the substance on which it acts by forming a new combination,—hydrochloric acid. It owes its peculiar value to its great affinity for hydrogen, sulphuretted hydrogen being one of the compounds occasioning fetid and noxious effluvia.

W. T., London, may rest assured that we shall in times to come, as in times past, keep a strict watch on the doings of all public men. We rejoice that the Journal referred to has, in some particulars, mended its ways. As a body, we are confident that our hospital surgeons are humane, honourable, and able men.

M. D.—We have nothing to do with the private friendships of Dr. A. H. Hassell; neither do we believe that he or any other qualified practitioner would so far forget himself as to sign certificates of death for an unqualified man.

Students.—Do the one, and do not leave the other undone. Attend two courses of lectures on the principles and practice of medicine, and the instruction of the Professor of Clinical Medicine. We should regret it deeply if the regulations of the worshipful Society led a single student to neglect attending a second course of lectures on medicine.

An Enemy to Quackery.—The thing is dead, and we have no desire to revive it unless some unwise man should endeavour to resuscitate it.

A Student.—The supply of subjects, for some reasons unknown, is provokingly small.

A Looker-on.—Let those laugh who win. We are contented.

COMMUNICATIONS have been received from—

Professor QUAIN, of University College, and Cavendish-square; Mr. CROUCH, of Bruton, Somerset; Mr. MAPLESON, of New Burlington-street; Dr. ROSE CORMACK, of Putney; Mr. FOOTE, of Tavistock-street, Covent-garden; AN INVALID STUDENT; Mr. ROBERTS, Staff Surgeon, Quebec; INQUIRER; W. T.; Mr. THOMAS, of Pembroke-dock; ONE WHO PRESSED UPON THE AIR IN THE CHOLERA BUBBLE; Mr. BRADLEY, of Greenwich; M. D.; T. C.; Mr. WARD, of Exmouth; C.; Dr. FULLER, of St. George's Hospital, and Manchester-square; Ex. BOYD.

ORIGINAL LECTURES.

LECTURES

ON

DIGESTION, RESPIRATION, AND
SECRETION.GIVEN AT THE ROYAL INSTITUTION,
TO THE MEMBERS, AND TO THE PUPILS OF
ST. GEORGE'S HOSPITAL.

By H. BENICE JONES, M.D., F.R.S.,

Physician to St. George's Hospital.

[Continued from page 479.]

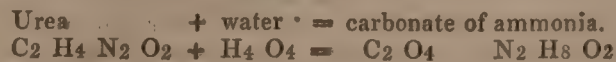
ON ALKALESCENCE OF THE URINE FROM
FIXED AND VOLATILE ALKALI.

In my last lecture, gentlemen, I endeavoured to make clear to you that the phosphates which exist in the urine, are of two kinds: earthy and alkaline. I explained that the alkaline phosphates are of as great importance, if not greater than the earthy phosphates, which form the chief constituent of the phosphatic calculi. The alkaline phosphates, being soluble in water, never form concretions, never occur as deposits; still they play a most important part in the re-actions of the urine. I intend to-day to dwell, not so much on the action of the alkaline phosphates, as on the causes which lead to the deposit of the earthy phosphates,—the causes, in other words, which lead to the formation of the white stones or white gravel in the urine. The difference in the solubility of the earthy phosphates, I told you, depends upon the degree of acidity which exists in the urine. If I take a solution of earthy phosphate,—as the phosphate of lime, which is one of the salts existing in the urine,—and add to it an alkali, either volatile or fixed, I shall get a plentiful deposit of the earthy phosphate, arising from the acidity being neutralised. The specimen I have here, I have deprived of its acid re-action, and it is now alkaline; and this is the reason why the precipitation takes place. (Experiment.) As regards the precipitation of phosphate of lime, it matters not whether I had added ammonia or potash; the same precipitate would have occurred whether the acid had been neutralised with fixed or volatile alkali. Yet the difference between volatile and fixed alkali is very considerable, though it makes no difference in the mere precipitation of phosphate of lime. The attention must be fixed on the cause of the precipitation, and not on the precipitate itself. If I can show that both the volatile and fixed alkali occur in the urine, and that the circumstances under which they occur are very different, we shall obtain much more clearness regarding the causes of the precipitation of the earthy phosphates, than we shall gain by dwelling on that appearance of the phosphates which has been misnamed the phosphatic diathesis. The great distinction between volatile and fixed alkali, is that implied by their respective names; the one is permanent, the other is capable of escaping into the air. If I take a solution of potash and of ammonia, and put a piece of test-paper in the fixed alkali, and another in the volatile alkali, the re-action at first will be precisely the same in both instances, as far as I can see; but if I heat the test-papers, the results would be very different. If I place them on a sand-bath, where I can see them dry without allowing them to burn, I shall find a great difference in the two re-actions. The volatile alkali will not remain; the ammonia will go off. The fixed alkali, as the name implies, will be permanent; and, as the paper becomes dry, the alkaline re-action will be as strong as it was when the test-paper was wet. This is the great distinction between these two alkalies. Moreover, this is not the only difference. If I take a solution of muriate of ammonia, and a solution of muriate of potash,—one of these bodies being muriatic acid combined with fixed alkali, and the other muriatic acid combined with volatile alkali,—and if I test them, I shall find neither solution will have an acid re-action. I can insure the absence of an acid re-action in either, by the addition of the smallest quantity of fixed alkali to both solutions. If I test these two solutions, the test-paper will show no re-action; but, as quickly as the evaporation takes place, the difference will be most apparent; you will see

that the muriate of ammonia, as it evaporates, will leave a distinct red re-action, as if I had dipped the paper into an acid. Now, there is no free acid in muriate of ammonia; it is a neutral body, and has no acid re-action. The muriate of potash remains fixed; it will not change, the paper remains as blue when it is dry as when it was wet. The muriate of ammonia, on the contrary, is decomposed; it cannot evaporate even at a low temperature without being partially decomposed. A small quantity of the ammonia goes off, leaving the less volatile free acid to produce this red colour. I have taken muriate of ammonia to illustrate the decomposition of the salts of ammonia; if I had taken any other ammoniacal salt, such as phosphate of ammonia, or urate of ammonia, the same results would have occurred. Thus, a short and easy way exists of distinguishing between volatile and fixed alkali; it applies, whether we have to do with caustic alkali or with carbonated alkali; or with alkalies in a state of combination with other acids. It follows from this fact, that if the acidity of two portions of the same urine be neutralised, the one by carbonate of potash and the other by carbonate of ammonia, by test-paper you can determine which portion contains the volatile and which the fixed alkali.

Having thus arrived at a means of distinguishing between caustic and volatile alkali, even when they exist as salts in solution, I found, in examining different specimens of urine, that I obtained these different re-actions,—contrasts as marked as if volatile and fixed alkali had been added to the two specimens of urine. I have here, for instance, two quantities of alkaline urine, and if I test them with blue test-paper, I find, when the papers are dry, this decided difference, that the one is distinctly alkaline, and the other is as distinctly acid. Now, I might have said that both urines were alkaline, and there I might have rested; and, if I had only looked at the test-paper when it was wet, this would have been all the result I should have obtained. But, by examining the papers when they are dry, I can determine that one urine is alkaline from volatile alkali, and the other from fixed alkali. It remains only to trace out whence these alkalies come, and what are their relations to the different states of the system, to arrive at a very important difference in these two kinds of alkalescence of the urine.

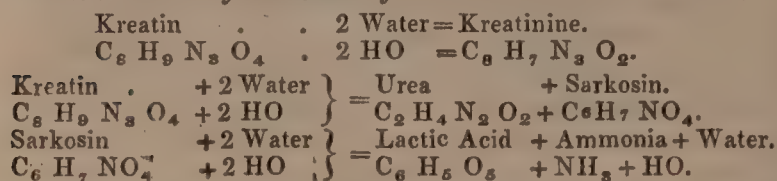
First, let me take alkaline urine from volatile alkali. Whence does this volatile alkali come? The volatile alkali is, of course, carbonate of ammonia. What, then, is the origin of the carbonate of ammonia which occurs in the urine? That carbonate of ammonia comes, as such, out of the blood, is in the highest degree doubtful; there is no proof whatever of this fact. We have, however, a much more probable source than the blood. We find, if we take healthy urine which is acid when it is passed, and only let it stand long enough, it will undergo a change, it will become distinctly alkaline from volatile alkali. Some few specimens, indeed, always remain acid,—they appear never to undergo this change into alkalescence; but most frequently by far, the urine which we pass will become ammoniacal when kept for a longer or shorter period. From whence does this volatile alkali come? It was not there when the urine was fresh made. There is evidently some substance in the urine which undergoes a change; and we know that that substance is urea,—a body which is in the closest relation to carbonate of ammonia. The relation I have represented in this diagram.



If I take urea, a body which can be obtained from urine, and dissolve it in water, and put the solution in contact with a ferment, with yeast, with animal matter, or vegetable albuminous substance in a state of decomposition, the urea, according to the activity of the ferment, more or less quickly undergoes change, and is converted into carbonate of ammonia, losing all its properties as urea, and becoming an alkaline, instead of a neutral body; when this change occurs in the urea in the urine, then that urine becomes ammoniacal. The change in the urea may occur after the urine has been made, or it may happen in the bladder, and occasionally, in a peculiar state of the mucous membrane, even in the kidneys. Chronic inflammation of the mucous membrane of the urinary organs gives rise to an altered mucus, which, beyond all other ferments, acts most energetically on the urea, converting it into carbonate of am-

monia. To trace the origin of the urea would, therefore, become a matter of some interest, if my time permitted. Now, I can only say, that we have already seen one source of urea. I showed you, that if uric acid was boiled with peroxide of lead, urea was produced. Another source I have also alluded to: kreatin, boiled with caustic baryta, becomes converted into urea and sarkosin; these bodies resulting from a change which takes place in one of the substances found in healthy muscle. I showed you, that urea can be obtained from healthy blood. I have a specimen here obtained from the blood of an ox, and it has been detected in the aqueous humour of the eye. No doubt it is formed more especially from the albuminous substances of the body; and, if it does not exist in the muscles, it can be easily formed from one of the substances which occur in the muscles:—

The Relation of Substances found in the Muscles to Urea.



Certainly some urea is present in the blood ready formed, and passes thence into the urine. (a) The quantity in which it exists in the urine has often to be determined by chemical analysis. Approximative results are not difficult to obtain, but a good working method has still to be discovered. A very imperfect way is to add nitric acid to the concentrated or unconcentrated urine. I have here a specimen, from which, on the addition of nitric acid, without any evaporation whatever, nitrate of urea crystallises out. By means of a filter the crystalline nitrate of urea can be collected. Here are beautiful crystalline plates of nitrate of urea. Rarely specimens of urine occur so highly concentrated, that the nitrate of urea forms immediately on the addition of nitric acid; most usually it is necessary to evaporate the urine to form a more concentrated liquid. Such a concentrated liquid I have here; and, on the addition of nitric acid, I shall be able to obtain a crystalline mass of the nitrate of urea, which is insoluble to a great extent in dilute nitric acid, though it is very soluble in water. (Experiment.) All urine contains more or less of this urea, and this is the substance which in certain states of disease of the mucous membrane of the bladder and kidneys, gives rise to the carbonate of ammonia of ammoniacal urine. The urea is converted into carbonate of ammonia, and renders the urine alkaline, and, for clearness of expression, such urine should always be called ammoniacal. The action of the mucus is very similar to the action of the ferments, which, as you have seen, exist in the saliva, gastric juice, and pancreas, and act within the body; or you may compare it to the action of yeast. For in the same way as this ferment out of the body causes sugar to be changed into carbonic acid and alcohol, so in the body, the mucus of the kidneys and bladder, more especially when inflamed, is most potent in its action upon the urea, causing it to change into carbonate of ammonia. By direct experiment also, the influence of the mucus can be determined. If the mucus act as a ferment, it is clear that, by separating it as much as possible, the change should be retarded. If I could take all the mucus away, the change of urea into carbonate of ammonia should be entirely stopped; and the more carefully the mucus is separated, the less active ought the change to be. By filtering through a very fine filter one portion of urine, and by thus separating the mucus from it, whilst another portion of the same urine was left unfiltered, I could determine whether, by this separation, I retarded the change of the urea in the filtered urine. The following table shows the result of the experiment.

Effect of Filtration on the Decomposition of the Urine.

Filtered.	Unfiltered.
10th day, acid.	10th day, acid.
11th „ acid.	11th „ neutral.
12th „ acid.	12th „ alkaline.
15th „ acid.	15th „ more alkaline.
16th „ alkaline.	16th „ highly alkaline.

Both specimens were left to stand in open glasses,

(a) A specimen of urea from healthy ox blood was exhibited.

exposed to precisely the same circumstances as regarded temperature, light, and agitation. On the tenth day after the urine was passed, both specimens were acid; there was no difference between them, except, perhaps, that, to my eye, the unfiltered was a little less acid than the filtered specimen. On the eleventh day, the filtered specimen was acid, and the unfiltered one neutral. On the twelfth day, the filtered specimen was acid, and the unfiltered specimen alkaline; showing that by filtration I had separated something which was left in the unfiltered specimen, and that this had given rise to the ammoniacal re-action. On the fifteenth day, the filtered urine was still acid, and the unfiltered was more alkaline than before. It was not until the sixteenth day that the filtered specimen became alkaline; and then the unfiltered portion was highly alkaline. Thus, then, one filtration alone made a difference of four days at least, probably of five days, in the putrefaction of the urine.

Thus much with regard to the alkalescence from carbonate of ammonia. I will now pass on, by way of contrast, to the other specimen.

I have here some urine which is alkaline from fixed alkali. It is altogether different from the ammoniacal urine of which we have been speaking. There may be a little ammoniacal salt in the urine, but there is so much fixed alkali that it altogether hinders the evidence of any salt of ammonia. What is the fixed alkali which renders this urine alkaline? It is usually present in the form of the alkaline, or common phosphate of soda, of which I spoke in my last lecture. More rarely, the fixed alkaline carbonates are also present.

You will remember, that by means of a diagram, in a previous lecture I illustrated the variations in the acidity of the urine. I showed you that occasionally, when urine was passed about three hours after food, it was found to be alkaline. Examination by test-paper shows that the alkalescence is fixed and not volatile; the urine, as I have said, is alkaline from fixed alkali, a quantity of acid has been set free in the stomach, and a corresponding quantity of alkali has been liberated in the blood, and some of it has passed off in the urine. By carefully watching the periods at which this alkalescence occurs, there can be no doubt but that it is closely dependent upon the state of the stomach; invariably, while digestion is going on, that is, as long as acid is present in the stomach, the tendency to the alkalescence of the urine is increased. It only requires careful search to find that this is so after every meal. This most variable and temporary alkalescence of the urine is totally different from that which is caused by the putrefaction of the urea. The two states cannot be confounded.

Let us pass on to the first effect of the urine becoming alkaline, whether from volatile or from fixed alkali? If the alkalescence comes in one case from decomposing urea, and in the other from the acid being present in the stomach, is there any difference in the first effect of this on the urine? I have here three specimens of the same urine, one of which is more acid than the other two, from which I have taken away a small quantity of the acidity by adding a little alkali. To one portion I added a very little fixed alkali, to the other volatile alkali. Either fixed or volatile alkali would do all that I require, which is to neutralise a little of the acidity. What, then, is the first effect of this? There is no apparent difference between the three specimens until I heat them, then you will see a very distinct and decided difference is produced. The two portions which have been slightly deprived of the acid re-action will give a plentiful deposit, while the other portion will remain perfectly clear. What is this deposit that forms on heating the urine? It is nothing else than the earthy phosphates,—those phosphates which form the calculi. The precipitate fell because the earthy phosphates are less soluble in the hot liquid than in the cold. Salts of lime, more especially, are much more soluble in cold water than in hot. It is, therefore, simply the difference of temperature, and probably the formation of a more basic phosphate of lime that leads to this deposit. We must not conclude that there is more phosphate in one case than in the other; each portion of urine contains precisely the same amount of earthy phosphate; in the one case you make it apparent, and in the other it does not appear. That this is not peculiar to the urine, and that it depends upon the temperature, the following experiment will show. I have here a solution of a salt of magnesia, phosphate of magnesia, made by adding phosphate of soda to sulphate of magnesia. Now,

if I heat this solution, raising it to a boiling temperature, I shall get a plentiful precipitate. (Experiment.) The phosphate of magnesia is held in solution in the cold liquid; but, in the boiling liquid, it is precipitated in considerable quantity. This is a simpler case, illustrating what occurs in urine that is neutral, or nearly so, on the application of heat. If, in the above experiment, I allow the liquid to stand until it is cold, you will find, as it cools, it will become perfectly clear; the whole of the phosphate of magnesia will be taken up again, and will be redissolved. A precipitate of phosphate of lime differs in this respect from a precipitate of phosphate of magnesia; the former is not so easily redissolved by the cold liquid. Hence, the first effect of taking away a little acid re-action from the urine is—that the earthy phosphates become precipitable by heat; this does not show any evidence whatever of an excess of earthy phosphates; but it is the result simply of the removal of a little acid. So that all the conclusions which have been drawn regarding the increased quantities of earthy phosphates in the urine from their precipitation by heat are erroneous. We may immediately determine, whether this precipitate that occurs with heat, consists of earthy phosphates, by restoring the acidity of the urine; by adding one drop of acid, the earthy phosphates will be immediately redissolved. (Experiment.) The other specimen of urine which has not been deprived of any of its acidity might be boiled it for ever; but, until I had evaporated all the water, it would give no precipitate of earthy phosphates.

I must pass on to the next effect which is produced by making the urine a little more alkaline. If I add rather more ammonia to the urine to take away its acidity, or, if I add more caustic potash, in both cases a precipitate will occur; the earthy phosphates fall when the urine is made alkaline. If I examine the phosphatic calculi, I find they do not consist simply of phosphate of lime, but that there is also generally magnesia present, in the form of phosphate of ammonia and magnesia. Phosphate of ammonia and magnesia, mixed with phosphate of lime, form the calculus known by the name of fusible. Phosphate of ammonia and magnesia forms a crystalline deposit; and phosphate of lime generally forms an amorphous powder like sand. These are the bodies which form calculi, and which are deposited simply on account of the alkalescence of the urine. But is there any difference between the alkalescence of ammonia and the alkalescence from a fixed alkali in regard to the appearance of the precipitate? I find that there is. In many cases of alkalescence from fixed alkali there are no crystals of phosphate of ammonia and magnesia; there is not sufficient ammonia present to form phosphate of ammonia and magnesia; and the precipitate which falls when the urine is made alkaline with potash or soda may consist of phosphate of lime alone, without any crystals of phosphate of ammonia and magnesia. If the urine is ammoniacal, I always find in the precipitate crystals of phosphate of ammonia and magnesia, triple phosphate as they have been called, and these crystals are mixed with amorphous phosphate of lime. Thus I come to two great differences between the urine alkaline from a fixed and from a volatile alkali. That which is alkaline from fixed alkali, commonly gives a precipitate of phosphate of lime alone; whilst the other gives a precipitate not only of phosphate of lime, but of phosphate of ammonia and magnesia crystals also. In the two specimens of urine before me, you may observe this difference. In the one, all the white matter which you see precipitated is the result of carbonate of ammonia throwing down the mixed phosphates. In the other specimen, which is alkaline from fixed alkali, where the mucous membrane of the bladder is perfectly healthy, but the stomach is irritated at certain hours, phosphate of lime alone is precipitated.

The differences between ammoniacal and alkaline urine are mentioned in the following Table:—

Contrast between	
Ammoniacal Urine	Alkaline Urine.
Alkalescence from carbonate of ammonia.	Alkalescence from fixed alkali.
Caused by local disease.	Caused by general disorder.
Blue paper made red on drying.	Blue paper remains blue on drying.
Alkalescence is constant.	Alkalescence is occasional.
Excess of mucus and pus present.	No pus. Rarely much mucus.

Contrast between	
Ammoniacal Urine	Alkaline Urine.
Prismatic crystals generally seen.	At first granular deposit only seen.
The iridescent film has prismatic crystals.	The iridescent film consists of thin plates.

The alkalescence of ammoniacal urine is caused by carbonate of ammonia. It arises from local disease,—from some altered mucus setting up a change in the urea, and giving rise to carbonate of ammonia. When tested by blue paper it is made red on drying. The alkalescence is generally found to be constantly present for days or weeks together. The local disease consists in inflammation of the mucous membrane of the bladder, which gives rise to an excess of mucus, and frequently to pus. In the sediment, prismatic crystals are constantly seen. If the urine is left to stand, an iridescent scum forms on the surface, giving all the prismatic colours, and in the film distinct prismatic crystals can be found. But look at the difference when the urine is alkaline from fixed alkali. It is caused, as you see, by general disorder, I mean indigestion, which is not a derangement of the stomach alone, but a disorder of the whole system. When tested with blue paper, it remains blue when the paper is dried. The alkalescence is only occasional, lasting usually a few hours. No pus can be found, and there is rarely much mucus present. There are sometimes oxalate of lime crystals present; but these are very variable. In how many points does such urine differ from ammoniacal urine: the most striking difference is the absence of pus, and of an excess of mucus. But there are other points of difference still to be mentioned. In urine alkaline from fixed alkali, the precipitate which forms at first consists only of a granular deposit of phosphate of lime. Usually there is no appearance of prismatic crystals at all until the urine has stood for some time. The iridescent film, if you examine it with a microscope, will not be found to consist of prismatic crystals, but of fine thin plates of phosphate of lime, which are perfectly soluble in any acid, and have no crystalline appearance. If these facts are true, then what has been called the phosphatic diathesis, should be called alkaline urine; and this must be subdivided into two very different states, the one ammoniacal urine, and the other urine alkaline from fixed alkali; as the causes which produce these states are totally different, the practical importance of the distinction cannot be overlooked.

There is one very interesting fact connected with alkaline urine, which it is well that I should point out to you, especially as it will bear also upon my next lecture. Here is a specimen of urine which is alkaline, from fixed alkali. It was passed a few hours after a meal,—the time, you will remember, when the quantity of uric acid is always greatest. If I test this urine, by adding to it a little hydrochloric acid, it would give a considerable and decided precipitate, because a considerable quantity of uric acid is in solution. The precipitate, most probably, is caused by the insolubility of urate of soda in hydrochloric acid. Not only does mineral acid cause a precipitate in this urine, but if I boil it previous to the addition of the acid it will give a plentiful precipitate. This last precipitate consists of the earthy phosphates, and it is immediately dissolved on the addition of any acid. The precipitate with acid of which I first spoke consists of urates, and by heat the urates will be re-dissolved or decomposed, forming a much less perceptible precipitate of uric acid. Thus I have urine at a certain hour of the day which will not unfrequently give a deposit by heat which is soluble in acid, and at the same time it will give a deposit by acid which is soluble by heat. Diminished acidity of the urine and increased excretion of the urates give rise to these remarkable reactions. Such urine has often been wrongly called albuminous.

I have endeavoured in this lecture to impress on you the fact, that an alkaline state of urine exists totally different, in my belief, from the state which results from inflammation of the bladder,—from that state which leads to these vast phosphatic concretions which depend upon the urine becoming ammoniacal. If the bladder returns to its healthy state the urine is no longer ammoniacal, and the immense deposit of triple phosphate and of phosphate of lime ceases. How different is this state from that of alkalescence from fixed alkali. In the one case the physician must direct his attention to the state of the stomach; in the other case, to the state of the bladder. In one, if the irritability of the stomach is removed the alkalescence ceases to appear; in the other, if the inflammation of the bladder is subdued, no altered

mucus is poured out, no decomposition of the urea occurs, and no alkalescence from volatile alkali is produced, and the earthy phosphates are not precipitated. I have hitherto occupied your attention with substances which are excreted in healthy urine; in my next lecture I shall pass to those which are occasionally thrown out in disease. I shall take first the occurrence of albumen in the urine.

ORIGINAL COMMUNICATIONS.

ON THE MODE OF PROPAGATION OF CHOLERA.

By JOHN SNOW, M.D.

(Concluded from page 562.)

Although, as I have observed, the influence of vitiated water in aiding the spread of cholera is now generally admitted, it must be stated that it is not usually understood to act in the way I have explained; but the contaminated water is thought by many to predispose persons, so that an unknown cause of cholera may act upon them in some inexplicable way. The manner in which these outbreaks occur, when caused by the contamination of a local supply of water, shows, however, that it does not act by merely inducing a predisposition. The water in many of the instances had been contaminated for months or even years, when a case or two of cholera occurring amongst the people on the spot, whose evacuations entered the water through the drains or otherwise, in a day or two afterwards there was a simultaneous outbreak of the malady amongst a number of the persons using the water; whereas, if the water had merely caused a predisposition, and was not acting as the exciting cause, the cases of cholera, however numerous in the locality, might be expected to be distributed over the period that the disease prevailed in the town or district in which the locality was situated. In a review in the *Medical Gazette*, in 1849, the remark was made, that as the communication of cholera to the first case in Albion-terrace could not be traced, and was of course not attributable to the water, which did not yet contain the cholera evacuations, the same cause which would produce that case would produce others in the immediate vicinity. This must be admitted to be possible; and in the same way, if a fire had taken place from some unknown cause in No. 13, and the whole row had been burned down, it must also be admitted that a fire might possibly have originated from the same unknown cause in all the other houses about the same time, and that the burning of the one had no connexion with that of the others. No one, however, would believe this to have been the case.

Besides the local outbreaks already alluded to, it can be shown, that the cholera was often communicated through the water, on a more extensive scale, by means of the sewers which empty themselves into various rivers, from which the population of many towns derive their supply of water. In several towns of this country, among which are Birmingham, Leicester, Bath, and Cheltenham, there were only a few cases of cholera, either in 1832 or 1849, and those chiefly in persons who had arrived from other places in which the cholera was prevailing, or among the immediate attendants of these patients. Now, all these towns were supplied with water from sources quite uncontaminated with the contents of sewers. In some towns so circumstanced, there has been a good deal of cholera, but then it was confined to the poor, and to particular localities in the towns; but, on the other hand, in all those towns in which the malady extended generally, and was not confined to the poor and dirty, this connexion between the sewers and drinking-water existed. A great part of London was in this condition in both epidemics; Exeter was so in 1832, and Hull in 1849. The difference between the two epidemics in Exeter and Hull, in connexion with an altered supply of water, is very remarkable. In 1832, the people of Exeter were supplied with water by water-carriers, who obtained it from two mill-streams diverted from the river; and one of the chief sewers of the town emptied into a branch of the river which divided into the two mill-streams. Cholera commenced with a woman and child who had just arrived from Plymouth, where the former had been nursing another child that had died of

the same disease. It soon became very prevalent and severe for the size of the town. There were 1135 cases, and 345 deaths. (a) Subsequently to 1832, Exeter has been supplied by waterworks, with water derived from the river Exe, at a point two miles above the town, and more than that distance above the influence of the tide. In 1849, there were only about 20 cases of cholera in Exeter, nearly half of which occurred in strangers coming into the town, and dying within two or three days after their arrival.

In 1832 Hull was scantily supplied with water, conveyed in pipes from some springs situated three miles from the town; in the epidemic of that year the cholera was confined almost exclusively to the poor, and the deaths amounted to 300. Between that time and 1849, Hull, besides an improved system of drainage, obtained a more abundant supply of water. The water-works, however, are situated on the river Hull, two miles and three quarters from its confluence with the Humber. About half the sewage of the town is delivered into the river Hull, and the tide flows up this river for many miles past the waterworks, carrying with it the filth from the sewers. In the late epidemic the deaths from cholera and diarrhoea in Hull amounted to nearly 3000, and occurred among all classes of the community.

In London the cholera was most prevalent during both epidemics in those districts supplied with water vitiated by the contents of sewers and cesspools, and indeed it generally bore an exact relation to the amount of vitiation. The map from the second Report on the Health of Towns, which is suspended in the room, shows the districts of the metropolis supplied by the different Water Companies; and the other map, from Mr. Grainger's Appendix to the Report of the Board of Health on Cholera, is coloured to show the relative prevalence of the late epidemic in different parts of London. A large district on the north of the Thames is supplied with the New River water, which is not contaminated by the sewers; another district on the same side of the river is supplied by the East London Water Works Company, with water obtained from the Lea, above the influence of the tide, and nearly, if not altogether, free from contamination. These districts are not much tinged with the blue of cholera in Mr. Grainger's map, except in particular spots in which there was generally a local supply of contaminated water, as, for instance, in the neighbourhood of Bridge-street, Blackfriars, where many of the inhabitants obtained water for drinking from St. Bride's pump, which was afterwards closed in consequence of its being ascertained that the well had a communication with a sewer which emptied into the Fleet ditch; and in the vicinity of Shoreditch and at Hackney, where Dr. Gavin found the contents of the privies overflowing or percolating into the wells in certain courts and allies. The north-west districts of the metropolis are supplied with water by the West Middlesex and Grand Junction Water Companies, who obtain the water from the Thames, near Hammersmith and Brentford, where the river is in a great measure free from sewage at particular times of the tide, and the water is also purified by subsidence in large reservoirs. The districts so supplied were not severely visited by cholera.

The district supplied by the Chelsea water-works, was not severely visited by cholera during the late epidemic, as appears by the cholera map, except in particular spots where contaminated water was used, as in the neighbourhood of Duke-street, Chelsea, where many of the people obtained water by dipping a pail into the Thames. Now, the Chelsea Company derive their supply of water from the Thames at Chelsea, where it is very foul; but having till lately to supply the Court and a great part of the nobility, they have large and expensive filters, and also very capacious settling reservoirs, in which the water is kept for a considerable time before its distribution. Dr. Hassall found the Chelsea Company's water to contain much less organic matter than that of the Companies supplying the districts on the south of the Thames; and he found it to be free from the hairs of the down of wheat, yellow ochreous substance, (believed to be partially-digested muscular fibre,) and other substances which had passed through the alimentary canal, and were found in the Vauxhall and Lambeth Companies' water. (b)

The districts of London, on the south side of the river, are

(a) See "History of the Cholera in Exeter in 1832." by Dr. Shapter, to whose kindness the writer is indebted for additional information.

(b) A Microscopic Examination of the Water supplied to the Inhabitants of London.

supplied with water obtained from the Thames near the Hungerford Suspension Bridge, and at Vauxhall, by the Lambeth, the Vauxhall, and the South London Companies. The water is very imperfectly filtered through coarse gravel, and has little or no opportunity to subside; and according to the evidence of Dr. Hassall, mentioned above, it contains a great deal of excrementitious matter. The cholera was very much more severe on the south side of the Thames than on the north, as appears by the map. There were other causes for this besides the water supplied by the Companies. The wells in this part of the town are very shallow, and are often vitiated by the contents of the cesspools, which percolate through the ground; and a yet more important cause of the great prevalence and fatality of cholera was the existence of certain tidal ditches in Bermondsey and Rotherhithe, the places in which the mortality was greater than in any other part of the Metropolis in the late epidemic. These ditches were the direct receptacles of the excrementitious matters of a large population, and furnished at the same time the only supply of water that could be obtained by a great number of the inhabitants. I was furnished by Mr. Grant with the result of a house to house visitation in Jacob's Island, which is surrounded by one of these ditches, and it shows that the mortality from cholera was much higher among the people who had no supply of water except from the ditches, than among those who had access to the pipe-water of the Company.

In the epidemic of 1832, the part of this Metropolis most severely visited by cholera was the Borough of Southwark, in which ninety-seven persons in each 10,000 of the population were carried off, being nearly three times the proportion of those that died in the rest of London. Now, the Borough at that time was supplied by the Southwark Waterworks with Thames water obtained at London-bridge, and sent direct to the houses without the intervention of any reservoir.

The communication of cholera by means of the water is well illustrated by the instance of Moscow, which was severely visited by that disease in 1830, but much less severely in the second epidemic. Subsequently to 1830 the greater part of the town, which is situated to the north of the Moscow river, obtained a supply of excellent water conducted in pipes from springs at a distance; and the cholera in 1847 was chiefly confined to those parts of the town which lie to the south of the river, to which the new supply of water did not extend, and where the people had still only impure river water to drink. (a)

The Table [copied and suspended in the room] from the Weekly Report of the Registrar-General of January 12, 1850, shows the mortality from cholera in the different districts of London supplied by the various Water Companies; and if the purification of the Chelsea water, and certain local contaminations of the water before mentioned be taken into account, the mortality will be found to bear a very close relation to the absence or presence of connexion between the sewers and the water supplied. It also appears from the same table that the average mortality from all causes in a series of years bears a relation to the quality of the drinking water. There is great reason to believe that typhoid fever and some other epidemic diseases are communicated occasionally through the drinking water; and there are a great number of facts in the history of the Plague that have led me to believe that it is communicated in exactly the same way as cholera. There are also many circumstances which render it probable that the cause of one disease not epidemic and communicable from person to person, but endemic, viz., ague—often exists in the water of marshy districts, and is acquired by drinking the water; but there is not space to enter on these subjects at present. (b)

The large public institutions of London, in which the

inmates are shut up from the rest of the community, showed the influence of the water, or the absence of that influence, in a remarkable manner during the late epidemic of cholera. Bethlem Hospital and the Queen's Prison are both supplied with water from deep wells on the premises, and, although situated on the south of the Thames, in a district in which the cholera was very fatal, there was not a death from that disease in Bethlem Hospital, with a population of more than 400, and only one death in the Queen's Prison, with a population of 300 and upwards. In Milbank Prison, on the contrary, the cholera was very prevalent until the greater number of the prisoners were sent away. It was considerably worse, in fact, than among the population outside in the same neighbourhood. There were 113 cases and 48 deaths; the deaths amounting to 4·3 per cent. of the average number of prisoners. The water used in the Milbank Prison was obtained from the Thames at the spot: it was filtered, indeed, through sand and charcoal, but not kept for a while in large reservoirs like that sent from the Chelsea Waterworks to the rest of Pimlico and Westminster. In Tothill-fields Prison, supplied by the waterworks just mentioned, there were 13 deaths from cholera among 800 prisoners, but in all the other prisons on the north of the Thames which are supplied with water into which the sewage cannot enter, there was but one death from cholera; that death took place in Newgate.

The first cases of cholera which occurred in London in the autumn of 1848 are particularly interesting with reference to the influence of the water of the Thames. According to the valuable Report of Dr. Parkes on the subject, subsequently corrected by him in one or two particulars, in consequence of some information which I received from Mr. Russell, surgeon, of Horsleydown, the first case of cholera in London (when the disease was introduced into this country from Hamburg, the greatest commercial town on the continent of Europe, as it had been just seventeen years before) occurred on September 22nd, in a seaman named John Harnold, newly arrived by the Elbe steamer. It is, indeed, said that cases of cholera occurred in London prior to this; and Dr. Copland mentioned one in the *Medical Gazette* as having happened on July 11th, in a man who had been employed on board of a steam-vessel from St. Petersburg, where the pestilence was then prevailing. But, looking on the case of John Harnold as the first, then the next case occurred in the same room, on September 30th—eight days afterwards—in the person of a workman, named Blenkinsopp. These cases occurred in New-lane, Gainsford-street, Horsleydown, close to the Thames. In the evening of the day on which the second case occurred in Horsleydown, a man was taken ill in Lower Fore-street, Lambeth, and died on the following morning. At the same time that this case occurred in Lambeth, the first of a series of cases occurred in White Hart-court, Duke-street, Chelsea, near the river. A day or two afterwards, there was a case at 3, Harp-court, Fleet-street. The next case occurred on October 2nd, on board the hulk *Justitia*, lying off Woolwich; and the next to this in Lower Fore-street, Lambeth, three doors from where a previous case had occurred. The first thirteen cases were all situated in the localities just mentioned; and on October 5th there were two cases in Spitalfields.

Now, the people in Lower Fore-street, Lambeth, obtained their water by dipping a pail into the Thames, there being no other supply in the street. In White Hart-court, Chelsea, the inhabitants obtained water for all purposes in a similar way. A well was afterwards sunk in the court; but at the time these cases occurred the people had no other means of obtaining water, as I ascertained by inquiry on the spot. The inhabitants of Harp-court, Fleet-street, were in the habit, at that time of procuring water from St. Bride's pump, which was afterwards closed on the representation of Mr. Hutchinson, surgeon, of Farringdon-street, in consequence of its having been found that the well had a communication with the Fleet-ditch sewer, up which the tide flows from the Thames. I was informed by Dr. Dabbs, that the hulk *Justitia* was supplied with spring-water from the Woolwich Arsenal; but it is not improbable that water was occasionally taken from the Thames alongside, as was constantly the practice in some of the other hulks, and amongst the shipping generally.

It must no doubt seem very unlikely to many that the materies morbi of a disease should pass for a distance of two or three miles through the water; but the propagation of

(a) Report of Swedish Commissioners, quoted in the Second Report of the Metropolitan Sanitary Commission. 1848.

(b) Mr. Wm. Blower, surgeon of Bedford, speaking of Wooton, near Bedford, says, "A few wells have been dug lately, and good water has been obtained, and there is every probability, that if the water pits were filled up, and more wells dug, and the draining completed, that sporadic typhus and ague which have so long infested this village, and occasioned so much distress and expense, might be entirely eradicated. A respectable farmer informed me that, in the neighbourhood of Houghton, a few years ago, his was the only family that used well water, and almost the only one that escaped ague."—General Report of Poor-law Commissioners on the Sanitary Condition of Great Britain, 8vo. 1842. P. 66.

Mr. Grainger also quotes some instances, at page 94 of his recent Appendix to the Cholera Report, in which a number of persons contracted intermittent fever by drinking marsh water, while others, exposed to the same atmosphere, who did not drink the water, altogether escaped.

plants and the lower forms of animals by seeds and ova which can be transported to a distance would appear equally improbable, were it propounded for the first time. Analogy leads to the belief that, however minute the particles which propagate cholera, they must yet have a definite structure, (probably that of a microscopic cell), and must therefore not be capable of dilution, so as to be rendered inert.

In the autumn of 1849, Drs. Brittan and Swayne, of Bristol, considered that they had discovered the cause of cholera in a minute fungus; and Dr. Wm. Budd, of the same city, met with the supposed fungus in various specimens of water used as drink, in places where the cholera was very prevalent. It was, perhaps, too much to expect, that we should obtain a knowledge of cholera more exact than that which we possess of syphilis, small-pox, and other better known diseases; and the supposed fungi were resolved into other things. As many of these, however, were particles of bran and other matters which had passed through human intestines, the labours of these gentlemen confirm the fact of the water in various places being a medium of communication between the alimentary canals of cholera patients and those of other people.

In one of the Registration Reports, in the beginning of last year, Mr. Farr pointed out a remarkable connexion between the prevalence of the cholera of 1849 and the temperature of the Thames. The probable reason of this connexion is, that the cholera poison does not so well retain its properties unimpaired in water below 60° Fahr. as at warmer temperatures. Mr. Farr appeared to attribute the influence of temperature to the increased amount of vapour and effluvia given off from the surface of the river; but this would not explain the influence of the water on those who drink it.

It may be here remarked, that it would be unreasonable to expect to trace every case of cholera, either through the water, or by contamination of the food; more especially as it is sufficiently probable that the disease may be communicated by cases which proceed no further than preliminary diarrhoea. If the view here given be found to explain more of the progress of cholera the more it is inquired into, it must be held to account for the cases which cannot be traced, in the same way that generation accounts for the existence of plants and animals under circumstances in which we cannot always trace their parentage.

With regard to preventive measures, I entirely agree with the Registrar-General, that "internal sanitary arrangements, and not quarantine or sanitary lines, are the safeguards of nations." For I believe that quarantine would often be evaded, and is altogether unnecessary. The presumed sanitary measures, however, should have a particular reference to the mode of communication of cholera, otherwise they may sometimes be prejudicial instead of advantageous. I have given one instance in the case of Hull, where the malady was nearly ten times as fatal in the late as in the former epidemic, on account of a more plentiful supply of water having been obtained without reference to its quality. In London, the late epidemic was three times as fatal as that of 1832. This was, in my opinion, partly owing to the manifestoes of the General Board of Health, which were understood to imply that the cholera was not communicable or catching in any way; and these documents had an immense circulation, by being copied into the newspapers. The effect was also due to presumed sanitary measures employed both in the interval of the two epidemics and during the late one. In the interval a great number of cesspools had been abolished, and a much larger amount of fæces became daily sent into the Thames, whilst a great portion of the people had still to drink the water; and during the epidemic itself, the flushing of the sewers increased the mischief in two ways: first, by driving the cholera evacuations into the river before there was time for the poison to be rendered inert by decomposition; and second, by making increased calls on the various companies for water to flush the sewers with, so that the water which they sent to their customers remained for a shorter time in the reservoirs before being distributed. It should be remarked, also, that the contents of the sewers were driven into the Thames by the flushing, at low water, and remained flowing up the stream for four or five hours afterwards.

The sanitary measures required for the prevention of cholera, according to the views here explained, suggest themselves at once. They are as follow:—

1. The entire disuse of water into which sewers flow, or

which is navigated by persons living in boats, or which is in any other way contaminated by the contents of drains or cesspools.

2. An extended use of hand-basins and towels among the poor, together with sufficient water always in readiness.

3. Strict cleanliness in every one about the patient, or the dead body; and especial care in all such persons to wash their hands before touching food.

4. The separation of the healthy from the sick, and their removal to another abode, when they have no place but the sick room in which to prepare and take their meals.

5. The immersion of all soiled linen in water, until it can be scalded and washed; for if it should become dry, the fæces might be wafted about in the form of dust, and so be swallowed by any one who should come near the linen.

In the way just indicated, it is probable that cholera may be occasionally communicated for a short distance through the air; and when small-pox and other diseases are communicated through the air, it is most likely by organised particles, which are wafted like the seeds of plants and the ova of some animals, and not by anything in the form of gas or vapour. Indeed, there are neither facts nor analogy to show that any kind of epidemic disease whatever can be caused by the air, or even influenced by it, otherwise than indirectly. Epidemics have been attributed to the state of the atmosphere since the time of Hippocrates, and the antiquity of the belief causes it to be received as an indisputable axiom, although our better knowledge of the nature of the air, and of gaseous bodies in general, is capable of entirely disproving it. But the facts which disprove the atmospheric theory of diseases are often pressed into its service, and so handled as to lend it apparent support.

It is a curious circumstance, that the medical men who are most active in advocating the sanitary measures which, as a general rule, would prevent the communication of cholera, for the most part disbelieve in its communicability, probably because the question had never suggested itself to them, except in the form of infection by means of effluvia, or of contagion by contact. What is still more remarkable is, that these gentlemen generally look on the presence of all those circumstances which aid in the communication of cholera, when found in situations where the pestilence prevails, as proofs that it is not communicable. They speak of these circumstances as something which can explain the increased prevalence of the disease without its being communicable, although it has never been explained in this way, even by a hypothesis. One or two hypotheses have indeed been attempted, but have signally failed. One of the most able and experienced authors on cholera writes, for instance, as follows.—"If we could suppose that certain organic impurities existing in the atmosphere of unhealthy neighbourhoods, passed into the blood through the lungs, so as to follow the circulation, and that similar impurities taken into the stomach with articles of food or drink, were likewise absorbed into the blood; if we could, moreover, suppose that the epidemic influence possessed the power of assimilating such organic matter to its own poisonous nature, we should be enabled to include a number of complex phenomena under a hypothesis which would indicate the requisite measures of prevention." The above quotation is from Dr. Sutherland's Appendix to the Report on Cholera; but the latter part of the supposition is quite incapable of being entertained for various reasons, one of which is, that the assumed epidemic influence, in order to be capable of acting in this way, must consist of some material mixed with the atmosphere, and if so, it would diffuse itself through the air, and would also pass along with the air. It could not travel against the wind, or remain in a spot for weeks, without extending to the next parish, when the air is moving at the rate of one or two hundred miles a day.

There is much evidence on the subject of this paper which I had not room to bring forward, and many important points connected with it that I have not been able even to allude to; but I trust that I have succeeded in drawing the attention of the Society to the views I have endeavoured to explain, in such a way that they will be induced to consider the question carefully for themselves. (a)

54, Frith-street, Soho-square.

(a) This paper was originally read before the Epidemiological Society.

ON THE PREVENTION OF DISEASES OF THE AIR PASSAGES.

By ALFRED EVANS, Esq., M.R.C.S., L.S.A.

WHEN we look at the weekly Bills of Mortality, during the non-prevalence of a severe epidemic, to see what has been the most fruitful source of death in our vast Metropolis, we cannot but be forcibly struck by the great predominance of the numbers comprised under "tubercular diseases," and "diseases of the lungs and other organs of respiration." We find they constitute about a fourth, and sometimes a third of the whole. Let us take, for instance, our number for March 29 last, in which the deaths were greater than usual. We have in our analysis under the 3rd head of tubercular diseases, 166 cases of phthisis, while, under the 6th head, we have laryngitis, 8; bronchitis, 156; pleurisy, 6; pneumonia, 126; asthma, 39; disease of the lungs, 15: making a total, with phthisis, of 516 deaths from disease of the lungs and air passages in one week; being considerably more than a third of the whole number of deaths from all causes whatever. The question naturally arises, could none of these five hundred individuals have been prevented from being carried off; nay, could not a large number of them have been prevented being ill at all by some known hygienic means? If so, at whose door lies the responsibility? Assuredly, say the surviving friends, if we could have provided any means whereby our relatives could have been saved at any expense, we would have done so. Assuredly, say the medical men who have attended them, we would have done so; but the fault lies, not in the failure to have cured, but probably lies more at the door of the departed, in not having used due means of prevention. But what could have saved a hundred and fifty-six individuals in one week from being attacked by bronchitis? I do not pretend to say that they could all have been protected from their attacks; but I do think that a great number of them might. And how is death to be deprived of so great a feast? says the incredulous reader. Let me for a moment refer to the causes of this frequency of disease of the lungs and air passages.

Our changeable climate—changeable as to temperature, and changeable as to moisture—our habit of taking great care of our chests, while the extremities are much neglected—frequently five or six thicknesses of clothing on the former, while probably there are only two or three on the latter; but, above all, our going from cold air into hot rooms, as well as the reverse, we consider among the most fruitful sources of this tendency to disease of the air passages and lungs.

Many efforts have been made to obviate the injurious effects of our changeable climate. Some have recommended the removal of the delicate one to a warmer locality, either in our own country, or to some foreign one. Some have recommended them to shut themselves up in rooms in which the temperature is regulated by a thermometer; while others have adopted the wiser medium of endeavouring to equalise the temperature which we breathe in and out of doors. Among the most successful efforts was that of Mr. Jeffreys, whose respirator invented, about fifteen or sixteen years since, was considered to have met the necessity of the case in a great degree, and no doubt his instrument has proved very valuable, and prolonged very many lives beyond the span they would have reached without it. It appears to me, that all previous efforts have been far eclipsed by Mr. Rooff's improved respirator, the leading difference of which from all others consists in having distinct passages for the ingress of pure air into the lungs, and the egress of the impure from them; while in all others the pure and impure have to pass between the same interstices, which thereby soon become obstructed, both by the condensation of the moisture of the breath, and by the corrosion of the metallic plates. The manner in which Mr. Rooff has attained his end is at the same time highly ingenious and simple, viz., by the introduction of a double set of valves, which regulate the course of the air in the same manner that the valves of the heart regulate the course of the blood, and effectually prevent retrograde movement of the air. The air, after being admitted by the lower chamber of the instrument, and passing up the tubes, and thence by another chamber into the lungs, is prevented returning by the same channel by a set of valves in the lower chamber, which fall down imme-

diately the inspiratory act has ceased, and continue shut during the expiratory act, which, immediately that it commences, opens the second set of valves, which are in the centre of the instrument, and the air then traverses the spaces between the tubes, giving out to them its caloric. On the repetition of the inspiratory act, the last-named valves are drawn, or rather by their own power close; while the first valves open to admit another current of air, warmed by the caloric given out by the expired air in its transit through the interspaces.

To insure greater utility and meet the exigences of the frequently changing temperature of the external air, some of the instruments have slides, which open or close a portion of the tubes at the will of the wearer. Thus, when the atmosphere is at Fahr. 32°, it must require a greater warming power to raise the inspired air to 60° or 70°, than when it is at 40°. This is met by the slides referred to.

The metallic surface of the tubes contains from 25 to 50 square inches. I have entered thus fully into the structure of this ingenious instrument, that my readers may be enabled to appreciate the value of the invention, as, to those who are subject to bronchitis and other affections of the lungs, it must prove a valuable boon, and I doubt not that its inventor will find that he has not taxed his ingenuity in vain. Next to this, as a means of prevention, let us take care that our delicate ones be more watchful, that neither the insensible perspiration of the extremities, nor the circulation of the blood in them, be in the least repelled; that they no more expose themselves to the vicissitude of passing from cold air into heated rooms, than they would from heated rooms into cold air; that there be no tight lacing; and that undue temperature and impurity of their rooms be prevented by the use of Dr. Arnott's ventilator; and I think that, when all these things are duly attended to, such frightful numbers of deaths from diseases of the organs under consideration, annually exceeding the deaths on the field of Waterloo, would not, could not, meet our eyes.

Walthamstow.

EXCISION OF THE ELBOW JOINT— SUCCESSFUL.

By EDWARD WILLIAM LOWE, M.R.C.S.

Late House-Surgeon to St. Bartholomew's Hospital.

LOUISA ATKINSON, aged 15, mill-girl, a light-haired, blue-eyed, delicate young person, applied with disease of the right elbow-joint.

The joint is considerably swollen, especially on the outer side; is tense and painful on pressure. Three sinuses, opening on the outer side, lead to bone, evidently the outer condyle of the humerus, and further into the interior of the joint. The limb has been kept, for a few months past, on an angular splint; but though thus quiescent, she has suffered considerable pain in the joint, and the discharge from the sinuses has been great. Her general health is very feeble, with loss of appetite and amenorrhœa.

History.—The disease is of about two years' duration, first commencing in a stiffness of the joint. In about seven weeks from the first failing of the joint, an abscess formed on its outside, which was opened by a surgeon in Manchester; a good deal of pus seems to have come out at the time, and subsequently, the opening contracted into a discharging sinus. Of the further history of the case, up to the time of her application to me, I can obtain no very clear information.

Tonics, ol. jecoris, iron, wine, good diet, and fresh air, enabled me to bring my patient into a more healthy condition, with establishment of the catamenial discharge. But this improvement in the general health was not followed by any in the conditions of the joint.

After due consideration of all the circumstances of the case, I determined on excising the joint. The patient consenting, on the 1st of May I performed the operation, being assisted by Dr. Scott and Mr. Dunstan; the one advised by, and known as Moreau's, being the operation done. Of the operation itself, nothing need be particularly described, as in the course of it, there was nothing extraordinary to such a case. The interior of the joint being laid open, by removal of the integument and olecranon process, the exposed ends of the bones were

found in a carious condition, together with necrosis of the external condyle of the humerus; by the application of the saw the ends of the humerus, ulna, and radius were successively removed. The bones were then placed in apposition, the flaps brought together and secured by sutures, and the limb laid in a well-padded splint, and the patient replaced in her bed, when she comfortably returned from under the influence of the chloroform, which had been, as usual, successful. There was but little blood lost during the operation.

The case progressed favourably. The ligatures came away, and the flaps united chiefly by the first intention; one of the old sinuses, however, was sluggish, and but ill inclined to heal, remaining, indeed, open for some time, but in the end slowly and firmly closing.

The present condition of the limb is in every way satisfactory. There is slight and increasing motion between the bones at the situation of the joint, with perfect use of the wrist and entire hand. The girl can already sew and carry light weights without inconvenience. Her general health is much improved; indeed, since the operation, she has grown stouter and taller, and is become decidedly healthy looking.

Congleton.

DISPLACEMENT OF THE LONG TENDON OF THE BICEPS.

By JOHN POSTGATE, Esq., M.R.C.S.

A countryman, John Waters, aged 22, strong and muscular, after assiduously rubbing in a stimulating liniment for what he considered a mere "flesh rent" of the shoulder, and deriving no benefit, sent for me, and gave the history of his case as follows:—

He stated, that whilst forking hay into a loft, a considerable height from the cart in which he stood, he made a violent effort to push the hay into the window—the arm being fully extended, and, from his position, as nearly as I could ascertain, rotated inwards; he at once lost power over the forearm, had considerable pain in the shoulder, and was obliged to give up working. I found the forearm slightly flexed and pronated; no loss of rotundity of shoulder; some pain in the region of the bicipital groove, and on extending the forearm, head of humerus moving freely in glenoid cavity.

By flexing forearm, and at the same time raising the arm to a right angle with the body, and rotating it outwards, the tendon was reduced; the man regaining perfect power over the limb, which could then be moved in any direction. A bandage was applied, and, after a few days' rest, he was able to follow his usual occupation.

The above case calls forth no remark. Its history, the semi-flexed and pronated position of forearm, with no loss or alteration in the appearance of shoulder, or movements of humerus, pointed out the nature of the injury, which the simple manipulatory movement required to reduce it verified. It is interesting only as affording an instance of displacement of long tendon of biceps, on tuberosity of humerus, ably described some years ago by Mr. Handcock, in the *Provincial Medical and Surgical Journal*.

Birmingham.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

METROPOLITAN FREE HOSPITAL.

By JOHN L. MILTON, Esq.

PARALYSIS.

H. S., Bishopgate, a dyer by trade till the last seven years, during which he has been employed as porter to a gunmaker. He has always been of temperate habits, but during these seven years his labour has been excessive, and to this he in some measure attributes his present state. He is now 50, but looks very much older. He has been much exposed to the weather, rising at five in the morning, and often not returning till one or two the next morning. He never remembers straining his back in any way.

About five months ago he was surprised to find on rising,

that his right foot was asleep; he thought he should shake it off, dressed, and went down to breakfast, though with some difficulty; when he got out he found that his leg, up to the knee, moved as if it were a piece of wood; he hobbled about, however, and got through his work with a good deal of trouble. He did nothing for this loss of power and sensation, which continued, and in a few days reached as high as the knee, while the leg became so weak that he could no longer go to work. Within five weeks the left leg became attacked with a numbness and coldness in the foot, which grew daily worse and alarmed him, particularly as the affection proceeded much more rapidly in the newly-attacked limb than in the other.

In a few days he experienced almost complete loss of sensation in the lower part of both legs, so that when he was lying in bed with his legs crossed, and in such a posture that he could not see them, he could not tell which limb to move if he wanted to change his position. His feet were cold and insensible to pricking and pinching, which he frequently practised to assure himself that feeling in them was lost. When he walked he could set the right leg (that first attacked) pretty firmly down, but the left was so violently agitated that he could not move about; the limb, indeed, was thrown about as if convulsed, and his boot was on more than one occasion kicked and dragged off by the violent plunges he made.

Having never before had a day's illness in his life, he thought this would go off, and therefore neglected applying for any medical aid till the progressive spread of the disease to the middle of the thighs thoroughly alarmed him. Some weeks before the first attack he had found great difficulty in retaining any control over his bladder. He made water very frequently, and at times, when carrying heavy loads, it used to run away from him. No symptoms of stricture had appeared. He is now obliged, when making water, to lean for support against the bedpost. The urine is muddy, and passed frequently. His bowels are confined, but in other respects his health has not suffered much. In this state he applied and was admitted under Dr. Bushnan, in May, 1851. He was ordered purgatives, and as soon as his bowels had been freely opened, flying blisters were applied to the knees, and strychnia was prescribed in doses of one-sixth of a grain every night and morning. This practice was pursued for three weeks, when the dose of strychnia was augmented to one quarter of a grain, and the steel mixture, an ounce three times a day, was added. The peculiar effects of the strychnia were soon evidenced by violent pains in the limbs, with twitchings and jerkings, which sometimes threw his legs suddenly and uncontrollably into the strangest positions. As "coldness" in his knees, of which he had complained a good deal, still continued, and he was gaining strength, the strychnia was continued till he could bear the pains no longer, and when he had taken nearly thirty grains of it. Terebinthinate embrocations to the back were now ordered with the best effects, and after an interval of a few weeks the strychnia was recommenced in the same doses, viz., gr. $\frac{1}{4}$, but only once a day. It has never since caused the same degree of pain, probably owing to the more moderate use made of it, and is manifestly of great utility.

At the date when these notes were taken, October 6, 1851, it is stated that the case now presents the most favourable appearance; the man is able to walk nearly as well and steadily as ever, and ventures to a distance of a mile and a half from home, whereas previously he could not cross the room. His appetite is good, and his strength, which had very much given way at one period of the disease, is rapidly returning. He is able to do a little work in place of not being able to stand steadily upright, for there were periods at which he was always obliged to lean on something for support. He makes water less frequently, has complete control over his bladder, and the urine is getting clear and healthy looking.

On the 24th of October he seemed to suffer much from the cold, foggy weather. He complained of pains in his head, and a return of the pains in his limbs, which had left him. A blister applied to the knee had, as it always did, aggravated these pains; his tongue was foul, and his appetite gone; the case, on the whole, looked most unpromising.

Quinine was ordered, in two-grain doses, three times a day, with stimulant applications, containing the spiritus ammoniæ, to the limbs and back, followed by a plaister of ammon. c. hydrarg. to the loins; the strychnia was left off for a day or two, and by the 31st of October he seemed to

have quite recovered the ground he had lost, and is now going on very favourably.

We do not pretend to cite this as a case of cure of paralysis; but we cannot conclude the history in hand without reminding the reader of the obstinate and too often incurable character of the disease. By far the larger proportion of the cases we have seen have progressed steadily from bad to worse; and all that treatment could do was to effect an occasional suspension of the symptoms, and soothe the patient's path to the tomb.

SUPPURATION AND CARRIES OF THE PROXIMAL EXTREMITY OF THE TIBIA.—AMPUTATION.—DISEASE OF THE CARTILAGES IN THE KNEE OF THE OPPOSITE SIDE.

Now that conservative surgery is so much in the ascendant, additional reasons for inducing the surgeon to save the limb could scarcely be supposed to exist, or if they were present, to exert much influence in determining him on a course now so completely and extensively sanctioned.

But surely if such reasons could be admitted, the fact sought to be elucidated by the following details, might be allowed to count as one; we see the patient after amputation had deprived her of one limb, thrown back in her recovery by disease arising in the other, owing to the additional burthen imposed on it in supporting the frame; we see her threatened in consequence with an evil of the greatest magnitude, the loss of the legs, an evil, especially to a woman, immeasurably greater than that of one, and fortunately rarely witnessed.

The patient, now a pale-shattered-looking person, was two years ago admitted under Mr. G. B. Childs, for what appeared to be periostitis of the upper part of the right tibia. She was then stout and healthy looking, but, as the disease progressed, her health soon began to give way. As the pain was excessive, Mr. Childs applied a belladonna plaster to the part, and prescribed morphia internally three times a day. But, as this did not tend to check the inflammatory symptoms, leeches were applied, followed by cold lotions; and these remedies were again exchanged for an ointment containing iodine and iodide of potassium with opium, while the morphia was resumed in combination with the acetic extract of colchicum, and iodide of potassium and bark were given three times a day.

But all these measures proved ineffectual in checking the progress of the disease; the patient grew steadily weaker and thinner; her pulse was small, and she was distressed with night sweats and hectic. About nine months from the time of her first visit, a spot just beneath the tuberosity of the tibia grew prominent, and fluctuated. This Mr. Childs freely opened, and passing down a probe, discovered that the bone was bare. Poultices were applied, and the opening partially closed, leaving a sinus through which, as the disease progressed, the probe could be passed down into the head of the tibia.

Mr. Childs now made an attempt to save the limb, and at the same time remove the diseased bone. A great portion of that which was diseased was scooped away; but it was still found that so much remained behind, that there was every probability of laying bare the articulating cartilage, if the operation had been proceeded further with. Amputation was therefore resolved upon, and performed on the same day, as the patient had now become so weak that her constitution was no longer able to resist the further encroachment of the disease.

At first the discharge from the stump was most profuse, and the patient complained extremely of the heat of the weather, of the perspirations she suffered, and of pain in the part. But she soon rallied, and the suppurating surfaces began to heal rapidly; and, at the end of three weeks, almost complete union had taken place.

As soon as she felt herself able to move about she began to use the other leg, on which all the weight of the body was now for the first time thrown; this was soon followed by pain in the joint, which then swelled, and, growing greatly alarmed, the patient yielded to the solicitations of some friends, and entered another hospital.

Here it was considered to be hysterical, and was blistered and poulticed. She was then recommended to go to the sea side. Instead of this she returned home; the limb grew more swollen and painful, and she called in some medical

man near, who made two caustic issues near the part, directing these to be poulticed, so as to procure further counter-irritation.

Mr. Childs was now summoned, and finding there was still severe pain on pressure, but that the joint was growing smaller, directed the poulticing to be continued, and decoction cinchona, with iodide of potassium, to be taken three times a day.

Under this treatment the patient rapidly improved; and now, though far from strong, the disease seems subdued, and there is every probability that the joint will be saved. Some swellings on the forehead, seemingly caused by infiltration under the pericranium, and similar to that which first presented on the tibia, form a threatening symptom, and would almost augur a syphilitic taint; but the patient most emphatically denies ever having had any primary symptoms.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Dec 13.—MEDICAL SOCIETY OF LONDON. *Subject*:—Dr. OGIER WARD, "On Compression of the Foetal Head at Birth." Eight o'Clock.

Monday, December 15.—CHEMICAL SOCIETY. Eight o'Clock.

—STATISTICAL SOCIETY OF LONDON. Eight o'Clock.

Tuesday, December 16.—PATHOLOGICAL SOCIETY OF LONDON. *Meeting of Council*. Seven o'Clock.

Wednesday, December 17.—GEOLOGICAL SOCIETY. *Subject*:—W. HOPKINS, Esq., P.G.S., "On the Causes of the Changes of Climate at Different Geological Epochs." Half-past Eight o'Clock.

Thursday, December 18.—HARVEIAN SOCIETY. Eight o'Clock.

Saturday, December 20.—MEDICAL SOCIETY OF LONDON. *Subject*:—Dr. COGSWELL, "On the Action of Medicines." Eight o'Clock.

THE MEDICAL TIMES.

SATURDAY, DECEMBER 13.

THE "MEDICAL TIMES" AND "GAZETTE."

Our readers are already aware, that on the 3rd of January, 1852, an amalgamation will be effected between this Journal and the *Medical Gazette*. This arrangement has not been made without mature deliberation, nor without a certainty that the interests of the Profession will be promoted by it. We shall thereby be enabled to offer to our subscribers a still greater amount of original observations. We trust, and indeed look confidently forward, to retaining the good will of that large and respectable body who have hitherto been represented by the *Gazette*; and we believe that the additional contributions we shall receive from this quarter will enhance the value of this Journal to the readers of the *Medical Times*.

The *Medical Gazette* has now been established for nearly twenty years, and has during this time been noted for the great scientific value of its original contributions, and for the uniformly gentlemanly character of its editorial tone. These characteristics will neither be lost nor destroyed by the proposed modifications in its form. The band of admirable contributors, of which the *Gazette* is justly proud, will transfer their valued co-operation to these pages, and, when combined with those who have hitherto so powerfully supported our own Journal, will form a scientific cohort of greater force and ability than has ever yet been arrayed by any Medical Journal.

With regard to ourselves, the management of the Journal will continue as heretofore. Our efforts to make the *Medical Times* worthy, both in scientific and in moral tone,

of our great Profession, have been attended with the most gratifying success. These efforts will be continued with unremitting zeal. We shall still more anxiously endeavour to record the progress of science, and to bring every new fact before the notice of our readers; we shall still more earnestly strive to take an honest and disinterested view of the questions which arise from time to time, and which affect the interests and the prosperity of our brethren.

In contemplating the periodical medical literature of this and of other countries, and in endeavouring calmly to estimate its merits and defects, it would be affected modesty to deny, that we are satisfied with the manner in which the *Medical Times* has been conducted. But we are equally conscious that it may still be greatly improved; and the present union of a hitherto divided strength, gives us an opportunity which will not be thrown away. On every department fresh energies will be brought to bear, and we do not doubt that the effect will be perceptible in our ensuing volume. We trust, therefore, that we are not too sanguine when we believe, that our efforts will not be unrewarded, and that the support of our Professional brethren will enable us still further to extend the sphere of our usefulness, and to give to an intelligent and scientific community a Journal which, in its information and its spirit, may appropriately represent them and their art.

THE PUBLIC HEALTH.

IN the forthcoming Session of Parliament the Health of Towns Act will undergo alterations, which must produce important results to the Medical Profession. The grouping together certain towns and localities into districts, and the appointment of officers of health to those districts, may be expected to advance the best interests of medical science, and to strengthen the claims of the Profession to public support and approbation. In no respect is medicine inferior to its associates, Law and Divinity; and in no respect ought it to have a less prominent hold upon public opinion, or be contented with a less honourable or dignified status.

The Health of Towns Act, by its very appellation, implies the active co-operation of the Profession. It would be absurd to talk of carrying out those hygienic provisions which the crowded state of our large towns calls for, without bestowing a prominent place upon the men who alone are able, by their professional attainments and experience, to devise the details, and predict their effect.

While we claim the first rank in this important measure for our own Profession, we admit that the engineer has also a large work to perform; it is, however, no part of our duty to speak of other branches of science than those strictly belonging to medicine. We hail, then, the approaching Session as one of great importance, not only to ourselves, but to all classes of the community. In point of education, of intelligence, and of position in society, the medical practitioner has all the claims to confidence which Government ought to require of the men to whom it entrusts the duties of those offices which have been so long demanded by the growing wants and increasing size of our large cities and towns, and which at length are about to be instituted.

If it be an object of importance to Government that the labouring classes should be healthy, who so competent to point out the means of attaining that object as the medical man? If it be a matter of consideration to a nation, that the people as a body should be vigorous and self-supporting, and that disease should be as little known as possible

among them; if it be sound economy to preserve the health of the community at any pecuniary cost, to give effect to sanitary law by inspecting the spots where fevers dwell, epidemics linger, and death steals an undue proportion of the victims of disease, who so fit to detect and remedy the evil as the medical man? He is in daily communication with the miserable objects of disease and suffering; in the performance of his painful duties, he becomes familiar with the social and physical evils of poverty, and of that distressing moral prostration, which is too often superadded to continued or frequent illness, among the inhabitants of those inexhaustible magazines of mortality and sickness—our lanes, and courts, and back yards.

The constitution of the Board of Health is a step in the right direction; it is a harbinger of future good; and will, if judiciously directed in its operations, bestow incalculable advantages on the Country and the Profession. We sincerely trust that it will, in the approaching session, obtain those needful additions which are required for the efficiency of its working.

Cheese-paring economists, may carp at any enlargement of the powers of the Bill; but, to render it beneficial and really operative, such clauses must be added as will give it the scope at first intended, and make it, not simply economical, but thoroughly comprehensive and practical.

By associating officers of health with the institutions of the country, and connecting them with the Executive, the Medical Profession gains a support and standing which are reflected throughout its ranks, and which identify the Profession of Medicine with those of Divinity and Law.

It gives to us a national character which has been hitherto wanting,—it brings us up to a higher level, and affords us, as a body, an opportunity of participating in those civil distinctions which are more or less desired by every man of honourable ambition.

We envy not the testimonials of national gratitude awarded to others; but if the warrior or statesman who has served his country be rewarded by substantial marks of national approbation, shall these be grudged to the man who has served humanity, who has risked life a thousand times in the field of science—and who, by long, and laborious reflection has extorted from nature her secrets, and applied them to the benefit of mankind,—shall it be grudged, we ask, that such a man should have some fair and honourable distinction, and at his death some mark as durable as those who, in other ways, have been thought deserving of pillars of stone and statues of bronze? How is it, that England has been so slow to acknowledge the claims of medicine? How is it, that the voice of public opinion has not pronounced more earnestly in its favour? If we measure its successful cultivation, its resources, its value,—if we test it fairly and impartially with other sciences, we shall be at no loss to discover the strong and pre-eminent claims which it presents to the estimation and the gratitude of mankind. There are many questions of national importance which require advocacy in the House of Commons; for there only are many of the conflicting opinions to be elucidated which have reference to the rights of the Profession, and to the absolute requirements of the people. It is within the precincts of the Commons that our *prayers* are best heard and most likely to be attended to; and it is there alone that the vital interests of medicine can receive a genuine interpretation. If every other interest of the country can find a representative in St. Stephens, surely the Profession ought not to be without some organ, through which it may express itself,—

some medium for the communication of its opinions to the legislative wisdom of the State. Let our brethren think of this,—sanitary law in all its details—professional consolidation—quarantine—Poor-law medical offices—medical charities—medical institutions—(collegiate and hospital); in fact, all that relates to the Profession, must, in the course of a few years, have their solution in Parliament.

The medical polity of the empire is anything but satisfactory,—it has long been a blot upon the Government which could permit such anomalies to exist. Perhaps, after all, much of this is our own fault; where there is no union there can be no real strength; where no well-directed efforts for improvement, no positive aim, no high resolve, no determined and inflexible resolution such as must characterise the attempts of those who pioneer the way to large and comprehensive reforms exist, there can no impression be made upon those who minister the laws,—nor can the objects we seek ever be presented in such a shape as to command attention, much less sympathy. Let us hope that the time is drawing near when this lukewarmness will no longer be a reproach to us, but when, with well-directed and combined front, we shall be able to influence by our unity, and to promote by our energy, those measures which would constitute the most glorious epoch of our history.

MR. QUEKETT'S LECTURES.

HISTOLOGY, the science of the minute structure and development of organised beings, is to physiology and pathology what these sciences are to practical medicine and surgery. As rational medicine is based on physiology and pathology, it is evident that histology takes no mean nor unimportant position among the medical sciences, and that it deserves, and indeed receives the attention due to its value, in the furtherance of the scientific practical application of medicine to the alleviation of disease. Perceiving the importance of the subject, and desirous of imparting to our readers a portion of the vast stores of information accumulated by the Demonstrator of Histology to the College of Surgeons—Mr. Quekett—we have taken advantage of his willingness at all times to communicate to others, what he has acquired by long and patient labour. In no course of Lectures we have ever had the good fortune to publish, has there been a greater amount of original matter, and that frequently of the most valuable character, accompanied with so great a profusion of illustrative wood engravings.

Among the characteristics of these Lectures we must note the many practical observations scattered throughout them, and the considerable amount of information of an original character not to be found in any of the published works on physiology and minute anatomy. We have only space to refer our readers to the peculiar and important observations on the formation of renal and vesical calculi contained in the last lecture; the demonstration that the organic matter constantly found in calculi is not an accidental constituent, as was heretofore generally believed, but that it is so diffused through the entire calculus that when the earthy or crystalline matter is removed by an appropriate re-agent, the organic portion still retains the form of the fragment of calculus, and shows evidence of the existence of a cell formation. Henceforward, a calculus will not be regarded as merely a mass of earthy or crystalline matter collected by the simple attraction of aggregation and the organic matter which is always present as an accidental constituent. We feel that any further laudatory observations

emanating from us would be supererogatory, and that the readers of the *Medical Times* will fully appreciate what we have considered of great and increasing value.

THE JUDICIAL CRUSADE AGAINST THE MEDICAL PROFESSION.

A week or two since we had occasion to notice a remark made by the Lord Chancellor, reflecting on the conduct of Medical Men, in giving, as he said, their evidence and opinions in favour of those by whom they were employed, the Chancellor intimating that they did so whether such opinions and evidence were correct or not. We repudiated the attack at the time, and we were glad to observe that the editor of the *London Medical Gazette* joined with us in passing condemnatory strictures on the conduct of that judge. Prior to this, we have occasionally noticed an unkind and unpleasant sort of feeling exhibited by the occupants of the Bench towards members of the Medical Profession, although undoubtedly these very men, when suffering from ill health, would be most ready to seek for the aid and assistance of those whom, in their judicial capacity, they so unfeelingly insult, and carelessly injure and depreciate in the public estimation. We have now to record another deliberate insult offered to the Profession by the Lord Chief Justice of the Common Pleas, and in which, he implied, *all the Judges* joined. In the course of some remarks which he made subsequent to the hearing of an action headed, "*Everton v. Freeman and Another*," he is reported to have observed, "that, for the future, the judges had determined to listen to no excuses put forward by jurymen, unless *verified by affidavit, more particularly with regard to medical certificates.*" The italics are ours.

We know not the circumstances that have operated to induce the Judges to come to such a decision; but we must strongly protest against the assumption, that medical men, as a body, are not to be believed on their word,—for such is the implication of the Lord Chief Justice of the Common Pleas. The general and professional education received by medical men is as good and as extensive as that bestowed on barristers,—the wood from which judges are made,—and, as Medical men do not mingle with the viler part of society, except to relieve and cure their ailments, and not to listen to the histories of their crimes, it is fair to presume that their moral perceptions are, to say the least of them, as acute as those of members of the legal profession. But according to the dictum of all the Judges, they are not to be credited, unless upon affidavit; while a barrister's mere word,—although he be paid to make "the worse appear the better reason," and, when he really has nothing to say for his client, to make up for it by abusing the attorney and witnesses on the opposite side,—his word, we say, is received with every respect and attention, and he has conferred upon him immunities and privileges better fitted for the dark ages than for the present enlightened era. Of this we do not now complain, although many medical men, when placed in the witness-box, have had great cause to complain of the insults heaped upon them by the bar; now, we are sorry to perceive, most causelessly added to by the judges. The sting of the insulting remark we complain of, consists in the use of the words "more particularly," as if we were singled out by the occupiers of the judicial bench as liars,—it is of no use to mince the matter,—as liars *par préeminence*. Perhaps, however, we ought, after all, to feel grateful that our certificates are to be admitted "upon affidavit," and

that we are not set down by the judges as men "who are not to be believed; even upon their oath;" and thus, out of this little,—very little modicum of compliment, we may, for a while at least, draw the consolation, that our English judges do not refuse to give some credit to a member of our Profession, when sworn "to tell the truth, the whole truth, and nothing but the truth."

REVIEWS.

Lizars on Stricture of the Urethra. Second Edition. Edinburgh.

Supplement to the Principles of Surgery. By JAMES SYME. Edinburgh. 1851.

It is not with the view to fan the flame of angry feeling which still blazes in Edinburgh upon the subject of the perineal section, that we notice the Second Edition of Professor Lizars' work. We deprecate the animosity manifested on both sides, and feel assured, that the invectives, personalities, and want of truth characterising many parts of the dispute, have received general condemnation from all branches of the Profession. We have already expressed our opinion with reference to the operation, which is never to be performed when instruments can be introduced into the bladder; but cases do occur, in which it is necessary to form, as it were, a passage by external incision, in consequence of the impermeability of the canal. Such an operation is as old as the hills. Malgaigne describes it, with reference to the former class of cases, as "Une opération ancienne, condamnée déjà par Desault, et renouvelée récemment en Allemagne, en Angleterre, et en Amérique." He might have added in Scotland. The "incision extérieure," or "boutonnière" fell into merited disrepute from the disagreeable and even dangerous consequences by which it was accompanied; and it was reserved only for those forms of the disease in which all other methods had failed.

The position, then, which Mr. Syme holds upon this subject is the following:—He has the merit of having revived, with others, an operation which, some few years ago, received condemnation as dangerous and unfit for general performance; and he asserts that he has now operated, without a single loss of life, on fifty-one cases of stricture deemed irremediable under ordinary treatment.—*Monthly Journal*, Sept. 1851. P. 238.

We beg to remind Mr. Syme, that it is no comfort to a patient to be told, "you have undergone an operation pronounced dangerous by most surgeons, and behold you are not dead! I have not killed you, although I believe any one else would." The question interesting to the patient has reference to the cure of the disease.

Now, in the second edition of Professor Lizars' work are drawings representing the present condition of Joseph Antonio and of Francis Rodgers. Are these representations accurate? If so,—and there seems no attempt at any denial,—what is the conclusion which we must form as to the condition of the other cases which Mr. Syme has recorded as cured?

Mr. Syme's vulgar and boastful challenge about paying the expenses of a patient, deemed incurable, to Edinburgh, could not be accepted by the leaders of the Profession; it was utterly beneath their dignity and position.

We are glad to find Mr. Syme candid enough at last to acknowledge that the operation has failed in "one or two of his patients."

And now let us once more introduce the testy Northern Professor to our readers with his dictum, that his "Principles of Surgery" are just as valuable now as when they were first published ten years ago, and his homely advice to, we presume, the very young men composing his class. He states, in the language of one who has recently made a discovery, that anatomy, physiology, morbid anatomy, pathology, materia medica, operative surgery, and the principles of surgical practice, are necessary branches of study in medical education.

Scotland is evidently a healthy country. We should think half a dozen active practitioners sufficient to attend the whole population; for we are told that, in the Edinburgh Infirmary, the pupils, most of them, if not all, will see more

surgical cases in their course of study, than any one of them will have to treat in the whole duration of his private practice, however much it may be prolonged.

Mr. Syme condemns the clinical lectures which have appeared in the columns of the periodical Medical Press. He does not approve of, or understand the practice of, minutely recording every circumstance, however remotely connected with the particular derangement in question. He need not have volunteered this statement; nobody ever would have supposed that he who had stood still in his surgery for ten years could appreciate the value of accuracy.

After demanding for himself the credit of being anxious to establish claims for lasting confidence, Mr. Syme concludes this impressive address by recommending the students to *buy his book*.

In his remarks on the use of chloroform, Mr. Syme recommends, for its administration, the clumsy mode of soaking a handkerchief with the fluid; by which there can be no estimate formed as to quantity used, and no means employed for protecting the skin of the mouth and nose against the irritating effects of chloroform.

We do not believe that any patient who had just undergone amputation of the thigh at the hip-joint ever awoke from the unconsciousness of chloroform, with a smiling countenance, as if he had experienced relief instead of mutilation. These miracles do not occur to those who take cases accurately, minutely, and at the time. We are sick of the oft-told tale of Syme's operation at the ankle-joint. It is as great a bore as fractures within the capsule of the hip. There are occasionally seen cases in which it may be practised with advantage; but the number is small, as it is not always possible to pronounce whether the disease be confined to the tarsus, or whether it involve the extremity of the tibia. An abscess of bone in the latter situation would require amputation at the lower third of the limb.

We do not quite understand Mr. Syme, when he says, speaking of amputation of the leg: "In the first place, it does not seem desirable for any useful purpose to retain a longer stump than when the tibia is divided at the distance of an inch below the tuberosity." Are we to understand that he has not yet learned the importance of keeping as much of the leg as possible in all cases? Has he heard nothing of artificial limbs, which allow a patient, still able to move the knee-joint, to walk, and ride, and dance almost as well as previous to the loss? Does he not know, that the further the operation is performed from the trunk, the less is the danger to life? His "Principles of Surgery," ten years old, are rather musty.

It is known to every student, that while some one or two thousand patients undergo annually, in any large London hospital, salivation for venereal or other diseases, cases of fungus testis are extremely rare, and occur just as often as not in those who have never taken mercury to any extent in their lives. We mention this for the information of Professor Syme, whom we presume to be the only "passed" surgeon ignorant of the fact; and who asserts the disease to be common wherever mercury has been freely and indiscriminately given.

In connexion with this disease, Mr. Syme asserts that his colleague, Professor Goodsir, discovered that which the late Mr. Samuel Cooper copied from Mr. Lawrence's early account of the morbid changes, published between forty and fifty years ago. Mr. Cooper says:—

"Mr. Lawrence informs us, that if the part be examined while the fungus still remains, the excrescence is found to have its origin in the glandular substance of the testicle itself; that the coats of the part are destroyed to a certain extent; and that a protrusion of the *tubuli seminiferi* takes place through the aperture thus formed."—"Surg. Dic.," p. 1082.

This statement was published in the *Edinburgh Medical and Surgical Journal*, July, 1808. In the year 1851, Mr. Syme thus speaks:—

"Mr. Lawrence, who was doubtless very familiar with this disease, many years ago pointed out its non-malignant character, and recommends repeated ablation of the fungus by cutting or caustic, until cicatrization was accomplished. But my colleague, Professor Goodsir, found, on examining under the microscope, in an excrescence of this kind which I had removed, that it consisted of the tubular structure of the testicle expanded in the form of diverging rays," etc.—P. 39.

This is rather too rich. Does Professor Goodsir claim for himself the merit of discovering that which a student in London would long ago have been plucked for not

knowing. We have too much faith in his honesty and good sense. Now, as to treatment. The fungous protrusion is not shaved off by London surgeons without cause, as Mr. Syme might learn, if he applied himself to inquiring before writing. The patient being kept quiet, the fungus usually recedes, when it has discharged the tuberculous matter which is frequently infiltrated among the tubules. Should the tubules, however, undergo degeneration, lose all glandular character, and become converted into a dense white and imperfectly organised fibrous mass, then the structure, utterly useless for secreting purposes, had best be removed. Caustics are applied, not to destroy, but to hasten cicatrisation in an indolent sore. The testicle is rarely fit for its functions after such a disease as this. It usually becomes slowly atrophied.

Mr. Syme's operation of reflecting back the scrotum, and uniting it over the mass, is unscientific and useless.

Smith's Physicians', Surgeons', and General Practitioners' Visiting List, Diary, Almanack, and Book of Engagements for 1852.

THIS useful annual—a *multum in parvo*—fully sustains its character. We know no other publication which, in the small compass of a pocket-book, could be more desirable as a *vade mecum* to the General Practitioner, with much valuable information ready to his hand, and careful arrangements for a methodical transaction of his varied duties.

GENERAL CORRESPONDENCE.

HOMŒOPATHY AND THE COLLEGE OF SURGEONS.

[To the Editor of the Medical Times.]

SIR,—I am one of that unfortunate, perhaps obtuse minority, the one in twenty, who cannot perceive that the President and Council of the College of Surgeons have committed either an indiscretion or a crime in refusing to lower their dignity by noticing the homœopathic rabble. It is a curious and unaccountable fact, that the Council of the College have been and are viewed by many as the "ne'er do wells" of the Profession, while the College of Physicians is permitted to enjoy its profound slumbers, and the Apothecaries' Company occasionally gain some scraps of praise.

You, Sir, have regretted, and others have stormed at the Council, for what I view as a course of sound policy. Statesmen, looking more deeply into the probable consequences of their acts; occasionally refuse what is demanded by "public opinion," and years after receive the thanks of a new phase of that same public opinion for their resistance; but if, as in a recent and memorable instance, they either yield or lead on the multitude to an impolitic act, they suffer for their imprudence by giving satisfaction to none.

Had the Council of the College yielded to the desires of the remonstrants—had they condemned homœopathy—had they even expressed a regret, that any member of the College was drawn into the homœopathic net, it would have been not unreasonably demanded, that some further steps should be taken in the case of the offending members. The results of such a course you have clearly shown in your leading article of last week.

It seems to be a quality inherent in the minds of a large section of the public, that they enjoy the pleasure of being cheated, which probably called forth the distich of the poet:—

"Surely the pleasure is as great
In being cheated, as to cheat."

This section of the community always has, and always will yield to the blandishments of every new form of quackery, as it emerges from this ocean of folly and deceit; and, although crusades against quackery have been, and may be hereafter preached, they will share the same fate as those of the Middle Ages—ending in defeat and disappointment. The quacks will ever be the conquerors in these encounters, for the public will always attribute our resistance to them to selfishness and other improper motives; and our very agitation of the question is most welcome to the quacks as the most efficient form of advertisement. Quackery in some shape will never die so long as the public at large are uneducated in modern science, and there are knaves to pander to the foibles of the ignorant. Quackery is hydra-headed,—cut off one head, and several spring up to seize a

larger prey. There is a certain substance, according to a homely proverb, that diffuses an unpleasant odour in proportion as it is agitated; so is it with homœopathy, kinesopathy, and the other pathys with which we are threatened, for the odour and the infinitesimals are equally indeterminable by our most delicate balances. One form of quackery, like Pharoah's lean kine, swallows up the rest, to be in its turn gorged by a succeeding monster of the same family. What hope, then, have we that the denunciations of colleges will exterminate this foe to the human race? I answer, none, so long as the knaves and fools exist; and it will I fear be long before such a millennium as the absence of these two classes would produce will be consummated. On these grounds, Sir, I think that the Council have acted wisely in abstaining from all interference and unavailing regrets.

Let me turn the tables, and see what the College has done for the advancement of the real and material interests of the Profession. Let us contemplate the magnificent collection of specimens of normal and abnormal structures of man and the whole animal creation, contained in the Museum of the College, and the expenditure demanded to increase and preserve such a collection as no other country save England can boast. Let us listen to the eloquent lectures of the Hunterian Professor on a science which, although it be not demanded in the curricula, is the strongest support of a sane and enlightened physiology. Let us attend the able demonstrations of the microscopic characters of the tissues of man and animals; and last, but not least, the important lectures of the Professor of Surgery, in which, eschewing the ordinary routine, he yearly takes up some important class of diseases, and investigates them with admirable profundity. Lastly, let us enter a library stored with the learning and experience of past and present ages in all branches of medical science; and then shall we be in a position to answer the question,—Have the authorities of the College faithfully performed their duty to the members; and thence to the public at large? The answer cannot but be in the affirmative,—that the Council has done more for the real, solid, and permanent advancement of medical science than any other body in the United Kingdom, and admiration instead of obloquy should be its reward. I am, &c.

PH. B. AYRES, M.D. Lond., M.R.C.S. Eng.

Wandsworth-road.

[To the Editor of the Medical Times.]

SIR,—I have just learned, through the medium of your pages, that the Council of the Royal College of Surgeons of England have decidedly refused to remove those members of their body who disgrace the Profession by practising homœopathy, and at the same time they retain in the list of their honorary Fellows one who has left our ranks, and is carrying on a trade as a silversmith of glass by a new method, although they at once struck out from the list of members the name of Mr. Stephens, who invented and sold some new inks, which he doubtless has found far more profitable than dispensing medicines, especially as patients but too often dispense with paying the doctor. Why the Council should retain the name of the Fellow in their list, and not that of the Member, both having become traders, I cannot conceive, unless it be because the one was a pure, (?) and the other a general practitioner. But why strike out Mr. Stephens' name, simply for making and vending some excellent inks, material for staining wood, &c.; while, in defiance of the whole body of the Profession, and notwithstanding the decisions of the Edinburgh College of Physicians, the Provincial Association, and of other medical corporations, they retain the names of homœopaths in the list of members, and of one of them, I believe, among the Fellows? Surely ink-making is quite as reputable as humbugging the public with a dishonourable quackery. There are many, I dare say, who will remember the notorious manifesto of the Council of the College, in 1843, the composition, it is said, of Mr. J. H. Green, issued in an attempt to reply to the storm of indignation raised by the Charter granted to the College in that year. In that manifesto, we, the General Practitioners of England and Wales, among many other insulting observations, were told, that among us were some who were abettors of quackery and quacks, putters forth of indecent advertisements, etc. etc.; and this was alleged as a reason why a part of our fellow-members were raised above us in collegiate rank. Are the Council anxious to have it in their power to point to these homœopaths when their dictum on this point is questioned, and is that the reason they will not expel them? I cannot agree with you, that they have not the power to do so; but if in reality they have it not, let them get a clause inserted in the new charter, or a new bye-law, giving the power they need. When, many years ago, during the delivery of

Mr. Guthrie's lectures on Hernia in the College theatre, Mr. Wakley got up a disturbance there, and was consequently taken to Bow-street. the Council made application to the proper authorities, and the necessary power was obtained for the expulsion of refractory members. The present is a case demanding a similar step, and in stronger words. The whole Profession require the expulsion from the College of men who disgrace and dishonour it by practising a quackery of the vilest dye, and which runs directly counter to all the theories and dogmata which we have long learned to hold in highest honour and estimation, and of the truth of which daily experience affords ample proof. One other step, too, may be usefully and advantageously taken by the Council authorities. The Dublin Surgical Councillors, when they grant their diploma to a candidate, require from him a bond to the amount of 500*l.*, enforceable if he refuse to surrender the document, in case of expulsion. A clause to that effect in the new charter would be very powerful in keeping the members in the right way, and preventing them from adding their names to the list of those who, according to the Collegiate Manifesto, abet quackery, and act as quacks, writers of indecent advertisements, etc.

I am, &c.

M.R.C.S.L.,

But one not glorying in the distinction, as long as it is shared by homœopathic quacks.

DR. HOLLAND AND DR. RANKING.

[To the Editor of the Medical Times.]

SIR,—I should not have taken further notice of Dr. Holland's recent professional visit in this neighbourhood, had not your leader in the last number of the *Medical Times* rendered it imperative upon me to defend myself from the imputation of "slander" and "reckless accusations against men of unblemished character," which, if not by name, yet by implication, you affix upon me. Now, Sir, all that I averred in my first letter to the *Lancet* was, that Dr. Holland had virtually, if not actually, met a homœopath in consultation, after having been informed of his character and mode of practice on credible testimony. To make this a slander, there should be no truth in the report; but I shall prove to you, from Dr. Holland's own admission, that the main facts are correct, though their import may be differently interpreted on account of collateral circumstances. In a letter which I received from Dr. Holland, that gentleman informs me, that on Mr. Bell's arrival at the patient's house in the morning, he (Dr. Holland) "simply made inquiry of him as to the preceding symptoms, the medicines and other means employed, and shortly stated my views of the nature of the case, and what I had directed as to future treatment." So you see, Sir, that Dr. Holland admits that he communicated with the homœopath on symptoms and treatment, the which I might fairly be excused if I confounded with a consultation, in its ordinary signification.

As regards the spirit in which this meeting was viewed by Dr. Holland himself, I have nothing to add beyond the fact, that in admitting, as I have done publicly, that Dr. Holland believed he was acting conscientiously, and neither looked upon it himself as a consultation, nor conceived that it would be so regarded by others, I have admitted all that is requisite to exonerate Dr. Holland from connivance with quackery. As to my opinion respecting the abstract propriety of holding any kind of intercourse, on any pretence, with homœopathy, I conceive that that is a matter for my own consideration. It is my opinion, that no such intercourse should be permitted, and nothing that I have heard in this case tends in the slightest degree to alter or modify it.—I am, Sir, &c.

W. H. RANKING, M.D. Cantab.,

Physician to the Norfolk and Norwich Hospital.

Norwich.

[To the Editor of the Medical Times.]

SIR,—I have read the observations in your Journal of last week on the letter of Dr. Ranking, which appeared in the *Lancet* the week previously respecting Dr. Holland.

As those observations lead your readers to suppose that Dr. Ranking took the step he did on his own responsibility, I beg to state that he did so at the request of his colleagues generally, assembled at the hospital; all of whom felt regret that there should have arisen a necessity for so acting from such a quarter.

Those of your readers who have any acquaintance with Dr. Ranking will readily acquit him of any wish to cast aspersions on his professional brethren; but in the case alluded to, the painful necessity was but too apparent to all, and the information was

derived from a source not to be disputed, indeed allowed, by Dr. Holland himself in his subsequent letters to Dr. Ranking.

I trust you will insert this in your next Number.

I am, &c.

WILLIAM P. NICHOLS, F.R.C.S.,
Surgeon to the Norfolk and Norwich Hospital, etc. etc.

Norwich.

RETAINED PLACENTA.

[To the Editor of the Medical Times.]

SIR,—The following case may be interesting both to Dr. Robertson and the rest of the Profession, during the present controversy. I was called on Saturday, the 1st November, to attend Mrs. R., who had just aborted a foetus of four months. I found the entire placenta retained, and partially protruding through the os uteri. I gave ergot and made every effort by manipulation which I thought consistent with the safety of my patient, but without success. I left her, enjoining strict rest in the horizontal position, and directed that I should be immediately summoned should hæmorrhage supervene. None, however, occurred; but in about three days the discharges became very fetid, and continued so for more than a week; but with the exception of one piece, about the size of a walnut (quite putrid), no solid placenta passed; the remainder must have escaped with the lochia, or been absorbed. The chief point is, my patient has recovered without a bad symptom. The treatment consisted of injections of warm water into the uterus, opium for the first two or three nights, and gentle stimulants.

Surely this plan was correct. The removal of the placenta could not have been accomplished without the introduction of the whole hand, and to have effected this, extreme violence would have been required, unjustifiable, I think, in the absence of hæmorrhage. By-the-by, a few months ago, I had a similar case, excepting that severe hæmorrhage recurred several times; here both a medical friend and myself failed in abstracting the placenta, and the hæmorrhage was restrained by plugging, the plug and afterbirth being forced out together about eight days after the foetus. The patient eventually did well.

I am, Sir, &c.

Greenwich.

R. H. BRADLEY.

[To the Editor of the Medical Times.]

SIR,—In answer to "Physician Accoucheur," I beg to say, in the instances I related, the placenta did not come away in any appreciable quantity, consequently the precise date could not be marked. There is no reasonable doubt but that it came away in each instance mixed up with the lochia.

If I might be allowed to express my opinion of the termination of these important cases,—when I speak of termination, of course I only allude to that process whereby the placenta becomes detached from the uterus,—it is, that the adherent portion undergoes a process of disorganization and sloughing, and the preservative efforts of the uterus then throw off the morbid matter.

In other cases, where the portion left behind is not very large, it may become broken up, and so intimately mixed in the usual discharge as to be entirely lost sight of, as in my cases.

A statistical table, something like the subjoined, would fill up a most important hiatus in the practice of midwifery:—

1. Seat and extent of attachment.
2. Brief accompanying symptoms.
3. Date of separation.
4. Termination.

To render such a tabular form complete would require the concurrence of all especially engaged in the practice of midwifery to record their cases, if any.

I am, &c.

Southport.

G. B. BARRON.

MR. FARWELL'S CASE OF DEATH FROM CHLOROFORM.

[To the Editor of the Medical Times.]

SIR,—My friend Mr. Farwell has furnished me with the particulars of the fatal case under chloroform alluded to in your Journal of the 29th ult. I accordingly forward the accompanying abstract from his letter, wherein it will, I think, appear, from the peculiar circumstances under which the chloroform was administered, that the result in this case is not calculated to shake the general confidence of the Profession in the use of that invaluable anæsthetic agent.

I am, Sir, &c.

5, Crescent, New Bridge-street.

A. M. M'WHINNIE.

"The unfortunate patient was the poor woman, Elizabeth Hollis, aged 37, whom you saw with me suffering from cancer of the uterus, and who had been under my care eighteen months. The

ulceration of the neck and body of the uterus had been making great progress latterly, and attended with alarming hæmorrhage and copious fetid discharge. For these, proper remedies were administered, and the patient seemed to derive benefit both locally and generally. This improvement in her condition was, however, of short duration; her sufferings became more and more acute: there was constant escape of urine through an ulcerated opening into the bladder; and most intense pain attended the evacuation of the bowels, which required strong purgatives and enemata every alternate day; and it was necessary to administer narcotics in very large and increasing doses. The constipation of the bowels at last became very formidable; every remedy was tried in vain; and for three weeks there was no evacuation. She had become very emaciated, and her death was hourly expected. In this state, I examined the rectum, and was enabled to feel a hard mass of fæcal matter, equalling in size a cricket-ball. This as well as other indurated masses I succeeded in extracting, but not without intense pain and further exhaustion. After this she rallied; but in about eight days her sufferings became as great as ever, and on examining the rectum I found that it was again filled and obstructed as before; but upon my telling her that she must endure the same operation, she said it was impossible, unless I gave her chloroform. I pointed out the danger, but she still persisted. I accordingly acquiesced, and succeeded in relieving her of the hard fæcal matter. This operation was again repeated in the same way after an interval of a few days; but it was evident that her debility was increasing, and when the time again arrived for affording her the same relief, I endeavoured to prevail upon my patient not to have the chloroform: but I gave way to her earnest entreaties; I again used it—but fatally. The time occupied in its inhalation was about eight or nine minutes; quantity inhaled $10\frac{1}{2}$ drachms, half a drachm at a time, allowing her frequently to breathe the atmospheric air. She spoke to me during this period. When I found that her arm fell after being raised, I proceeded to and accomplished the operation. At this time she was not inhaling. I then, as I always do, wetted the face with a sponge, with the view of washing off any remaining chloroform from the nose and lips, when, to my surprise, I found that she had ceased to breathe, and all attempts to restore her were in vain. The friends would not permit a *post-mortem* examination. Sufficient disease, however, was manifest in the vagina and external parts to show that, had she not died under chloroform, she could not have lived many days longer. The fatal issue of the case does not lessen my confidence in chloroform. I still have the highest opinion of its value.

"The constipation appeared to be due to the diseased and enlarged uterus pressing upon the sigmoid flexure of the colon.

"When I commenced the operation, the pupil was contracted, and the conjunctiva slightly red. After death, the pupil was very dilated, and the countenance extremely pallid. The abdomen became much distended, and putrefaction seemed to commence early."

Chipping Norton.

THE RULES OF ENGLISH COMPOSITION.

[To the Editor of the Medical Times.]

SIR,—Long-continued ill health has made me more a student than a practitioner, and much of my time is occupied in reading the medical and other journals, and also the new publications, which come upon us almost in a deluge. I have been greatly struck, while pursuing my studies, with the singular and amazing fact, that few medical men, however high their position, really understand the proper construction of a sentence, and that, consequently, they often write nonsense. As an example of this, I may quote one or two paragraphs from a communication recently published in a cotemporary Journal. The case of a lad suffering from hip-joint disease is given, and it is stated, that "the history he gave was, that five months previously he had received a kick on the upper and fore part of the thigh, which caused considerable pain, and had continued more or less till I saw him." Here, from the use of the word *and*, instead of *which*, the reader is led to understand that the kick, and not the pain, had continued for five months. The treatment, however, was much more extraordinary, for "leeches were applied in abundance with *Dover's powder*, to get slight rest, which soon relieved the most urgent constitutional symptoms." This is the very first time I have ever heard of leeches being applied with *Dover's powder*, and I have yet to learn the peculiar advantages of the combination. We are, besides, left in ignorance as to the cause of the relief of the constitutional symptoms—whether it was the application of the leeches with the *Dover's powder*, or the slight rest. Such careless writing, such gross inaccuracy in composition, must surely tend to impress the non-professional educated part of the public with the belief,

that medical men are content with their professional acquirements, and grossly neglect the attainment of a requisite knowledge of their own language, forgetting that which we are taught in one of the examples of the Eton Latin Grammar.

"*Ingenuas didicisse fideliter artes
Emollit mores, nec sinit esse feros.*"

The public may, therefore, believe, that he who cannot avail himself of the rules of grammar must be a butcher (query, botcher), and not a surgeon. I am, &c.

AN INVALID STUDENT.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, Nov. 25, 1851.

J. HODGSON, Esq., F.R.S., President, in the Chair.

[We continue the debate on Dr. Robert Lee's paper on the Diagnosis and Treatment of Ovarian Disease, which unfortunately the indisposition of our reporter prevented our completing last week.]

Dr. Frederick Bird having resumed his seat amid marks of disapprobation; and it having been moved that the sitting of the Society be prolonged,

Dr. Lee, in reply, said that as it had been asserted that his analysis of 162 cases of ovariectomy in Great Britain, which was published in the last volume of the *Medico-Chirurgical Transactions* was full of errors, he would prove beyond all contradiction that the charge is wrong, and that he had bestowed much labour and pains to prevent any error being committed in its construction. The first attempt at ovariectomy in Great Britain was made by Mr. Lizars, at Edinburgh; a long incision was made through the abdominal parietes, but there was no ovarian cyst or tumour to remove, the enlargement having been produced by fat and flatulence. Several of the most eminent physicians in Edinburgh had examined the patient before the operation was begun, and they believed that an ovarian cyst or tumour did exist, and considered the attempt at extirpation was justifiable. The second case also occurred to Mr. Lizars, and in this, one ovary was removed, and the other left behind in a diseased state; the patient was, he believed, seen alive some years after by Mr. Lawrence, having a long scar along the front of the abdomen, and a great tumour within its cavity. In the third case, Mr. Lizars made an incision from sternum to pubes; but the adhesions were so extensive that they could not be destroyed without the employment of great violence. The patient, who might have lived for years, speedily perished. This was in 1825. That same year, Mr. Lizars operated again, the patient having a large vascular fibrous tumour of the uterus, which he left untouched. The woman survived the operation twenty-five years. She died last year, and when the body was examined, both ovaria were found perfectly healthy. The account of these cases in the analysis was taken from Mr. Lizars' work, and served to show the difficulty of establishing the diagnosis of ovarian cysts and tumours. The next case in the table is recorded by Dr. Gooch; and here also there was no ovarian disease. The next two cases occurred to Dr. Granville; in the first the ovarian tumour could not be removed; in the second there was a great fibrous tumour growing from the fundus uteri by a root nearly as thick as the wrist, which he tied and divided. This case, said Dr. Lee, made a very deep, lasting, and painful impression on his mind, and the operation has ever since occupied his serious attention; for he felt that the subject was one deeply involving the best interests of humanity, and the honour of English surgery. All the cases that follow in the table have been taken either from published reports, the references to which were given, or from manuscripts in his (Dr. L.'s) possession. Mr. Lane furnished him with the histories of eleven cases; in the four last, after he (Mr. Lane) had acquired so much experience, the ovarian cysts could not be removed; the operation was impracticable. Dr. Clay, the greatest ovariectomist in this country, had also furnished him with a full report of all the cases. The analysis contains 46 cases, and the supplement 5, thus communicated by Dr. Clay; he had also revised the proof of the cases. Messrs. Hargraves, Handiside, I. Brown, Paget, etc., followed the example of Dr. Clay and Mr. Lane; but Mr. Walne and Dr. F. Bird did not, on the ground that they intended publishing their cases themselves. Dr. Lee complained that Dr. F. Bird had promised to furnish him with the particulars he desired; and had afterwards declined to do so on the plea just stated. He read several notes to prove this. Dr. F. Bird gave him only a brief

memorandum respecting his cases. Dr. Lee then proceeded to comment on what Dr. Bird called exploratory incisions, but which, he (Dr. Lee) said, were uncompleted operations, and then added, that no labour or pains were spared to make his analysis correct. He admitted that there are cases called cases of ovariectomy in it, where there was no ovarian disease; but an operation had been attempted as for ovariectomy, and therefore they must be included under the same head, and have been so in all similar tables. Dr. Bird's objection was merely technical. Would not a case in which the bladder had been cut into, but no stone removed, be called a case of lithotomy? The analysis was constructed with the utmost care, and the charge made, that it is "fraught with errors," was, he said, a glaring misrepresentation, and he denounced and repudiated the accusation. What were the results of these 162 cases of ovariectomy? In 60 cases there was no ovarian cyst to remove, or the operation was begun and not completed. About one-third of these speedily sunk. Of the remaining 102, 42 perished directly by the operation, and 60 are stated to have recovered. Of the 162 cases, 61 died from the immediate effects of the operation, 60 recovered, and 42 escaped with their lives, most of whom have died since. How many of the 60 who survived are now alive, no one could say. An attempt had been made to institute a comparison between ovariectomy and the great operations of surgery, such as amputation, hernia, and the ligature of large arteries for aneurism. It is impossible to draw a parallel between them: there is no analogy between them. The great operations in surgery are required because death is threatened; if not performed in compound fracture, in aneurism, and wounded arteries, and in strangulated hernia, death is inevitable. It is quite the reverse in ovariectomy: this operation has been repeatedly performed where life was not in immediate danger, and where the patient might have lived for years if left alone or if treated by the ordinary mode. When this operation is undertaken, it is impossible in any case to tell beforehand whether it be or be not practicable. When the surgeon takes up his knife to amputate a limb, it is speedily dismembered from the body; in hernia, the sac is soon reached, and the stricture divided. In 60 out of 162 cases of ovariectomy performed in Great Britain, the operation was begun and could not be completed. The only operation analogous to ovariectomy is that of the Cæsarian section, which has this advantage over ovariectomy,—that the knife of the operator is sure to make its way into the cavity of the uterus, and the foetus has never been found adhering invincibly to the inner surface of that organ; but no one can say when he commences the operation of ovariectomy, whether it can be completed. Dr. Lee then explained, that the paper he read at the Western Medical Society was but a mere sketch, an outline of that brought forward this evening, with a view to elicit discussion, and render his then unwritten paper more full and accurate. He still thought the uterine sound a useless and mischievous weapon, the passage of which had led to the commission of gross errors in the diagnosis of uterine and ovarian diseases. He knew of many such lamentable cases. But if Dr. Bird, who says the paper is barren,—though it contains the faithful reports of 156 cases,—will really contribute any fact, even of the slightest importance, to improve the diagnosis of ovarian diseases,—something more than a set of unmeaning words,—I will be most happy to add that fact to the paper, and I have no doubt the Council will grant their permission. The same evening, as I was walking home with Dr. Bird, he informed me that he was about to perform ovariectomy on a lady in the country who had consulted me, and whom I had recommended not to submit to the operation. When Dr. Bird made this vaunting statement, the lady had actually been dead some weeks. Neither in this, nor in my former paper, have I expressed any opinion on the propriety of having recourse to the operation of ovariectomy. It is, however, well known, that I have always been opposed to it. It is right to state, that the following paragraph formed the conclusion of my paper when first presented to the Society:—"I am, however, fully aware, that other practitioners who have also carefully examined this analysis, have arrived at the conclusion, that there are some cases in which the operation is justifiable and proper. The President of this Society belongs to this number; but he is of opinion that ovariectomy should not be undertaken, in any case, until all remedies have failed, and not unless the disease is producing such injurious effects on vital organs as to endanger life, and which cannot be relieved by any other means. He is likewise of opinion, that in no case whatever should ovariectomy be performed without the full extent of its danger and the uncertainty of its practicability being clearly explained to the patient, and her deliberate assent obtained." (Cheers.)

Erratum.—In Dr. Aldis's speech, at the Medical and Chirurgical Society, reported in our last, for "Dr. Seymour," read "Dr. Chambers."

PATHOLOGICAL SOCIETY OF LONDON.

Dr. P. M. LATHAM, President, in the Chair.

Dr. Bristowe read the following report on

DR. BENGE JONES' CASE OF CYSTS IN THE KIDNEYS,

presented at the preceding meeting. "As might have been expected, microscopical examination displayed a considerable number of minute cysts. They were not uniformly scattered; so that, while some sections contained none, others were thickly studded with them. They (that is, those that were more particularly microscopic objects) were of nearly uniform size, some being as large as Malpighian bodies, but the majority somewhat, though not much smaller. They had a peculiar pellucid appearance, were round or oval in outline, admitted of somewhat easy isolation from the surrounding parts, were elastic, so that they immediately recovered from the effects of pressure, and even when injured by the needle, retained, for the most part, their original form. On examination with a quarter of an inch object-glass, they were seen to present a somewhat obscure concentric marking, which was certainly in some cases, and probably in all, due to a laminated arrangement of the walls, which were usually very thick, and in one instance at least occupied two-thirds of the diameter of the cyst. The walls of the cysts were somewhat granular, in addition to being laminated, and their contents were chiefly made up of molecules and granules of oily matter; in a few cases they were dense and dark, and had an orange tint. Acetic acid caused a slight degree of expansion and transparency in them, but no other change. Though the cysts somewhat resembled Malpighian bodies, they were for the most part easily distinguishable. They were smaller, more uniformly transparent, either when seen on the face of a section or at its margin; and, whether at the margin or isolated, they retained their natural form and appearance; whereas a Malpighian body in the above situations almost invariably becomes free of its capsule, which is either entirely lost or remains loosely attached to it as a thin, almost structureless membrane; and, again, the capsules of the cysts were thick and laminated, and their contents presented no appearance of a Malpighian tuft; so that, taking all these facts into consideration, it is quite certain they were not Malpighian bodies, at least not healthy ones. How cysts in the kidney arise, I am unprepared to say. Neither in this nor in any other I have examined, have I been able to verify the opinion of Dr. George Johnson, that they arise in the tubuli uriniferi. I have never seen a cyst continuous with a tube; and I imagine that that must be seen before this view can be considered proved. Neither did I see here, as I have done in others, any appearance which would warrant me in believing that they were fresh formations arising from cytoblasts, as is stated by Mr. Simon, Mr. Paget, and others; there was not that variety in size and appearance which would be expected in cysts having such an origin; and, lest I have conveyed the impression (in my anxiety to distinguish between them and Malpighian corpuscles) that I lean to the belief, that, in the kidney under consideration, they arose in those bodies, I may say, that that idea has nothing in its favour beyond the uniformity in size of the smallest cysts, the occasional difficulty of distinguishing one from another; and their (I believe) uniform origin in the cortical substance. With respect to the larger cysts I may remark, that their walls presented a faintly-granular and fibrous appearance; but I was unable to distinguish any epithelial lining, and the only microscopic characteristic of their contents was an appearance of molecular matter, in many places aggregated into masses. The other parts of the kidney, Malpighian bodies and tubules were healthy, so far as I could discover. One could hardly expect that so many cysts should arise in a healthy kidney; but, if it were diseased, the differences between it and a healthy gland were not sufficiently well marked for me to distinguish them."

Dr. Benge Jones exhibited, through the kindness of Dr. Beith,

TWO KIDNEYS CONTAINING SEROUS CYSTS,

from a fine, hale, hearty Greenwich pensioner, 93 years old, who died of pneumonia after a few days' illness. The organs of the body were healthy. The prostate gland was somewhat smaller than natural. He had no symptoms of kidney affection, but the condition of the urine was not observed. He had gonorrhœa eighteen months before his death. On the surface of the left kidney there was a large cyst, which contained one ounce and a quarter of yellow clear fluid. On examination with the microscope, some cells like mucous globules, but larger, full of granular matter, rarely nucleated, were seen. The fluid was slightly alkaline from volatile or fixed alkali; specific gravity, 1012.14; contained a trace of car-

bonates; with ammonia gave a slight crystalline precipitate of phosphate of ammonia and magnesia. Contained very little, if any, alkaline phosphate, very little sulphate, much albumen. From about six drachms of the fluid, no positive proof of the presence of urea could be obtained. Two drachms of the fluid did not give even microscopic evidence of uric acid. 1000 grains of fluid contained 971 of water, and 29 of solid residue, which was chiefly albumen.

Dr. Brinton inquired of Dr. Bence Jones what he thought to be the origin of the carbonate of ammonia; whether it might not arise from the decomposition of urea?

Dr. Bence Jones replied most probably, but not certainly. The quantity was so small as not to alter his view of the nature of the fluid: the alkaliescence was so slight, that the phosphate of ammonia was not precipitated until ammonia had been added.

Dr. Brinton and Dr. Bristowe were requested to make a microscopic examination of the kidneys, and to report thereon to the Society at its next meeting.

Dr. Bence Jones also exhibited some

SARCINÆ FROM THE STOMACH OF A BOY.

The patient, aged 14, was admitted into St. George's Hospital for Bright's disease with peritonitis, on the 5th of November. On the 12th, the urine being of a very high specific gravity and highly albuminous, was given to Dr. Bence Jones for examination, and sarcinæ ventriculi were found to be present in it. This led to an examination of the matter which had been vomited, and sarcinæ in much greater quantity were found therein. As another specimen of urine did not contain any sarcinæ, and that found in the bladder and kidney after death was perfectly free from them, there could be little doubt, that the specimen of urine which was first examined had been in some way mixed with vomited matter. On the 13th the patient died, and was examined by Dr. Ogle, who states, that there was œdema of the lower extremities; that both pleural cavities contained much yellow serum, more especially the left one; and on both lungs recent yellow fibrin existed. The lower lobes of both lungs were non-crepitant, tough in consistence, and sank in water. On pressure, a quantity of brown-red dirty fluid escaped. In some of the subdivisions of the pulmonary artery distributed to the lower lobes, coagula of fibrin existed. The heart (excepting distended superficial veins) was healthy. Abdominal cavity contained about two pints of milky purulent fluid. Stomach was apparently healthy, and contained a quantity of olive-brown coloured fluid and solid substance, consisting chiefly of undigested food; and in this a number of sarcinæ existed, of both clear and granular character. Excepting slight injection of the duodenum, the intestines were all healthy. The kidneys were smooth, and externally apparently healthy, but a sectional surface showed white yellowish deposit in the cortical part; and on microscopical examination, the epithelia of the cortical and pyramidal parts contained considerable fat within them, but not to any very great extent, as did also the Malpighian bodies. The extra-tubular parenchymatous part, also, was much exaggerated in quantity. Kidneys weighed 11½ oz. In the pelves of both kidneys a peculiar thick dark-yellow substance existed, consisting chiefly of fibrinous cysts and mucus; but no sarcinæ and no crystalline matter could be found.

MEDICAL SOCIETY OF LONDON.

DR. MURPHY, President, in the Chair.

[THE same cause that prevented us last week completing the report of the proceedings of the Medical and Chirurgical Society, prevailed also with regard to the London Medical. We shall make arrangements henceforth, and upon all occasions, to complete in one number the reports of society meetings.]

Dr. Snow Beck, in reply to some remarks upon his paper "On the Enlargements of the Uterus which remain after Parturition or Abortion," stated, that he had taken the uterus from the body of a woman deceased from typhus fever instead of from a woman deceased after an abortion or miscarriage, because he had not had any patient die under the latter circumstances, and that, if he had, he did not think it would have been a fair example; as it might have been argued, that all the changes which the organ would undergo had not taken place previous to the death of the patient. By selecting a preparation from the body of a female who died from an acute affection upwards of twelve months after her first and only confinement, he thought this obvious source of error would be avoided, and a fair specimen of the condition of

the uterus afforded. Much had been said about the use of opium after delivery; by many it was condemned; while others said, that it was only given to relieve the after-pains, and not to stop the subsequent contractions of the uterus. But how was this point to be arrived at in practice? He had merely thrown out the suggestion, to be confirmed, or not, by future experience; but the successful practice of some gentlemen who had always employed opium did not bear upon the question, as these affections, which it was sought to avoid, did not affect the life of the patient, but only involved much suffering and subsequent tedious disease. The use of the ergot of rye had been objected to, because, if given imprudently or before the birth of the child, it might be productive of much injury; but there was a wide difference between giving a remedy before the birth, and after the child was born, and the placenta had come away. The imprudent use of any remedial means was no argument against its judicious employment, especially when the line of demarcation was so broadly marked, as in the present case. Nor had he found the ergot exercise "the judicious and discriminating power," when administered, which had been attributed to it. It was quite true, that this medicine did not exert so certain an effect upon the muscular fibres of the uterus at the fourth or fifth months of pregnancy, as at the full period; nor had it so marked an influence at the commencement of labour as when the expulsive efforts of the organ had set in; but neither of these objections had much weight when applied to the use of the remedy directly after the completion of the parturition, at which time he felt assured its action was powerfully exerted. He (Dr. Snow Beck) had not found such good results follow the kneading of the uterus; and hence he had sought for some other means to insure the full and perfect contraction of the organ; tight bandaging and padding appeared to him objectionable. After a protracted and severe labour, to which his observations chiefly applied, the surface of the lower part of the abdomen is so tender, that the pad and bandage cause great suffering; and even when applied, it would only press the uterus into the hollow of the pelvis through which the child has just passed. He did not participate in the fear, that a small amount of the lochia would be injurious, or in the opinion that this discharge was in any respect salutary. The suppression of the lochia by disease after it had once been established, was one thing; but to insure the full contraction of the organ, and by this healthy and physiological act, to avoid any necessity for this disagreeable discharge, was quite another thing. The one might be said to be a condition of disease; the other a state of health. He had not mentioned the double touch, because he did not consider it at all requisite. By the introduction of the finger into the vagina, all the requisite information could be obtained. It might perhaps be thought, that more frequent examination of the uterine organs were instituted in the cases detailed than was requisite; and such, as a general rule, which was the case. But in testing the value of any new point in practice, he thought it would be conceded that such was admissible, but only as exceptional cases, and where no objection was made by the female. The condition of the uterus described might be called hypertrophy, when the anatomical condition of the uterus was considered; for it consisted simply of an enlargement of the muscular tissue of the organ. But it differed essentially from this state in the mode of its production, caused by the arrest of the absorption of the gravid organ in any part of its progress. Hypertrophy was then an active condition; this passive state forming the nidus for other morbid changes. The experiment of M. Boulard, of Paris, had been referred to as opposed to the opinions brought forward by him; it was very satisfactory to him, however, to know, that these researches were in exact accordance with his own, published some few years ago. M. Boulard had made a series of dissections, to which M. Cruveilhier had been witness, without having previously seen either Dr. Lee's papers or his own; and after completing his researches, he then, for the first time, read Dr. Lee's communications, to which his views were completely opposed; and he had, subsequently read his (Dr. Snow Beck's) papers, with which his own opinions (M. Boulard's) were in complete accordance. In summing up the results at which he had arrived, he re-stated the identical conclusions at which Dr. Beck had arrived, acknowledging at the same time that he "only repeated them with him." He (Dr. Beck) had been asked to give the reasons for his diagnosis between the uterine and vaginal affections. The explanation was easy, although it took much labour to find out. We must first bear in mind, that the sympathetic, as it is usually described, consists of grey, nervous fibres, and branches of spinal nerves which are distributed to the different viscera; and that through these branches of spinal nerves the pains originating in these viscera are transmitted. Now the middle and lower portion of the uterus is furnished with branches of spinal nerves from the lumbar plexus, through the medium of the hypogastric; and when this part of

the organ is attacked with disease, the pains are transmitted along these branches, and reflected along the nerves which arise from the lumbar plexus, to wit, along the nerves supplying the muscles of that part of the back, the walls of the abdomen, inside of the thighs, front of the leg to the top of the foot, whilst the upper part of the organ is supplied by spinal nerves, from the intercostal branches, through the medium of the splanchnic nerves and spermatic plexus, and any disease seated at this part cause the reflected pains to be felt along the intercostal nerves, or those which arise from the same part of the spinal cord as the nerves furnished to the fundus of the uterus. In opposition to this, however, the spinal nerves distributed to the vagina, are derived from the sacral plexus, and hence any disease of this part causes the pains to be reflected along the nerves arising from this plexus, *i. e.*, along the nerves going to the sacral region, the perineum, the posterior part of the thigh, the calves of the leg, and even to the soles of the feet, when the disease is severe.

Dr. LANKESTER, Vice-President, in the Chair.

TUBERCULOUS DISEASE IN THE LUNGS OF A MONKEY.

Dr. Lankester exhibited the lungs of a large monkey, *Cynocephalus Sphinx*, the left presenting here and there tuberculous spots, and the right being one mass of tuberculous infiltration. The microscope showed the granular character of tubercle. Dr. Lankester attributed the occurrence of tubercle in this animal to the same causes that produce it in the human subject, the monkeys being confined in a comparatively small and ill-ventilated room in the Regent's-park.

CARIES OF BONES.

Mr. Coulson mentioned, that he had lately successfully treated several cases of caries of the bone by the removal of the diseased portion; he advised that, when sufficient time had elapsed, and the parts were quiescent, the opening be enlarged, the diseased bone exposed, and freely removed by the gouge, or any other convenient instrument. Several cases in point were briefly narrated; in one the superior maxillary bone, in two the tibia, and in the fourth the metatarsal bones were the seat of the disease. In the first two cases, necrosis was combined with caries. After the operation has been performed, and all the diseased portion eradicated, the wound should be well plugged with wool, and dressed daily, until the whole cavity is filled up.

LATERAL DEPRESSION OF THE THORAX.

Mr. Richardson narrated a case of lateral depression of the thorax, leading to displacement of the heart, with dilatation and softening of its structure. The patient was an unmarried lady, 45 years of age, only seen by Mr. Richardson 24 hours before death, when she presented marked symptoms of heart disease. The deformity had existed from childhood. The chest was pointed, the abdomen large, the right side of the chest was not distorted, nor the left at its upper part; but lower on the left side, covering a space which included the 5th, 6th, and 7th ribs, a little anterior to their angles, there existed a large over-deep, cup-shaped depression, gradually shallowing anteriorly and posteriorly. The heart was elongated, flattened, and changed in position; its apex pointed directly towards the right shoulder, and its base was raised into the left infra-clavicular space. The 5th, 6th, and 7th ribs projected inwards, forming a rounded elevation, pressing upon the left side of the heart, and displacing that organ. The heart was dilated, its openings very wide, and its muscular structure softened. The lungs were healthy; the thorax very small, the spine projecting anteriorly, so that the space between it and the sternum was only four inches. The case is valuable, from the length of time life was protracted, in spite of mechanical deformity.

Dr. J. Risdon Bennett read a communication on

THE TREATMENT OF RHEUMATIC PERICARDITIS.

He observed, that whatever opinion may be entertained as to the precise nature of acute rheumatism, it has been long and generally admitted, that articular inflammation has peculiarities distinguishing it from ordinary inflammation; this conviction has very generally guided our treatment of the local affections; but when a case of acute rheumatism is complicated with local inflammation of internal organs, it has usually been the practice to treat it as if it were not in connexion with rheumatism. Dr. Bennett, however, looked on them as having a common origin with the external inflammation, and based their treatment on the same considerations which influence us in the local treatment of the arthritic complaints. If the affections of the joints be but the local manifestations of a general disease of the system, or of a blood disease, the pericarditis and pleuritis, which are so apt to supervene, should be viewed, he

thought, in the same light. It is, of course, readily granted, that the vital importance of the heart, or even the pleura, is far greater than that of the knee or elbow-joint. There is an urgent necessity for speedy relief in the one case, which does not exist in the other. We may be fully authorised in the use of means for the relief of the one, which from general considerations we should not employ in the other. Still, if the general pathological views be correct, they should undoubtedly influence us most materially in our attempts to relieve even the most urgent symptoms connected with a vital organ. And, *à fortiori*, we should not be too hasty, in the slighter forms of these internal affections, in having recourse to remedies of questionable propriety as regards the general treatment of the disease. The Profession, Dr. Bennett said, was much indebted to Dr. John Taylor for his valuable investigations on the subject of pericarditis. They have fully shown the important relation that subsists between pericarditis and other blood diseases than rheumatism, and more especially Bright's disease. Putting rheumatism out of consideration, it was, he observed, a remarkable and most important consideration, that pericarditis is a rare affection, except in connexion with some blood disease; his own observation, and, he believed, that of the Profession at large, fully confirmed this important pathological fact, which, the more it was considered, the more would it be found to be pregnant with important practical results. It had, however, been long doubted, whether the ordinary treatment of pericarditis was worthy the confidence it generally received; and with reference to a leading part of the treatment, it is no new thing with the disciples of that profound pathologist and sagacious physician, Professor Alison, to question the efficacy of mercury in overcoming pericarditis. Towards the solution of this question, Dr. Taylor has afforded us much valuable information. It must, however, still be considered *sub judice*. For the present, Dr. Bennett begged to be allowed to consider simply the subject of rheumatic pericarditis, and offered the brief cases which he read as a small contribution towards the determination of a very important practical question. He did not intend, however, to limit the consideration of the Society to the utility of mercury, but to the treatment of rheumatic pericarditis, whether by mercury, depletion, or any other means. Dr. Bennett then proceeded to give the histories of four cases of rheumatic pericarditis treated in the female ward of St. Thomas's Hospital, under his care. Lemon-juice was the constitutional remedy which had been relied on in all the cases, and with this he had for some time past treated almost all his hospital cases. The local treatment consisted principally in the application of a few leeches, counteraction, cataplasms, and an occasional sedative. In the third case, where the severity of the symptoms was much abated, some few grains of hydrarg. c. cretâ were given. All the patients did well. In conclusion, Dr. Bennett observed that he might have brought forward many other examples of the same kind of treatment, which had proved equally satisfactory. In all the four cases, the patients left the hospital either without a trace of any cardiac disease, or with merely a slight systolic bruit present during excitement, which was daily diminishing. His object had been to submit to the Society, the non-necessity, in a large proportion of cases, and in others the absolute impropriety, of attacking rheumatic pericarditis, either with large depletion, whether local or general, or with mercury so as to affect the system. He was by no means prepared to recommend the abandonment of mercury altogether; but he was quite satisfied that in many cases of acute rheumatism the system could not be brought under the full influence of mercury, without very materially increasing the danger. On the other hand, if we were satisfied with the general constitutional remedies that we were employing, if they were telling on the ordinary symptoms and on the general fever, there was every reason for trusting to such constitutional means, aided by the simplest and least possibly disturbing local means, when the internal sero-fibrous membranes became inflamed.

In the discussion that followed, Dr. Daniels, Dr. Sibson, Dr. Camps, Dr. Willshire, Dr. Routh, Dr. F. Winslow, and Dr. Bennett took part. The speakers referred chiefly to the treatment of rheumatic pericarditis, that of rheumatism generally being alluded to occasionally. They seemed unwilling to abandon the internal exhibition of mercurials pushed to such a degree as to induce ptialism; but some of them seemed to think that lemon-juice might also be used as an adjuvant. In answer to a question, Dr. Bennett stated, that the dose of lemon-juice was $\frac{1}{2}$ oz. every four hours, diluted or not at pleasure. It was very grateful to the patient, and its action was manifested by lowering the pulse, clearing the tongue, increasing the quantity of the urine, and rendering it paler and less acid.

REMOVAL OF A LARGE TUMOUR FROM THE NECK.

Mr. B. Travers related the following case, which was operated

upon by Mr. Stratham:—Mrs. M., a laundress, residing at Walworth, in her 53rd year, had had a large wen or tumour, growing from the side of the face and neck, for the last twenty years. Can give no reasonable account of its origin, other than that it was slowly and spontaneously developed. Has been the mother of a family, and always worked hard, but was not exposed to privation at any time during the existence of the disease. Mr. Sherrard Statham, of Mortimer-street, showed him (Mr. T) the case in June, and he at once advised him to remove it. He performed the operation on the 10th of June. The tumour was globular and very bulky, extending from the ear-lobe to the clavicle, being over seven inches in its greatest diameter from above downwards. The external jugular and its tributaries ran across and over it in several directions. The patient inhaled chloroform poured upon a handkerchief before the operation, and was placed completely under its influence. The proceeding then began, two incisions being made, which involved the isolation and removal of a large ellipse of skin along with the disease. The veins and several considerable arteries were divided in many places, but the operation was well and boldly done, and nothing serious occurred until towards the close, or what are sometimes called the "finishing" strokes of the knife, one of which unluckily divided an artery of such size, and so near the trunk of the external carotid artery as to compel to resort to pressure with the finger upon the parent trunk by the side of the trachea, about the middle of the neck. The sheath having been carefully opened upon a director, and the eyed-needle, armed with a single ligature, passed under the common carotid, that vessel was secured in the usual way. The patient at this time was very faint; indeed, when the heart had recovered somewhat, the bleeding began again, both in the upper and lower part of the wound, (anastomotic,) and more vessels were tied before the patient could be regarded as safe from the risk of further hæmorrhage. She lost certainly more than a quart of blood during and after the operation, and of course she remained in a very precarious condition for some days, but she eventually rallied. The ligature came away on the twenty-third day from its application, Sept. 4, 1851; eighty-six days after the operation, the wound has finally healed. There is still some remittent neuralgia in the contiguous parts, as the brow and cheek, which has been very distressing; also soreness and puffiness of the common integuments in the same region, along with chemosis of the conjunctiva on the same side, (left,) but these may now be said to have passed away, as has been noticed frequently in previous cases of the same description.

CASE OF CALCULUS.

Mr. Coulson exhibited a calculus which he had removed a fortnight before from a man sixty-three years of age. It weighed five ounces and a quarter, and the patient had not had a bad symptom. Mr. Coulson said, that he did not show the stone on account of its weight, because every now and then much heavier stones were removed from the bladder; but he wished to draw the attention of the Society to the fact, that two other members of the family had also suffered from stone. A brother of this patient had died from stone in the kidney, (Mr. Coulson showed the kidney with the calculus in it,) and a nephew, the son of the man who died with the stone in the kidney, had been operated on by Mr. Coulson for stone a few years ago. Mr. Coulson said, that it was difficult to get much information on the existence of stone in different members of the same family; and he was not surprised at it, for he believed that urinary diseases were transmissible from parent to offspring in their generic type, and not in particular forms. For instance, a parent might be the subject of calculus, and the children, if the subjects of urinary affection, might have diabetes; or, the reverse, the parent might have diabetes, and the children calculus. If this view is correct, it would account for the difficulty hitherto experienced in settling the question as to the hereditary tendency of calculous disorders. The nucleus consisted of uric acid; Mr. Coulson observed, that a calculus may have a nucleus of uric acid, covered by a deposit of urate of ammonia, oxalate of lime, phosphate of lime, or mixed phosphates; the nucleus may consist of oxalate of lime, followed by uric acid, urate of ammonia, phosphate of lime, or mixed phosphates. Other calculi have three layers: thus a nucleus of uric acid, followed by deposit of oxalate of lime and mixed phosphates, or oxalate of lime and uric acid; or a nucleus of oxalate of lime, covered by uric acid and urate of ammonia; or a nucleus of mixed phosphates, followed by phosphate of lime and mixed phosphates. Others, again, consist of four or even more layers: thus, a nucleus of uric acid, encrusted by urate of ammonia, uric acid, and urate of ammonia; or oxalate of lime, followed by uric acid, oxalate of lime, phosphate of lime, &c. The proportion of alternating calculi of two layers to the whole collection, in St. Bartholomew's, is as 1 : 2½; in Norwich, 1 : 2½; in Manchester, 2 : ¾; in Bristol, 1 : 3; in Swabia, 1 : 1½; and in Copenhagen, as 1 : 2½,—giving a general

proportion of 1 : 2½. Those of three deposits, are, in St. Bartholomew's, as 1 : 6; in Norwich, 1 : 6; in Manchester, 1 : 26½; in Copenhagen, 1 : 4½,—yielding a general average of 1 : 8½. Those of four deposits, are stated to be, in the Norwich calculi, as 1 : 26½. The deduction to be drawn from all these data is, that alternating calculi of all kinds form somewhat more than half the whole. The order in which different deposits succeed each other, in these calculi, is of considerable interest, as elucidating the successive changes in the condition of the body, corresponding with the progress of the diseases. Dr. Prout has calculated that oxalate of lime succeeds uric acid in the ratio of 1 : 15½; whereas uric acid succeeds oxalate of lime as 1 : 13 5-23rds; so that the alternation of these two substances is nearly equal. He states, that oxalate of lime follows urate of ammonia more frequently than uric acid, in the proportion of 1 : 9½; whereas urate of ammonia follows oxalate of lime in 1 : 38. Phosphates succeed uric acid in the ratio of 1 : 9½; the urate of ammonia, 1 : 12½; and oxalate of lime, 1 : 7½; whereas only three instances occur, in the museums already quoted, in which phosphates are succeeded by uric acid or lithate of ammonia; and oxalate of lime encrusts the phosphates only in the proportion of 1 : 283½. The general ratio in which phosphates succeed other deposits, in all the collections, is 1 : 4 1-15th. From these results, Dr. Prout deduces the law, that in urinary calculi a decided deposition of the mixed phosphates is not followed by other deposits.

Mr. I. B. Brown read a paper on

RUPTURE OF THE PERINÆUM AND ITS TREATMENT.

He began by observing that laceration of the perinæum in the process of parturition was certainly no uncommon accident; that it occurred during the last stage, whilst the head and shoulders of the child were making their way through the os externum; that these cases might and did take place occasionally in labour, under the conduct of most skilful accoucheurs, and therefore it might be concluded that, in some rare instances, it was unavoidable. He mentioned that at the same time, it might be stated, careful and judicious management would, in the majority of cases, obviate such results. He observed, that one of the most powerful assistants was chloroform, which so beautifully acts upon the rigid perinæum, that it relaxes it in a few minutes, and thereby prevents its rupture. There was a degree of opprobrium attached to these cases, and they had not therefore met with the attention and consideration due to accidents of so important a character. Mr. Brown described the perinæum as extending from the orifice of the vagina or margin, called the *fourchette*, to the anus; that its breadth from these two points varied in different females from an inch to an inch and a half in the quiescent state, but when put on the stretch it measured four or five inches, so extensible was its structure. He further described it as consisting of skin, fascia, and muscular fibre, the latter being composed of the constrictor vaginae, transversalis perinæi, and sphincter ani; that these all met at the centre of the perinæum, which was in fact their common insertion; it was, therefore, evident, that as they converged towards a common centre, which became divided by the laceration, they tended by their contraction to keep apart the two sides of the torn structures. He observed, that the deep fasciæ and the levator ani muscles were more deeply seated, and that the fibres of the latter doubtless assisted in separating the lacerated parts. The firmness of the perinæum depended not only on the muscles and rigidity of the skin, but more particularly on the strength of the fasciæ; these structures were all torn through when the rent extended into the rectum; also that occasional hæmorrhage took place from the rupture of branches of the pudic and hæmorrhoidal arteries. Mr. Brown then mentioned, that the importance of these cases was in proportion to the extent of the laceration; but that by far the greater number were happily only partial, and might even escape the observation of the medical attendant. The consequences were, therefore, unimportant, and but little, if any, inconvenience resulted. The wound healed more or less during convalescence, and if any alteration of the parts was observed by the patient afterwards, it was usually considered the natural result of the labour; but when, unfortunately, the laceration of the soft parts was so extensive as to run quite through the entire perinæum into the rectum, the alteration of form and the imperfection of the functions were so great, that the patient soon became sensible she had sustained some serious injury. He then described the four different forms or degrees of extent into which the ruptured perinæum might be conveniently divided. 1st. A portion of the distended perinæum may be torn to the extent of an inch from the *fourchette*; but this injury was so trifling, and became so small when the parts returned to their quiescent state, as to require no particular treatment, and was therefore quite unimportant to the

patient. 2ndly. When the perinæum was torn from the fourchette to the rectum, but not either through the sphincter ani or recto-vaginal septum; if this were noticed immediately after its occurrence, it might be easily managed, by bringing the parts together with sutures, by keeping the thighs in close approximation, and by drawing off the urine by catheter. He stated that he had seen three such cases, and they all did well under that treatment. 3rdly. When the perinæum, during its state of distension, became torn between the constrictor vaginae and sphincter ani, without lacerating either of these muscles, and the head and body of the child, if small, might, in fact, pass through the opening thus formed; but these cases were rare, and by immediately bringing the parts together by suture, the treatment would generally be successful. 4thly. When the rupture is through the constrictor vaginae, through the entire perinæum and sphincter ani, and sometimes also through the recto-vaginal septum. This last form was the one to which he wished especially to allude, and to illustrate its treatment by cases terminating successfully. He stated that the causes to which these accidents might fairly be ascribed were three in number:—1st. Laceration might be produced by a sudden and violent action of the uterus before the os externum became dilated. 2ndly. The continuance of a more moderate degree of pressure in persons of lax fibre. 3rdly. The improper and injudicious employment of instruments. There were three conditions of the soft parts which he thought should be referred to as necessarily existing in concurrence with the causes before mentioned in the production of these results. The first was an undilated state of the os externum at the time when a violent expulsive action of the uterus drove the head of the child with bursting force through it. The second was structural; there was a want of sufficient dilatibility of the os externum to allow of the passage of the head without its tearing more or less, even though the uterine contractions were not powerful. The third condition arose from the formation of the perinæum. In some women it was so deep, or rather, advanced so far forward towards the pubis, as to oppose the descent of the vertex, and itself to become distended into a bag, while the os externum remained nearly quiescent, unaffected by the propulsive efforts of the womb, which were directed against the broad surface of the perinæum, instead of towards the external orifice; in such cases either a sudden or a continuous action less forcible will often rend the part. Mr. Brown then proceeded to relate some of the deplorable consequences resulting from a laceration of the most extensive kind. He said the rectum was so much injured as to lose its retentive power, and its contents pass out involuntarily, though ultimately it might in a degree recover some control over them; the pelvic viscera were deprived of that support which the perinæum naturally afforded them; they felt as if they were suspended, dragging downwards from the hips; and a sensation of hollowness was experienced; the uterus usually descended, and even protruded when any exertion was made. The bladder was also more or less affected. The patient was unable to stand any length of time; ascending and descending a staircase gave great uneasiness; in fact, so many ills afflicted the poor sufferer, that she became deprived of all personal comfort; she could not mix in society; she was incapable of attending to her domestic duties, and, in extreme cases, life became a burden. He stated, that unfortunately the difficulties to be overcome in attempting restoration in such bad cases were neither few nor small; the situation of the wound, its nature, the structure of the parts, formed as they were of a combination of skin, cellular substance, fasciæ, and muscle, the necessity for functional action, the time which may have elapsed since the occurrence, the retraction that usually results, together with the difficulty of retaining these parts in apposition sufficiently long to become united, the irritation, inflammation, and even sloughing produced by sutures in some constitutions, the greater tendency to the formation of mucous membrane than to unite by the first intention, or by granulation, the management of the bowels and bladder during the healing process, were so many and so great obstacles in the way of success in endeavouring to restore the function of these parts by a surgical operation, that the most skilful attempts were often frustrated; many bad cases were abandoned, and the sufferer left to pass a miserable existence, with only such melioration as unaided nature could effect. He mentioned that Smellie related cases of laceration in different degrees; but all the severe cases were either left to nature or were unsuccessfully treated. Dr. Blundell, in his lectures, when speaking of lacerations in the perinæum, states a case of partial chronic rent of that part, treated successfully by a Mr. Rowley, which he said "did great credit to his surgery;" and he also remarked, that with the greatest care and nicest management these cases were seldom remedied by operation. Mr. Brown then narrated two cases of cure, to illustrate the treatment he desired to recommend. The first was that of a lady who lived some dis-

tance from London; she was 37 years of age, and the mother of seven children; she was a fine, well-proportioned woman, of good constitution and active disposition; was 23 years old when her first child was born; her labour was rather protracted and difficult; it lasted nineteen hours. During the passage of the head, the perinæum gave way, and the rent extended through the sphincter ani into the rectum; the laceration had not passed in the usual straight direction, but had either bifurcated from the fourchette, or, when it had reached the rectum, had returned upon itself, so as to isolate or separate a triangular portion from the front of the rectum and recto-vaginal septum, which was most probably lost by sloughing; the result was, that a considerable deficiency existed in the anterior part of the rectum. No attention whatever was given to this lady's case, and it would appear therefore that the medical attendant was ignorant of the occurrence of the injury; and though she has had six children since, and suffered for fourteen years the several distressing consequences, yet she remained ignorant of the nature and cause of her ailments (!) till she came to London. She was then suffering from prolapsus of the mucous membrane of the bowel, and a small polypus uteri. Besides this extensive laceration, she had very little control over the contents of the bowel at any time, and, when the slightest relaxation took place, was quite unable to retain them; any exertion would bring the uterus down to the os externum, and on one occasion, when endeavouring to ascend a hill, the womb became prolapsed, and inflammation succeeded, which required the application of leeches, with rest in bed for some days, to subdue. Mr. Brown then stated the particulars of the operation, which he performed on the 15th of August, at three p.m. The patient was put under the influence of chloroform, and placed in the position for lithotomy. The cicatrices were then pared off on each side, and the mucous membrane to the extent of an inch backwards into the vagina, and to about two inches in length from the rectum to the vagina within the labia; the edges of the bowel which were drawn back by the absence of the anterior portion of the sphincter, he also cut away, and brought the whole together by a triple suture,—i.e., by passing the suture through one labium at the posterior angle, then through the bowel, and thirdly through the opposite labium. He then passed two double sutures deep (at least an inch in depth) through both labia, and fastened them over two quills externally; then stitched the margin of the labia with small needle sutures; finally, on passing one finger down the vagina, and another up the rectum, he found there was a space not in apposition. He therefore introduced another suture through the vagina and rectum, thus making sure of every portion being in close apposition. The operation lasted one hour. After sponging the parts perfectly clean with cold water, he applied cold water dressings under a bandage, and gave his patient two grains of solid opium, and at seven o'clock one grain more. He then entered into the particular state and treatment of the patient daily up to the 5th of October, when the patient felt so nearly well as to wish to return home on the 1st of November. This lady returned to her home in the country, and gradually recovered her health and strength, so as to be enabled to ride out on horseback daily, and take walking exercise, and was, in fact, in good health and comfort, and enjoying a degree of personal happiness and ease she had not felt for years; so that the case may truly be said to be completely successful. Mr. Brown examined the patient a fortnight since, and there is no fistulous opening whatever, but a firm perinæum. He then offered some practical remarks on this case. He stated first the importance of making frequent use of the catheter, generally every five or six hours, for ten days; that great care should be taken that none of the urine escapes into the vagina, and trickles down on the united surfaces, for if it did, the result would almost certainly be sloughing of the parts, the union of which, by adhesive inflammation, is so anxiously desired. The most important practical point is keeping the bowels quite quiet, allowing no action. In this case, the bowels were kept confined for twelve days by repeated doses of opium. The third important practical point was constant personal watching and attention to the wound. He was in constant attendance on this patient for twelve successive nights. She was studiously kept on her side, her hip being on one of "Hooper's water-cushions." Mr. Brown remarked, that he did not divide the sphincter ani on the day of operation, but a few days subsequently. This he thought was wrong, and for the future he would divide it always at the time, so as to prevent any retractile power of the muscular fibres from the very outset. He quite intended to do so before attempting the operation, but was over-persuaded to the contrary, as he thought it an important point in the operation that the division should not be at the insertion of the muscle, but through the belly of the muscle, about one-third from the os coccygis. It may happen that both sides of the muscle would require division. At present one was

found sufficient. Nothing could prove the importance of this procedure more clearly than this case; for although adhesions took place anteriorly very satisfactorily, still, prior to the division of the sphincter, the posterior part seemed drawn asunder after the sutures were removed, whereas, immediately after the division the gaping parts were instantly brought in contact, and steadily kept so. The second case would, he thought, beautifully illustrate this point. This case being one of the very worst forms of these accidents, offered good grounds for attempting more frequently than hitherto a cure by surgical means. The second case adduced by Mr. Brown was of a similar kind to the first, but, occurring in a very poor woman, rendered her sufferings and privations almost unbearable and peculiarly distressing, by preventing her from following the duties of her station. Mr. Brown related this case in the words of Mr. Bullock, the house-surgeon of St. Mary's Hospital, as taken from his case-book:—The patient's name was Anne Judd, aged forty; laceration produced by the application of the vectis, extending completely through the sphincter ani. The operation was performed on the 12th November in the operating theatre of the hospital. The same means were used as in the first case; that is, confinement of the bowels by opium, and frequent use of the catheter. In this case the sphincter ani was divided before the sutures were applied. On the 3rd December, that is, three weeks after the operation, she was perfectly well, and took daily exercise about the wards. Mr. Brown observed that he allowed from the very commencement of these operations, generous diet, such as wine and meat, and believed that the success of the treatment mainly depended upon it.

In the discussion that followed Dr. Ryan doubted the frequency of rupture of the perinæum; he thought lateral laceration the most common form. It would get well of itself, if the sphincter were uninjured; if that were torn through, the operation should be performed at once, and not deferred. Dr. Murphy had never had a case of this kind in his own practice, but had seen the accident in that of others, and he attributed it to "meddlesome midwifery." In cases of rigid perinæum, he never used ergot. He would confine the operation to the very worst cases, as the patients in subsequent labours would be in danger of a fearful rupture, from the rigidity of the cicatrix. It was stated by one of the members of the Society, that he had attended nearly 4000 cases of midwifery, but never met with one instance of lacerated perinæum. Mr. Dendy had seen four or five where the orifice of the vagina was too forward. Drawing back the fourchette towards the sacrum with the finger might be of use in these cases. The long forceps, which are not so wide as the short, may also be serviceably applied. The neglect of the accoucheur was generally the cause of the rupture. A case of laceration into the rectum was related by Dr. Snow Beck, in which a cure was effected by patience, quietude, and cleanliness, the bowels being constipated by opium. Dr. Crisp thought the cure might not prove to be permanent in Mr. Brown's cases; constipation might cause the rupture to re-open. Was not ergot a frequent cause of the accident? Mr. Brown, in replying, gave a general summary of his views, which we need not repeat, as it will be found to a great degree in the abstract of his paper.

EDINBURGH MEDICO-CHIRURGICAL
SOCIETY.

HOMŒOPATHY.

A full meeting of the Edinburgh Medico-Chirurgical Society was held on the 19th November, no less than sixty four members being present. After the transaction of routine business, the following interesting circumstances occurred :

Professor Syme, in moving "That the public profession of homœopathy shall be held to disqualify for being admitted or remaining a member of the Medico-Chirurgical Society," said,—that in addressing the Society on this occasion, he considered it to be quite unnecessary to enter into a formal refutation of the principles of homœopathy, but, before proceeding further, he would exculpate himself from the charge of inconsistency brought against him by Dr. Henderson, to the effect that he had himself countenanced homœopathy in two instances. This charge appeared at the time in the various medical periodicals. Now, regarding this inconsistency as tantamount to a practical falsehood, he (Mr. Syme) took the present opportunity of exhibiting the falsities of the accusation. The cases to which Dr. Henderson alludes are two in number. The fact is, there was a young man who had been under the care of Dr. Nimmo, and who had been placed under his (Mr. Syme's) care. Finding that he had been attended by Dr. Henderson, Mr. Syme requested a meeting, not for the purpose of consultation, but to arrange for placing the medical treatment under the hands of another physician

—Dr. John Taylor—as Mr. Syme felt that he could not co-operate with Dr. Henderson. In the second case, he met Dr. Henderson, being under no pledge not to do so. This is the whole extent of his countenance of homœopathy. Mr. Syme next stated what he conceived to be the duty of every member of the Profession. As an individual, he had long refused to adopt homœopathy, because he regarded it as a mischievous folly. As a member of a licensing board, he would not refuse any candidate who complied with the regulations of the University. If such an one were base enough to disguise his real sentiments in regard to the practice of physic, the disgrace would rest with him and not with the Board. The duty of a Society like the present was, he said, clear. It was a voluntary Association for upholding sound principles of practice, and for elevating professional character. If, therefore, a member departed from the principles of the Society, and placed himself in opposition to them, he should be requested to withdraw from their body; or, if seeking admission, he should be excluded. He trusted the motion would be unanimously adopted.

[illegible]

the commencement of the world, and each had swallowed every second of their existence a decillionth of a grain, they would not yet have finished the grain. And say the homœopaths, a few of these decillionth globules of belladonna will cure scarlet fever. One remark of Mr. Syme reminded Dr. Simpson of a curious fact in the early history of homœopathy in Edinburgh, proving on the one hand how far imagination will go, on the other hand, that all homœopathic globules are alike, or rather alike inactive. Some eight years ago Dr. Simpson received a present of a box of homœopathic medicines from an old school-fellow, who had set up as a homœopathic druggist. During the time it was in Dr. Simpson's possession it was given as a plaything to his son, then a child. The boy amused himself by uncorking the bottles, emptying their contents into a general heap, and then refilling them promiscuously. The effect of this was a complete compounding of the globules of different kinds, by mixing them together. It soon happened that a professional brother calling at Dr. Simpson's, took a fancy to the box and carried it off. Many weeks after, the new proprietor of the box met Dr. Simpson, and told him he had been trying homœopathy with the contents of his box, and that he had accomplished wonderful cures. Dr. Simpson enjoyed the joke, and said nothing about the box, until, finding his friend had got deep into the homœopathic mine, and actually published a list of cases, he at length told him of the elaborate mixture the globules had undergone. This friend is Dr. Henderson!!! In conclusion, Dr. Simpson alluded to those impostors who, pretending to be homœopaths, prescribed ordinary doses in the guise of globules, and practised either way, as best suited their own pockets and the caprices of the patient. These, he argued, should be expelled from the Society.

At the conclusion of this instructive as well as important meeting, the globulists, Drs. Rutherford, Russell, and James Russell, had the good sense to anticipate expulsion by resigning their seats as members of the Society.—*Provincial Medical and Surgical Journal.*

ROYAL COLLEGE OF SURGEONS.

EXAMINATION FOR THE FELLOWSHIP.

THE Examinations for the Fellowship commenced on Tuesday week, on which occasion the following questions on Anatomy and Physiology were submitted to the senior candidates, viz. :—

1. Describe the peculiar characters of the vascular system of the brain.
2. Enumerate the contents of the abdomen, and describe their position in that cavity and their circulating apparatus.
3. Describe the relative position of the muscles, vessels, and nerves anterior to the elbow-joint, and for a hand's breadth above and below it.
4. Describe the relations of the muscles and tendons passing over and attached in the immediate neighbourhood of the hip-joint.
5. Describe the parts concerned in oblique inguinal rupture.
6. Describe the several salivary apparatus, inclusive of the pancreas.

The following questions were submitted to the junior candidates, viz. :—

1. Describe the different kinds of joints, and the intimate structure of the bone, cartilage, synovial membrane, and ligaments by which they are principally formed.
2. Describe the composition of the spinal cord, and the manner in which it is developed above to form the brain.
3. Enumerate the involuntary muscles, and describe the peculiar circumstances of structure and function distinguishing them from the voluntary muscles.
4. Describe the structure of the skin, including the perspiratory apparatus.
5. Describe the sympathetic nerve, its distribution and connexions.
6. Describe the perinæum and the parts which may be displayed within it.

DECEMBER 4, 1851.

The following questions in Pathology and Surgery were submitted to the senior candidates :—

1. Describe the probable consequences, immediate and remote, of a severe blow on the testicle, and the requisite treatment.
2. Describe the forms of venereal sores, and state the course of symptoms, secondary and tertiary, exhibited by that form of sore to which the term *syphilitic* has been specially applied: mention generally the required treatment.
3. Describe the characters of scalds, burns, and frost-bites; and generally describe the treatment of the several stages of each.

4. State the circumstances which, in a case of alleged rape on a young female child, would induce you to give a decided opinion that the crime had been committed; and point out those occasional conditions of the parts which render a decision difficult.

5. Describe the causes, symptoms, and results of phlebitis, and state the treatment it requires.

6. Describe the characters and consequences of synovial inflammation of the knee-joint, acute and chronic; also its treatment.

The following questions were submitted to the junior candidates :—

1. Describe the formation and progress of a true aneurism when not interfered with.

2. Describe the immediate and remote effects of an extraneous body which has slipped into the air-passages, and the treatment required under different circumstances.

3. Describe the effects of different wounds of the intestines, the prognosis, and reasons on which it is founded, and the treatment in each case.

4. Enumerate the different kinds of stone formed in the kidney and bladder. State which is the most serious, and why. Describe the symptoms and the treatment.

5. Point out the distinctive characters of phlegmonous, erysipelatous, diffuse cellular, membranous, and carbuncular inflammation, their results and treatment.

6. Describe the mode of union of simple and compound fracture, and the circumstances which render the latter usually of more serious consequence than the former.

MEDICAL NEWS.

UNIVERSITY OF CAMBRIDGE.—The lectures on Anatomy and Chemistry delivered in the Medical School of this University are now recognised by the Courts of Examiners of the Royal College of Surgeons and the Society of Apothecaries, so that students may pass the first winter session, agreeably to the curriculum of those bodies in Cambridge. The second and third winters must be spent in London or elsewhere. The hospital has long been recognised, and lectures are delivered on Medicine, Surgery, and other subjects. By this arrangement further inducement is offered to medical students to connect themselves with one of our Universities; for, in addition to the opportunity of acquiring a superior general education and other advantages of studying in a University, they may proceed to take a degree in medicine, or may be qualifying themselves to practise in the other branches of the Profession. Candidates for the Fellowship of the College of Surgeons who have taken the degree of Bachelor of Arts in an English University, are required to have been engaged for *five* years, instead of *six*, in the acquirement of professional knowledge, and are not required to produce any further certificate of knowledge in Greek, Latin, etc. Lectures on all the natural sciences collateral to medicine are delivered in the University; and, in the last year, an Honor Tripos for the natural sciences has been instituted, corresponding to the mathematical and classical triposes, so that the student has an opportunity of distinguishing himself in any or all of these sciences.

THE Lord Primate of Ireland, Dr. Whateley, has been elected the Chancellor of Trinity College. The office of Vice-chancellor is consequently vacant.

THE SENATUS ACADEMICUS OF THE UNIVERSITY OF EDINBURGH v. THE LORD PROVOST AND TOWN COUNCIL, PATRONS OF THE UNIVERSITY.—The question raised by this action is, whether the Town Council, as patrons, possess the power to institute the regulations under which medical degrees are to be granted by the University, or whether the Senatus Academicus, who have the duty and right of examination of the qualifications of candidates, and who confer the degrees, are not the body in whom vests the privilege of making the requisite regulations as to the course of study to be pursued by such candidates. The case arose in consequence of the Town Council having made it imperative upon the medical faculty to accept certificates of attendance at the classes of certain extramural lecturers, as qualification for the degree of M.D. The Town Council grounded their case on the right conferred by the charter, and other deeds constituting the University, on them, with respect to the administration of the affairs of the Institution. The Senatus Academicus pled the obvious equity of the matter, both as regarded their position in the University, and the fulfilment of their office as examiners and judges in the conferring of University honours. Judgment was given in favour of the Town Council. [As far as we understand this decision, it is a just one, and admits the extramural, or, to use the usual term,

extra-academical lecturers to the exercise of rights to which they are justly entitled. But if the Senatus Academicus are thus compelled to bow to the Town Council, we are afraid there are small hopes that they will be able to induce the victors in this cause to yield to them in a much more important matter, viz., the ejection of intra-academical homœopathic lecturers. The Town Council, it is understood, alone possess the power to do this, and the resolutions of the College of Physicians are rendered a dead letter by the refusal of the Town Council to act upon their spirit. The issue of this trial is not likely to make the Town Council more pliable. Edinburgh, we are afraid, will still see itself disgraced by the homœopathic vagaries of one Professor, and the "od" proceedings of another. We observe, by the way, that the homœopaths declare that Professor Goodsir was formerly in the habit of writing for their journals. We trust this is not the case. If done at all, it must have been done unthinkingly. We have little doubt that the homœopaths are making the most of some communication which the solicitations of a colleague may have formerly wrung from Mr. Goodsir.—*Ed. Med. Times.*]

NEW FELLOWS.—The following members of the College, having undergone the necessary examinations on the 2nd and 4th inst., were admitted by the Council, on the 11th inst., Fellows of the Royal College of Surgeons:—

BARKER, THOMAS HERBERT, Bedford. Diploma dated May 16, 1842.

MAY, GEORGE, jun., Reading. This gentleman was not a member.

MAYO, GEORGE, Australia. Diploma dated Jan. 2, 1829.

OSBORN, SAMUEL, Brixton. Diploma dated June 29, 1838.

STATHAM, SHERARD FREEMAN, Mortimer-street. Diploma dated April 28, 1848.

The questions submitted to the candidates will be found in another part of our journal.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 5th inst.:—

BAYNE, ALEXANDER FRASER, Reading, Berkshire.

CASSON, EDWARD, Hull.

COOKSON, JOHN DOUGLAS FRANCIS, Gloucester.

GIBSON, THOMAS, Birmingham.

LEE, JOSEPH, Guildford, Surrey.

MERCER, EDWARD, Uxbridge, Middlesex.

PALIOLOGUS, WILLIAM THOMAS, Calcutta.

TIERNEY, JOHN FRANCIS, Bengal.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 4:—

HICKS, ROBERT, Baldock, Herts.

HOWSE, ALFRED, Western General Dispensary.

OBITUARY.—On the 27th ult., at Havant, Hants, Mr. John Bannister, surgeon, aged 65, in practice many years in that town. —On the 3rd inst., at 29, New Broad-street, after a long illness, Algernon Frampton, M.D., of St. John's College, Cambridge, F.R.C.P., and many years physician to the London Hospital, in his 49th year.

THE LATE MR. W. HEWETT.—We regret to have to announce the death of Mr. William Hewett, resident surgeon to the Bradford Infirmary, in the 28th year of his age. This gentleman had lately served as house-surgeon to King's College Hospital, and had only commenced his duties at Bradford about three months since. He was suddenly cut off by an attack of erysipelas, caught in the execution of his duties. He was a young surgeon of great zeal and intelligence, and was much respected by his teachers at King's College.

MILITARY APPOINTMENTS.—64th Foot, assistant-surgeon Robert Thomas Buckle, M.D., from the Staff, to be assistant-surgeon, vice Short, deceased. Hospital-staff, acting assistant-surgeon, Stuart Moore, to be assistant-surgeon to the Forces, vice Buckle, appointed to the 64th Foot.

NAVAL APPOINTMENTS.—Surgeon John Rees, (1842,) from the *Arrogant*, steam-frigate, to the *Britannia*. Assistant-surgeons, Stephen Bowden, (1845,) James W. Elliott, (1848,) and Horace H. Smith, M.D., (1848,) to the *Britannia*. Surgeons James Taylor, (1836,) to the *Tortoise*, 12, store-ship at the Island of Ascension; John Stirling, M.D., (1845,) recently serving in the *Geyser*, to the *Fury*, steam-sloop, at Woolwich, for service on the Mediterranean station. Acting assistant-surgeon, Henry Hanson, (1851,) to the *Fury*, steam-sloop, at Woolwich.

NAVAL PROMOTIONS.—Assistant-surgeon Thomas R. Pick-

thorn, (1842,) of the Assistance; John Ward, (a) (1843,) of the *Intrepid*, and Charles Ede, (1845,) all employed in the late Arctic expedition, to be surgeons.

MEDICAL APPOINTMENTS AND VACANCIES.—The Board of Guardians of the Bethnal-green district require an in-door and a district medical officer: stipend for the house, 60*l.*; and for the district, 70*l.* per annum, exclusive of midwifery and vaccination. A house-apothecary is wanted for the Scarborough Dispensary; candidates must be duly qualified, and single; salary, 60*l.* a year, with the use of rooms, coals, and lights. The successful candidate must therefore board and clothe himself, etc., and lay by something for old age, out of 60*l.* a year. Happy dog! Dr. Richard Chambers has been elected physician to the Royal Free Hospital, in the room of Dr. Heale, resigned. Dr. Clement Hue has been appointed physician to the Dreadnought hospital ship, belonging to the Seamen's Hospital Society. The office of Assistant-surgeon to University College Hospital is vacant by the resignation of Mr. Cadge; and of Dental Surgery, by Mr. Durancé George's decease.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—John Thomas Smale, M.D., was elected a Fellow of the Society on December 9; and James Luke Esq., George Pilcher, Esq., and Christopher W. T. Robinson, Esq., were proposed as Fellows of the Society.

The next meeting of the Royal Medical and Chirurgical Society will not be held until the 13th of next month.

The Council of the Medical Society, London, have decided that in future no papers shall be read at the ordinary meetings, unless previously approved by referees.

UNIVERSITY COLLEGE HOSPITAL.—The authorities of this Institution have announced a donation to their funds to the amount of 100*l.*, from Edward Lombe, Esq., of Great Melton Hall, Yorkshire, together with a notice, that he had authorised his bankers to pay a like sum annually as his subscription to the funds. Mr. Lombe has consequently been elected a Vice-president of the hospital.

THE FELLOWS' GOLD MEDAL for the summer term of 1851, for the best observations on medical cases at the hospital, and the Longridge prize of 40*l.*, for general proficiency in medicine and surgery, have been conferred on Mr. Joseph Lister by the authorities of University College.

The next examination for the degree of M.D. at the University of St. Andrews commences on Wednesday, the 15th of May.

UNIVERSITY OF DUBLIN.—[We have just received the following Regulations of this University, which, since the date of their issue is later than that at which our "Students' Number" appeared, are worthy of attention.] *Diploma in Surgery.*—Resolved by the Provost and Senior Fellows:—That a diploma in surgery be given to such students as are matriculated in medicine, and have completed at least one year in arts, on the following conditions:—1. To complete one year in arts, it shall be necessary to have answered at least one examination, subsequent to the junior freshman year; or to have completed the junior freshman year only, by passing the Michaelmas examination of that year, and keeping one previous term, either by lectures or by examination. 2. Students who have not passed an examination in the senior freshman year will be required to attend one course of lectures in logic. Students who have not passed the junior sophister year of the undergraduate course will be required to attend one course of lectures on mechanics, with the assistant to the Professor of Natural Philosophy. 3. Students so qualified will be admitted to examination for the diploma in surgery, as soon as they shall have completed the prescribed curriculum. 4. This curriculum shall extend over a period of four years, and shall comprise attendance upon the following courses of lectures in the School of Physic in Ireland:—Anatomy and physiology, three courses; demonstrations and dissections, three courses; theory and practice of surgery, three courses; practice of medicine, one course; chemistry, one course; materia medica, one course; midwifery, one course; practical chemistry, botany, medical jurisprudence, one course each, of three months' duration. [Four of the above-named courses, together with one course of demonstrations and dissections, may be attended in any school of medicine recognised by the Board.] Also attendance for three sessions, each of nine months' duration, on the practice of any of the following hospitals, together with attendance on the clinical lectures on medicine and surgery there delivered:—1. Richmond, Whitworth, and Hardwicke hospitals; 2. Steevens' Hospital; 3. Meath Hospital; 4. Jervis-street Infirmary; 5. City of Dublin Hospital; 6. Mercer's Hospital; 7. St. Vincent's Hospital. Of the courses of lectures which are of six months' duration, not more than three can be attended during any one session. 5. Candidates for the diploma who have complied with the foregoing regulations, must pass an examination before a

court of examiners, consisting of the Regius Professor of Physic, the Professors of Anatomy, Surgery, Chemistry, Midwifery, and Botany. The examination of each candidate will be divided into two parts, one of which shall be devoted to anatomy and physiology, surgical anatomy, the theory and practice of surgery, and operative surgery; and the other to practice of medicine, midwifery, chemistry, materia medica, and toxicology. 6. Candidates for the diploma must submit their certificates and testimonials of qualification to the Regius Professor of Physic and to the Professor of Surgery, who shall sign the chart necessary to be laid before the senior lecturer and registrar, previous to the issuing of the *licet ad examinandum* to the professors. This diploma is recognised by the heads of the medical departments of the army, navy, and ordnance. The following courses of lectures and of clinical study are recommended to students intending to qualify for the public service in the above departments:—1. Ophthalmic surgery; 2. military surgery; 3. pathological anatomy; 4. comparative anatomy and natural history; 5. attendance in an hospital for the treatment of the insane.

EPIDEMIOLOGICAL SOCIETY.—At a meeting of the Society, held Dec. 1, 1851, at the house of the Royal Medical and Chirurgical Society, 53, Berners-street, Dr. Babington in the Chair, Dr. Milroy read a paper "On the Circumstances connected with the Rise and Development of the Asiatic Cholera in the Island of Jamaica." Mr. Grainger, Dr. James Bird, and Dr. Snow, took part in the discussion. In consequence of the reading of Dr. Milroy's paper, and the discussion thereon, having occupied the time of the meeting, Mr. Cox's paper, "On a Rational Mode of Treatment of Cholera," was deferred until the meeting in January.

EPIDEMIOLOGICAL SOCIETY.—On the formation of this Society, application was made by the President, Dr. Babington, to various public bodies for their assistance and co-operation. The fruit of this judicious step is now being realised. The Committee on Small-pox and Vaccination have deputed two of their members to examine the returns annually made by the medical officers appointed by the various boards of guardians according to the requirements of the Act of Parliament, passed in 1840, "to extend the practice of vaccination." Through the courtesy of the Poor-law Board, every facility for the full examination of these returns has been afforded; and we are informed by the Honorary Secretaries of the Society, that a large body of the most valuable and elucidative information has by these means been obtained by the deputation. Our readers will be enabled to judge of the importance of these official documents when we state, that they show the total number of persons vaccinated yearly by the public vaccinators in each district of the 631 Poor-law Unions in England and Wales, giving in separate columns those who are under one year and those above one year of age; and likewise distinguishing, in most instances, the successful from the unsuccessful vaccinations under and above one year. As the number of births in each union is also appended, a certain basis is afforded for determining the exact progress of vaccination in every part of England and Wales, so far as the gratuitous system is concerned. The results are now under the consideration of the gentlemen who have gone over the returns; and, although it would be premature at the present moment to state the conclusions to which they point, we may affirm, that they promise to constitute one of the most important and trustworthy contributions hitherto made in this country to the statistics of vaccination.

BRITISH MEDICAL FUND.—A large and influential meeting of the members of the Medical Profession, the friends and supporters of this Institution, was held at the Town-hall, Ipswich, on Saturday last, Dr. Baird in the chair. Among the gentlemen present were Dr. Beck, Dr. Kirkman, of Melton; Messrs. G. Bullen, Hammond, Bartlet, Sampson, G. Bullen, jun., Elliston, Edwards, Francis, Hughes, etc. The Chairman having opened the proceedings by an appropriate address on the importance and value of the undertaking and the claims which he considered it had on the support and encouragement of the Profession at large, the Secretary, from London proceeded to give a minute detail of the principles on which the Society was based, and the numerous objects and benefits it contemplated, dwelling at some length on its most important features and the favourable and encouraging support it had already met with from all parts of the country, and concluded by expressing his conviction that the Society would eventually be second to none in the kingdom. Several gentlemen having addressed the meeting, suggesting the necessity for mutual co-operation and individual exertion in promoting the objects of the undertaking, the following resolutions were moved and carried unanimously:—1st, "That this meeting considers the principles and objects of the British Medical Fund to be highly worthy of the consideration of the Profession, and strongly recommends the Society to their warmest encouragement and sup-

port." 2nd, "That the thanks of this meeting are due to Mr. Daniell, of Newport Pagnell, and the Directors of the British Medical Fund, for their indefatigable exertions in behalf of the Institution." Mr. Bullen having been requested to convey to the Mayor the thanks of the meeting for the use of the Town Hall on this occasion, it was proposed by the Secretary, and resolved unanimously:—"That the best thanks of this meeting and of the Directors of the British Medical Fund are due to Dr. Baird, for his kindness in presiding, and for his courteous and gentlemanly conduct in the chair."

PREISSNITZ, the originator of the system of hydropathy, died lately from water on the chest. With a certain degree of consistency he refused medical assistance to the last day of his life. He then took a little medicine on urgent solicitation; but, as he did so, he said—"It is of no use."

JAMAICA.—This unhappy island is again the prey of epidemic disease. Cholera and small-pox have broken out with virulence. Two fatal cases of cholera have occurred in Trelawny, one at Westonfabel estate, and the other at York estate. It has shown itself with great violence in the Maroon town district, in the parish of St. James. A whole family, named Waite, consisting of the father, mother, son, and daughter, have been cut off. The three last were all found dead in the house in one day. Small-pox is extending throughout the parish of Trelawny, and the poor people are dying daily from the want of proper attendance. It is said, that persons afflicted with this loathsome malady are met with walking about the highways near their homes,—a fact in itself sufficient greatly to aid the spread of the disease. The cholera has increased in St. James', more particularly in the country districts. The medical men consider it to present a very malignant form, particularly in Montego Bay, where many cases are under treatment.

ON FETID EXHALATION FROM THE FEET.—Sir H. Marsh, Bart., alluding to the above distressing affliction, mentions the case of a gentleman who was compelled to lead the life of a hermit, excluded from society by the exceedingly offensive smell which issued from the spaces between the toes. It was disagreeably perceptible the moment he entered a room; no amount of cleanliness or repeated ablutions, dissipated the fetid odour. Deodorizing applications of various kinds had been tried, and with only slight and temporary benefit. The treatment from which, as long as he remained under the writer's observation, he appeared to derive advantage, was a daily tepid bath, a diet exclusively vegetable and farinaceous, and the frequent application between the toes of the following ointment:—Mercurial ointment, one ounce; creosote one drachm; muriate of morphine, half a drachm. Sir H. Marsh states, that he returned to thank him for the good he had derived from the treatment, but whether the cure was perfect and permanent, he cannot affirm.—*Dublin Medical Press*.

ROYAL POLYTECHNIC INSTITUTION.—After a short recess, this valuable establishment has again opened its doors to the public. On Monday, Mr. J. H. Pepper introduced his lecture on Agricultural Chemistry, in which he described a visit recently made by him to Mr. Mechi's farm at Tiptree Hall, of which a model is exhibited. Dr. Bachhoffner resumes his interesting lectures on the Philosophy of Scientific Recreation, in which science is rescued from the hands of conjurors. We noticed several prize models and works of art from the Great Exhibition. Although not coming within the domain of medical science, we can yet earnestly recommend this place of recreation for its instructive and improving tendencies.

MORTALITY NOTABILIA.—Week ending Dec. 6.—The state of the public health, as indicated by a constant increase of mortality, is far from being favourable at the present time. During four weeks of November the deaths registered in the London districts increased in the following progression: 989, 1022, 1132, 1279; and in the week ending last Saturday they rose to 1316. During the same five weeks the deaths among old persons of 60 years and upwards have numbered successively 202, 207, 242, 277, and 305.

Continued Increase of Mortality.—It will be seen, from a review of ten previous years, (1841-50,) that in the week of 1847 corresponding to last week, influenza raised the deaths to 2454; but, with the exception of that year, they did not in any corresponding week exceed 1146, and were generally much less. The average of the ten weeks was 1123, and, if corrected for increase of population, 1235, compared with which the deaths of last week exhibit an excess of 81. It is hardly necessary to remark, that if the unusual mortality of 1847 were excluded from the comparison, the result would be still more unfavourable for last week.

Age.—Last week the mortality of young persons was 14 per

cent., of persons in middle life 26 per cent., and those of advanced age 35 per cent., above the average. The increase in the present return above that of the previous week has been derived almost exclusively from the aged part of the population.

Diseases of the Respiratory Organs.—From an examination of the Table of Fatal Causes, it will be perceived that affections of the respiratory organs greatly preponderate on the list. The increase of cases enumerated in this class is shown in the numbers of the last five weeks, viz., 148, 168, 256, 298, and 383. These 333 deaths of last week are distributed under particular heads in the following manner; laryngitis 2, bronchitis 156, pleurisy 4, pneumonia 133, asthma 30, others of the same class not designated, 8. In the corresponding weeks of the previous three years neither bronchitis nor pneumonia exceeded 88, and the whole class scarcely numbered more than 200, or were about 130 less than in last week.

Phthisis or consumption also exhibits an increase, the numbers during the four weeks of November having been 125, 123, 135, and 161, and last week the fatal cases of this disease rose to 180. In the ten weeks corresponding to last, of 1841-50, the deaths by phthisis ranged from 96 to 136, and when influenza was epidemic, to 198.

Zymotic.—Last week the mortality attributed to diseases of the zymotic or epidemic class was nearly of the same amount as in the previous return, namely, 249 deaths. Small-pox carried off 24 children and 3 adults, measles 17 children, scarlatina 43, hooping-cough 31, croup 6, thrush 2, diarrhoea 26 persons, dysentery 2, cholera 1, influenza 7, purpura 3, ague 1, remittent and infantile fever 4, typhus 61, rheumatic fever 3, puerperal fever 5 (besides 5 other cases of women dying after childbirth,) erysipelas 7, and syphilis 1 child and 2 adults. It appears that fever has increased to a small extent on the preceding week.

Nuisances.—In South Chelsea, at 16, Wink's-buildings, on 3rd December, the son of a labourer, aged 10 years, died of "typhus (17 days)." On the medical certificate it is observed, that "the buildings in which this lad died are most pestiferous, the houses most unwholesome. It has always been the haunt of fever, and, from this point as a centre, it has often spread with great virulence. The disease has just appeared among other inhabitants of the place."

The Small-pox and Fever Hospitals.—In the West sub-district of Islington 39 deaths were registered in the week; of these 2 occurred in the Small-pox Hospital on the 24th November and 6th December; 5 in the London Fever Hospital on the 26th and 30th November and 2nd and 4th December; and 2 in the Workhouse on 30th November and 1st December. Mr. Watts, the registrar, adds, that "the number is greater than usual, and 10 were from continued fever, typhoid fever, and scarlatina. There have been many admissions to the Fever Hospital. As regards both this and the Small-pox Hospital, application for admission, unless by a parish order or through a governor, should first be made to the resident surgeon."

Small-pox and Vaccination.—In the sub-district of St. Paul, Deptford, 5 deaths from small-pox were registered in the week, and in all the cases it is stated that vaccination had not been performed. Two occurred at 4, Black-horse-fields, in the family of a labourer, whose sons, aged 9 months and 10 years, died of the disease after 9 days' illness. At 7, Eagle-street, Red Lion-square, on 27th November, the son of a lath-render, aged 3 years, died of "small-pox (3 weeks), not vaccinated." Mr. Goodhugh, the Registrar, adds that "the reason assigned by the mother of the child for not having it vaccinated is, that in the opinion of the medical attendant it was in too weak a state of health. This is the third case of small-pox that has occurred in this house within the last six weeks. Several children have since been successfully vaccinated; and although 18 children were living in this house at the same time, no other case of small-pox has occurred. The disease was brought into the house by a servant girl, who had been vaccinated, and in whom it appeared under favourable conditions."

Miscellaneous.—The death of a girl, aged 9 years, in Thomas-street, Lambeth, is ascribed to "fright; cerebral disorder (14 days)." Mr. Daws states, that "the fright was caused on the 5th November by a cracker tied to the street door, which deceased went to open. She died on 25th November. The circumstances did not appear to the coroner to require an inquest." A woman, aged 57 years, died from "long-continued habits of intemperance." A man, who had been a servant, died on 5th December in the Marylebone Workhouse of "destitution." He had come from Carlisle-place. A coroner's inquest was expected to be held. Three children died in various districts from suffocation in bed.

The mean temperature of the week was 38° 8', or about 3 degrees below the average.

DEATHS in the Metropolis for the week ending Saturday, December 6, 1851.

CAUSES OF DEATH.	Dec. 6.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	583	427	305	1316	11229
SPECIFIED CAUSES	581	425	304	1311	11164
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	181	51	17	249	2455
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	1	23	21	45	490
3. Tubercular Diseases	53	150	12	215	1708
4. Diseases of the Brain, Spinal Mar- row, Nerves, and Senses, ...	71	18	40	129	1240
5. Diseases of the Heart and Blood- vessels	1	11	23	40	406
6. Diseases of the Lungs, and of the other Organs of Respiration ...	167	74	92	333	2558
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	19	33	10	62	619
8. Diseases of the Kidneys, &c. ...	...	5	3	8	102
9. Childbirth, Diseases of the Uterus ...	...	7	5	10	96
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	1	1	3	86
11. Diseases of the Skin, Cellular Tis- sue, &c.	1	...	...	1	14
12. Malformations	3	...	...	3	20
13. Premature Birth and Debility ...	12	3	...	25	233
14. Atrophy	75	2	...	27	137
15. Age ... ..	...	...	76	76	664
16. Sudden	1	...	1	2	94
17. Violence, Privation, Cold, and In- temperance	21	12	5	38	247
Causes not Specified	2	1	1	4	55

TO CORRESPONDENTS.

MR. MAPLESON.

[To the Editor of the Medical Times.]

SIR,—Having given a satisfactory refutation to the charge against me contained in your Journal of the 29th, I anticipated fully that these unprovoked hostilities were at an end. I am disappointed, however, and find one equally unfounded and equally malicious, contained in your Journal of this week. To this latter charge, of my having borrowed a model for artificial palate of Mr. Saunders, and used it without acknowledgment, I give the most unequivocal denial. I never spoke to Mr. Saunders, or communicated with him on the subject of any one of my cases at any time; nor, indeed, did I ever know that he was aware of my treating any until after I had sent a report of the successful issue of a case to the editor of a medical journal. So much for this charge. But now, Sir, let me add my great regret, that unfounded charges of this kind should be thus admitted into your pages against one who is quietly, and without presumption, usefully and honourably occupied in his practice, charges which could only have been dictated by some paltry jealousy, and are surely unworthy of the attention of the Editor of the "Medical Times" or the Profession. I am, &c.

12, New Burlington-street.

JOHN MAPLESON.

[The following letter from Mr. J. Saunders renders comment on the above unnecessary, except to state, as the reader is now aware, that we had undoubted authority for what we said respecting Mr. Mapleson's case. As to "unprovoked hostilities," "malicious" charges, and "paltry jealousy," we would merely observe, that in the conduct of this Journal we acknowledge neither friend nor foe. We owe a straightforward duty to the Profession, and that we shall continue to perform, as heretofore, uninfluenced by smiles, and undeterred by frowns.

[To the Editor of the Medical Times.]

SIR,—With a view to prevent further equivocation, will you permit me to reply to the queries with which you conclude your strictures on Mr. Mapleson, in the "Medical Times" of this week. It is matter of notoriety, that the late Mr. Nasmyth and my brother were both for some years engaged in improving the mechanical treatment of congenital cleft palate. Since the former gentleman's decease, however, or rather since he was laid aside from practice, my brother has pursued the subject, and has introduced such further improvements as made it necessary to remodel the palates which were previously in use. If these improvements have not been made public, it has been from an anxiety not to commit an immature work to the Press, and not from any desire to keep back anything from the Profession. When, therefore, Mr. Mapleson came to me to request that I would make him a palate, I sought on his behalf, and with his knowledge, such hints in the treatment of the case from my brother as I knew him to be both so well qualified and so willing to give; and this he not only did, but lent the model of such an apparatus as was best suited for the case, and from which Mr. Mapleson's palate was constructed. Let me add, in conclusion, that I am happy to be able to declare, that this is the solitary instance in which my brother's liberality has not met with courteous acknowledgment.

18, Argyll-street.

I am, &c.

JOSIAH SAUNDERS.

[To the Editor of the Medical Times.]

SIR,—Pray give me space for a few words in relation to the burst cholera bubble. In regard to the question of the utility of, or the dependence to be placed upon, the microscope, I may merely remark, that although this instrument was the medium of the origination of the cholera bubble, it was also that which caused it to burst, so that no fault can be found with the instrument, but with those who handled it. Permit me to state, however, that it was Mr. Quekett's note which gave importance to the statements of the microscopists, and which indirectly gave all the support to their theory. I

do not hesitate to state my belief, that if this note had not been published, the theory would not have been seriously entertained. In regard to Mr. Busk and the Uredo, it is a singular fact, that this gentleman has received the credit of having disproved the fungous origin of cholera; whereas, all that he really did was to commit as serious a mistake as Mr. Quekett, again showing the extreme care required in investigations with this difficultly-handled instrument.

Allow me further to state, that the credit of this very instrument is again in danger, and from the same cause, viz., the ignorance of those who are handling it. I allude to its application to the investigation of small-pox, by Mr. Dendy and Mr. Grove. Of the skill of the former gentleman in the use of this instrument, we have not been allowed to judge; the thorough ignorance of the latter in its use has been satisfactorily displayed in his absurd remarks upon the growth of the cholera fungi in the urine; so that, unless Mr. Quekett, or some one else who has been fortunate enough to obtain a name, comes forward again, the lucubrations of these gentlemen will certainly not be entertained. Allow me to suggest to Mr. Dendy and his fellow-labourer a method of freeing themselves from some serious sources of fallacy. The crusts of the variolous pustules are necessarily exposed to the air for fewer or more days, according to the lapse of time succeeding their formation. Therefore, foreign bodies of all kinds may adhere and become incorporated with them, thus apparently forming proper constituents of them. But let some of the fluid from various pustules, at a proper stage for inoculation, be examined with the microscope, adding acetic acid to reveal the nature of any apparent mucus or pus-corpuscles, and then see if the fungi exist. Without these precautions no judgment ought to be formed. Fungi (apparently not differing from those described by Mr. Dendy) have been found in tuberculous cavities of the lungs, ulcers on the legs, pustules on the head, &c.; nay, Mr. Ross showed years ago, that they may be found on the surface of slides of glass laid aside, so that great care is required in deciding upon their connexion with variola, even supposing they should be found in the manner I have described.

I am, &c.

ONE WHO PRESSED UPON THE AIR IN THE CHOLERA BUBBLE.

[Our Correspondent is in error on several points in his letter, with relation to the fungoid origin of cholera, although several of his remarks are pertinent and valuable. All the errors are certainly dependent, not on the instrument, but on the interpretation of the objects viewed. He surely cannot have read our recent articles on the microscope, or he would have seen that Mr. Quekett committed no such serious error as our Correspondent attributes to him. If he will take the trouble to refer to the original letter, in the Journal for 1848, he will find that Mr. Quekett simply states that the specimens submitted to him for examination were probably different stages of development of the same body, and that they appeared to be of a fungoid nature. Now we have no evidence before us that the bodies examined by Mr. Quekett were not really of a fungoid nature. The specimens are still preserved in the Museum of the College of Surgeons, and we shall take an early opportunity, on his invitation, of examining them for ourselves. The same observations apply to the remarks on Mr. Busk's Uredo. Let it be granted that a mistake was made by both these gentlemen; still we cannot understand how it can be designated a serious mistake, especially as the knowledge of the minute fungi is confined to a very few naturalists. A long and intimate acquaintance with Mr. Quekett and his microscopic researches, enables us to state, that there are not more than two or three Englishmen as conversant as himself with the minute structure of animals and plants.

The study of the minute fungi is one of extraordinary difficulty. The higher powers of the microscope have scarcely been applied as yet to a tithe of them, and years must elapse before a knowledge of their development will be obtained.]

[To the Editor of the Medical Times.]

SIR,—Doctor Abraham Brigham, in his work on the "Influence of Mental Excitement," somewhere says, that "the brain by its action modifies thought;" and such, I believe, is the doctrine of phrenologists generally. Tell me, Sir, how can this be? When, for instance, I think that two and two make four; when I think that Homer or any blind horse in the streets of London, on its way to the knacker's, could see as far into a millstone as a mesmerist; when I think that Miss Martineau, but for her Master, might yet be a good girl, in spite of her ravings about "Development;" when I think, too, that the writings, sayings, and doings of homœopaths, when duly analysed—(I would, Sir, that you would gird yourself for the task!)—will be found to contain as much precious truth as there was found to be precious metal in the golden thigh of Pythagorus: when I think thus, and persist in thinking so, tell me, in what manner or measure "the brain by its action" modifies these my thoughts? Have the phrenologists been permitted to thrust their heads, such as they are, further behind the curtain than their neighbours? If the majority of them be no better observers than some whose writings have, at various times, fallen in my way, in place of fancying they had thrust their heads behind the curtain at all, they would be more candid had they told us that, in mock imitation of the surgeon when sounding, they had only tried to thrust their umbrellas.

I am, &c.

R.

[To the Editor of the Medical Times.]

[SIR,—I was very much pleased with the statistics which Mr. Crompton supplied in his communication to your excellent pages last week in refutation of the statements of Mr. Hodgson. There was one deficiency, however, the more especially suggested by the latter part of the letter, namely, the want of all reference to the sources of these statistics. They will be complete as far as Mr. Crompton's surgery is concerned, when that gentleman has answered the following questions:—First. Were these statistics furnished from kept hospital records? Or, secondly. Were they from Mr. Crompton's kept private records? Or, thirdly. Were they the result of Mr. Crompton's reminiscences, without reference to any such notes.

I am, &c.

VERITAS.

A London Surgeon.—Mr. Syme's review of Mr. Bransby Cooper's "Lectures on Surgery" has not escaped our notice. It will not escape our comments.

Mr. Milton's paper, on "A New Mode of Treating Gonorrhœa," shall have early consideration.

G. R. Norvick.—We understand that a second edition of Royle's "Materia Medica" is in preparation; and that the last part of Dr. Pereira's work will soon be published.

Vaccination Committee of the Epidemiological Society.—We have already published the queries on this subject addressed to the Profession by the Epidemiological Society, and have not space to repeat them. Any gentleman wishing to receive them, may address a note to Dr. McWilliam, Trinity-square; or to Mr. Tucker, Berners-street, the Honorary Secretaries, by whom they will be immediately forwarded.

A Subscriber in Scotland.—An action may undoubtedly be held against a Procurator-Fiscal for undue harshness in the exercise of his office; but this, under the circumstances, we cannot recommend. It is not improbable that an ignorant jury might think a temporary detention in one's own house to have been warrantable.

An Army Assistant-Surgeon.—We think it right that a "Regius Professorship of Military Surgery" should be founded; and further, that candidates for Army medical appointments should be compelled to attend the Lectures before joining their regiments. Chatham would be the proper seat for the chair. But as for inflicting such a course upon lecture-ridden and unpassed students, the authorities might as well insist upon another dose of oral instruction in the guise of a "Professorship of Railway Surgery." The two propositions are equally strange, and would be received with like expression of ridicule.

"Shut, shut the door, good John, fatigued, I said;

Tie up the knocker—say I'm sick, I'm dead."

In the present state of railroad management, the latter chair, perhaps, would be of more public utility than the former.

Barometer.—*Mutato nomine de te fabula narratur.* Our Correspondent evidently belongs to the numerous fraternity of the *Menenii—facundia in gente meneni*. He has given us a laugh, as "asses" generally do; and, in return, we have immortalised his stolidity by presenting his sketch to the album of Mr. Stone, of the College of Surgeons. Our Correspondent will find it under the division "Notabilia Stultorum."

M.—If "M." will examine the Indices of both Journals, he will probably find the paper on Death from the Use of Antacids.

The Registrar of the King and Queen's College of Physicians, Ireland.—We are obliged by the kindness and courtesy of our Correspondent; but he will see, by reference to our Journal for Nov. 22, that the subject was therein fully dealt with.

Tyro.—The best advice we can give you is, to think much and say little.

J. B.—The law certainly would not be able to touch the man who acted in the way J. B. mentions; at the same time, our opinion is, that no man who has not had a Medical education, and proved to competent authorities that he has profited by his opportunities, ought to prescribe at home or abroad.

Mr. H. W. Sharpin, Bedford.—A house surgeon cannot demand a fee for evidence given at Inquests held on persons who have died in an infirmary; but if a qualified man, he can, for evidence given with reference to those brought dead into the Institution.

Mr. J. Jones, of Llanfair.—We have not yet received the new edition of Kirke's Physiology; but considering the character of the Author and the progress of the science, we have no doubt it will contain much new matter. A notice of it will appear in our Journal as soon as we receive it.

A Constant Subscriber, Hampshire.—When a vacancy occurs, D may apply for a part of the Union, or even for the whole of it, without any breach of professional etiquette. If D desires to share the appointment before a vacancy is declared, he must apply to A and B.

COMMUNICATIONS have been received from—

MR. CHAPMAN, of Lower Seymour-street; MR. F. A. BULLEY, of Reading; DR. GREEN, of Great Marlborough-street; MR. ROBERT HARRISON, of Dublin; MR. J. JONES, of Llanfair, Montgomeryshire; MR. T. LAYCOCK, of York; MR. G. HARDAY, of Daventry; DR. PATTERSON, of Lynn; BAROMETER; T. B.; MR. SLATTER; MR. FOOTE, of Tavistock-street; THE REGISTRAR OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS, IRELAND; DR. FOLEY, of Kilrush; MR. BEALE, of King's College; MR. E. W. LOWE, of Congleton; MR. MAPLESON, of New Burlington-street; DR. RANKING, of Norwich; DR. BELLINGHAM, of Dublin; DR. BASCOMBE, of Wyke-house, Brentford; DR. TODD, of King's College, and Spring-gardens; MR. SHARPIN, of the Bedford Infirmary; DR. ALDIS, of Chester, terrace; DR. SEATON, of Sloane-street; MR. McWHINNIE, of New Bridge-street; PROFESSOR SIR GEORGE BALLINGALL, of Edinburgh; DR. AYRES, of Upper Portland-place, Wandsworth-road; MR. JOSIAH SAUNDERS, of Argyll-street; DR. J. B. THOMPSON, of Suffolk-street, Pall-Mall; THE COUNCIL OF THE PHARMACEUTICAL SOCIETY; MR. PAVY, of Guy's Hospital; MR. NICHOLS, of the Norfolk and Norwich Hospital; SECRETARY OF THE BRITISH MEDICAL FUND; MR. LAWRENCE, of University College; G. R. NORVICK; MR. J. B. BROWN, of Oxford-street, Hyde-park; DR. BURNETT, of Alton; A CONSTANT SUBSCRIBER.

ORIGINAL LECTURES.

LECTURES ON PUBLIC HEALTH.

ADDRESSED TO THE STUDENTS OF THE
THEOLOGICAL DEPARTMENT OF
KING'S COLLEGE.

By WILLIAM A. GUY, M.B. Cantab.,

Dean of the Medical Department of King's College, Professor of Forensic Medicine, and Physician to King's College Hospital, &c.

CONTENTS.—The Cholera continued.—Connexion of the Disease with Defective Sanitary Arrangements.—Extracts from the Reports of the Local Registrars, in London and in the Provinces.—Coincidence of Fever and Cholera.—The Cholera conveyed from place to place by Mendicants.—An example in point.—Mortality from Cholera in the Rural Districts.—The Ravages of Cholera among the Heads of Families.—In this respect it resembles Typhus Fever and Consumption.—The alleged fact, that these Diseases do not Diminish the Population, explained.—History of the Cholera at Noss Mayo.—Visitations of the Clergy.—The Second Epidemic of Cholera more Fatal than the First.—An Argument in favour of Preventive Measures.—The Cholera and the Plague Compared.—The greater fatality of the Plague.—Presumption in favour of the efficacy of Sanitary Measures.—Conclusion.

I have now illustrated the baneful influence, in promoting the spread of cholera, of defective drainage, neglected sewerage, the use of polluted water, and overcrowding. I will add a few additional illustrations, chiefly from the reports of the Registrars to the Registrar-General, of the fatal effects which have attended a combination of several of these causes, as they are found to be associated in the lowest and worst districts both in town and country. The Registrar of Shoreditch, says, that the greater proportion of cases of cholera have occurred "in the narrow streets, courts, and alleys, with which the district abounds, and which, for the most part, are very badly drained and ill-ventilated." Speaking of the Trinity sub-district of Newington, in which there were 308 deaths from cholera, and 30 from diarrhoea, the Registrar says, "The most important local causes, I believe to be the very defective drainage, and the over populated and ill-ventilated habitations of the poorer class." From Lambeth, again, we learn that Spring-place, and the small streets adjoining, near the Wandsworth-road, which suffered very severely, are thickly populated and badly drained. Several fatal cases of cholera occurred in Little Gower-place, close to University College; and, accordingly, the place is described as ill-ventilated; the air being "shut out at both ends," and the house-surgeon of the hospital has been tempted to report the place to the Board of Health as being in "a filthy condition," and a source of supply of numerous fever cases.

The reports from the rural districts are to the same effect. From Mortlake, Surrey, we learn that twenty cases and upwards of Asiatic cholera "have arisen principally from defective drainage, deficient ventilation, over crowded habitations, and intemperance," and that "the drainage is bad." From Gravesend, the report states that "cholera has prevailed in the same and similar localities as those that were severely visited with fever in the September quarter of last year," (1848) and that there "are no available common sewers," but that "the whole of the surface and underground drainage falls into rudely-constructed cesspools." At Edmonton, the pestilence broke out in a row of eight filthy houses, to which there are no back yards; there were eleven fatal cases. Three cases of Cholera at St. Albans are reported to have occurred in houses with an open cesspool close to the back doors. The cholera prevailed to a very alarming extent in the town of Great Marlow, in Buckinghamshire, but "the disease was confined to the poor and overcrowded, ill-drained, and ill-ventilated part of the town." One of the Registrars of Norwich reports, that of fourteen cases of Asiatic cholera, ten occurred in a small yard, underneath some of the houses of which runs a most abominable sewer. One of the Registrars of Sunderland, after reporting twenty-nine fatal cases of cholera in his district in the last quarter of 1848, says:—"There is a great deficiency of light, air, and water. Many passages and staircases are quite dark, and windows are built up to escape the tax." The Registrar of St. Paul's district, Bristol, says, "The twenty-five cases of cholera occurred

within ten days, and were confined to an area of a few hundred yards, consisting mostly of three densely crowded courts, the houses in which were found to be ill-ventilated, almost without drainage, and abounding in filthy accumulations." In St. George's district, Clifton, eighteen fatal cases of cholera occurred in eleven houses, in little more than a month. Most of the houses are described as being "badly ventilated," and some as having "neither door nor window in the back." In the district of Charles the Martyr, Plymouth, "the majority of the sufferers" are stated to be "living in close, ill-ventilated apartments, herded together in a manner almost incredible."

In one or two of the instances which I have now laid before you, it is distinctly recorded that these *cholera districts* were also *fever districts*, and you cannot fail to have recognised in all of them the self-same conditions of squalid wretchedness which I pointed out to you in a former lecture as so conducive to the prevalence of fever. In order to render the analogy between the two diseases, as far at least as the predisposing causes are concerned, complete, it is only necessary that I should be able to exhibit the cholera to you in the act of being carried about from place to place. One fact of this kind I am able to adduce from the report of the Registrar of Market Drayton. "The deaths," he says, "would have been considerably below the average of previous corresponding quarters, had not the cholera (by which seven persons have died) unfortunately been introduced into the Union workhouse by an itinerant mendicant, said to have come from Wolverhampton, who was picked up in the streets labouring under the disease." How much obliged ought not the inhabitants of Market Drayton to be to the so-called benevolent persons, who had subscribed their pence in streets, highways, and doorways, to set up this itinerant mendicant in business as a Hawker of Pestilence. One good, however, was thus conferred upon the inhabitants of Market Drayton. The workhouse, which had already been nearly condemned to destruction on account of the cost it entailed upon the parish as a centre and source of fever, was at last doomed to be destroyed. So that here, as in some other places, the cholera proved a more authoritative teacher than typhus fever, setting its own seal to doctrines which the fever had been patiently, but almost uselessly, preaching for many a long year, and at last bringing suddenly about the very reforms which a wise and truly Christian people would not have waited for a new and strange pestilence to inaugurate.

Although I have adduced several instances of a very high mortality from cholera in certain parts of London, and in certain small districts in country towns, I have, probably, given you but a faint idea of the awful ravages of the pestilence in some of our rural villages. At Noss Mayo, a village on the coast of Devonshire, the deaths from cholera amounted to 49 in a population of 400, or rather less than 1 in 8. At Wreckington, in the parish of Gateshead, four miles from Newcastle, where the cholera broke out on the 9th of September, 1849, 120 deaths took place in a population of 1000, of which number no less than 19 occurred in a lunatic asylum containing 40 inmates. This gives the high ratio of 1 death in about 8 inhabitants. About the same rate of mortality occurred in the little fishing town of Kingsand, in Cornwall, the deaths from cholera being 93 in a population of 719, or about 2 deaths in every 17 inhabitants. Instances of still higher mortality were recorded; but there is, I believe, no instance to be compared to the following, for which I am indebted to the Special Correspondent of the *Morning Chronicle*. He says:—"Hearing at Aylesbury of a village named Gibraltar, about five miles distant, on which it (the cholera) fell with terrible severity, I proceeded to the spot, to ascertain, if possible, the cause of a visitation so peculiar in its malignity. The situation of the village is suggestive of health, being about half-way between Aylesbury and Thame, on an elevated ridge, looking upon the Chilterns to the south-east. The first thing I inquired into was the state of the drainage, but was told by one of the villagers, that there was but little water to draw off. 'There is not a pond in the neighbourhood,' said he, 'and sometimes for weeks we are very ill off for water.' The village consists of a very few houses of an inferior description, and its whole population did not exceed 56 previous to the visitation of the cholera. 'How many died here?' I inquired. 'Nineteen,' replied an old woman to whom the question was put. 19 out of a population of 56! or 1 in every 3! 'I helped to lay out 5 in one day,' said a

woman about 30, who herself lost her husband by the scourge. The population was thus decimated in a day; 16 died the first week, and 3 the second. It then disappeared. One family, consisting of a man and his wife, and six children, entirely disappeared, with the exception of one child. The worst feature in this case is, that the mortality was chiefly among the heads of families. Thirty-seven of the population have been spared, but eleven of them are orphan children. They were almost all sent to the Union, but 'after having been there a week, and being well cleaned,' they were taken out again by their relatives, who are now eking out their subsistence by the proceeds of the childrens' labour in the fields. During the height of the disease the surviving children were kept in a tent some distance from the village." The fact here alluded to, of the great mortality of the cholera among the heads of families, and the great number of children, who, but for the circumstance of their labour being in request, would have been consigned to the workhouse, will remind you of the instance I adduced in a former lecture of the ravages committed by the gaol-fever among the adult rural population of a village to which it had been conveyed by a debtor's wife. This high mortality of the heads of families is also a sad characteristic both of typhus fever and consumption, and supplies us with an economical motive of no slight force to use every effort to prevent them. The fact, that pestilential diseases in general, and pulmonary consumption still more remarkably, carry off large numbers of young and middle-aged adults of both sexes, will enable us to understand how it is that they do not, except in very extreme cases, diminish the population. Diseases which prove fatal to children and young persons do diminish the population both directly and indirectly—*directly* by cutting them off from the number of the living, indirectly by diminishing the supply of the future parents of the next generation. But the disease which carries off the heads of families, deprives society of those who having added their quota to the population, give place prematurely to young persons of either sex, who marry, have children, and, in their turn, are cut off prematurely. It is easy, therefore, to understand, how plagues and pestilences may not diminish the number of the people; it is not difficult to conceive how they may even lead to its increase, at the same time that they substitute a young and helpless population, for one capable of ministering to its own support—a population with an excess of widows and orphans, for one having a due proportion of persons of either sex and of every age.

One more history of cholera I must give you, as it is full of interest, and possesses some features worthy of notice. It is the history of the disease as it occurred at Noss Mayo, one of the places I have specified as the scene of the very considerable mortality of 1 in 8. Noss Mayo is situated on an arm of the tidal river Yealm, which is left dry every ebb tide, exposing a bed of mud and sand. Towards the land hills arise precipitously from the shore, covered with trees, and forming a *cul de sac*. The village is inhabited by fishermen. The houses are contiguous, placed opposite to each other, at short distances, with dungheaps of ashes and garbage before and behind the houses; and a number of pigs are also kept. The village seems to combine, in a remarkable degree, a moist and stagnant atmosphere, overcrowding of the houses, and the nuisances common to the inferior class of villages. The cholera, as I have stated, destroyed 49 inhabitants in a population of 400.

In Newton Ferrars, a village similarly situated, but the houses more scattered, and external ventilation more free, only two deaths occurred out of a population of 321.

The history of the origin of cholera at Noss Mayo is the point to which I am anxious especially to direct your attention. Between Noss and Dieppe there is a constant intercourse; and, in the second week of May, 1849, a French vessel from Dieppe, where the cholera was raging, lay in the Yealm; the fishermen of Noss were daily on board. The first inhabitant who was attacked, and who subsequently died of cholera, had been several times on board. His partner-boatman was next seized with diarrhoea; then one of his children with cholera. They both recovered.

The next victim was a niece of the fisherman first seized; she was attacked while he lay dead, and was a corpse in twenty-four hours. The next patient was another child of the second fisherman; she also died after 24 hours. The last of these deaths occurred on the 25th of May. On the 3rd of June, four new cases occurred. One of these was a

fisherman who had had dealings with the French. His wife was also attacked, as also a labourer and his child. The four patients died in from six to thirty hours.

The next cases were relatives of the wife—a nephew and niece were seized on the day of her death, and died in twenty-four hours. Her mother, who lived in the next house, and had nursed her, was next seized, and died on the 7th; and her sister on the 8th. The next victim was the partner boatman of the husband: he died on the 9th of June. The disease then became epidemic in the village of Noss, and gradually spread into the surrounding villages.

But the history of cholera, in the village of Yealmpton is more remarkable, and, if possible, still more conclusive as to the occasionally contagious nature of cholera.

The first case occurred on the 23rd of June, in the person of a man, 72 years of age, who died on the 24th. The next was that of his wife, also aged 72, who was attacked on the 24th, and died on the 25th. These deaths were followed by that of a man 23 years of age, who died on the 26th of June. The next victim was a woman aged 74, a connexion of the first two, whom she had nursed, and whose soiled clothes she had washed. Three days after which, viz., 28th June, she was seized at her own house, about a mile from the village, and died in twenty-two hours.

Half a mile further on, at Dunstan, on the 30th of June, a brother of this woman was attacked and died on the 3rd July. On the same day there died also at Dunstan, a young married woman, who had been nursing her mother-in-law at a neighbouring village, in a fatal attack of the cholera. The mother-in-law died July 1st, and on the afternoon of the 2nd the daughter-in-law washed her soiled clothes, sickened, went home, and died in twelve hours. The next cases in Dunstan occurred in these two families, whence it spread to their connexions and associates.

I have been induced to dwell upon these illustrations of the contagious nature of cholera, that the otherwise unsupported case of the mendicant who conveyed the disease to the workhouse at Market Drayton might appear more deserving of credence.

The writer of the narrative of the origin and progress of cholera at Noss Mayo pays a deserved tribute to the character of a clergyman of one of the neighbouring villages; and I am happy to be able to state, that in more than one of the letters of the Special Correspondents of the *Morning Chronicle*, the exertions of the clergy during the prevalence of the cholera are spoken of in the warmest terms of commendation. I regret that my very limited space does not allow me to quote one or two passages from these interesting letters in confirmation of this statement.

There is one subject connected with the cholera to which I must refer before I conclude: I mean the severity of the late epidemic when compared with that of 1832, and with the several visitations of the plague.

There is every reason to believe, that the last epidemic of cholera was much more fatal, throughout Europe and in this country, than the first visitation in 1832. The mortality for the whole of England and Wales is now in course of being abstracted and tabulated in the office of the Registrar-General; and I understand that there is a strong probability that the deaths will not fall far short of 80,000, instead of about 21,000 in the years 1831 and 1832. This is a very great increase of mortality, even when ample allowance is made for the increase of population in 17 years. In London, the mortality in 1832 was upwards of 5000; in 1848-9 it fell little short of 15,000. When every allowance is made for increase of population, the recent epidemic will be found very nearly twice as fatal as the first. The progress of the two epidemics and of the concurrent mortality from all causes, week by week, is well shown in some coloured curves which I have prepared from a table supplied to me by the kindness of the Registrar-General.

There can be no doubt, then, of the greater fatality of the late epidemic of cholera both in the Metropolis and in the provinces. Whether that increased fatality is attributable to the inherent malignity of the epidemic itself, or whether the pestilence, in this respect, having undergone no change, the scarcity which immediately preceded it, the vast influx of destitute Irish, and the continued neglect of measures of precaution, combined to give it a stronger hold upon the population,—are questions which we have not the means of solving. But the fact, that, on the occasion of its second visit, the cholera assumed so much more severe a character than when it first invaded us, ought certainly to stimulate us

to those acts of prevention, which, if they cannot keep the pestilence from our shores, may, under the blessing of Providence, disarm it of more than half its terrors.

But, fatal as the cholera has been in its last attack, the ravages which it has committed are not to be compared to those which attended the several outbreaks of the Oriental plague; nor did the mortality of the great cholera year 1849 equal the annual mortality of the 17th century. The relation which the deaths by cholera bear to those by plague, and to the annual mortality during the 17th century, is well exhibited in the coloured plan which you have before you.

Now, the very same difficulty which we experience in explaining the greater virulence of the second outbreak of cholera when compared with the first, meets us when we attempt to reason upon the slight mortality occasioned by the cholera in comparison with the ravages of the Oriental plague. We have no means of measuring the inherent virulence, so to speak, of the two diseases; we cannot say whether among the same population, placed in precisely the same circumstances, the one or the other would have proved the more destructive. This, however, we can allege, with a fair show of probability, that, had the cholera invaded England in the 17th instead of the 19th century, it would have found it in a state much more favourable to the destruction of human life. Between the progressive improvement in the public health, of which I had occasion to speak in my second lecture, and the gradual mitigation of pestilential diseases which a comparison of the plague of the 17th century and the cholera of the 19th, seems to prove, there is an obvious analogy. As I began by demonstrating the first proposition, I cannot do better than conclude by expressing my belief in the truth of the second. To these two propositions, I would add a third, to which I think the facts and reasonings advanced in these lectures will incline you to give in your adhesion, that, whatever may have been the improvement in the health of the people during the last two or three centuries, we have it in our power, by wise measures of sanitary reform, to accomplish still greater improvements for the future.

I have now brought this short, and, in many senses of the term, very imperfect, course of lectures to a close, and, were it not that I hope to be allowed to address many of you again during the Lent Term of 1851, on the same important subject, should take leave of you with regret that I have imparted to you so little practical information. When I say that I have not given you much practical information, I mean, that I have not been able to enter into many details respecting the means of preserving or restoring health. I have scarcely touched upon the principles and practice of drainage and ventilation, and have only incidentally pointed out the mode of treating one or two simple maladies; and yet I cannot deny myself the satisfaction of believing that, in one sense of the term, these lectures have been truly practical. If I do not altogether deceive myself, if I have not wholly misinterpreted your feelings, I have succeeded in awakening within you a lively interest in the improvement of the physical condition of the people, as an indispensable auxiliary to their intellectual and moral advancement, and the success of your ministerial labours. I may also venture to hope that I have confirmed, by an appeal to the history of past times, and by a reference to the events of our own day, the pregnant truth to which the highest authorities in our Church have borne willing testimony,—that health is being continually undermined and life endangered by causes which are placed completely within our own control, and which it is our bounden duty, as Christian men, to remove or counteract. But I did not deem it consistent with the view I have been led to take of the object and scope of such a course of lectures as this, to conceal from you the equally important truth, that there are many things which urgently require to be done in order to the preservation of the health of the poor, and the improvement of their condition, which it is not in our power to bring about by our own exertions as individuals. That such things may be effected, it is necessary to work a great change in the thoughts, feelings, and habits of the nation, and in the Acts of the Legislature. You may recollect, that, in my first lecture, I vindicated to myself the right to withdraw these topics from the domain of what is commonly designated "politics," and to view them as religious subjects, having no necessary connexion with the strife of parties, but imperatively demanding the attention of Christian citizens and Christian ministers. Each man's conscience must guide him as to the mode and extent

of his own interference in such matters; but I do not think that any good citizen can hold himself released, by any peculiarity in his social position, from the responsibility of bringing about reforms so urgently required, and without which the best efforts of individuals to improve the physical and moral condition of their poorer brethren must, to a great extent, prove abortive.

Such being the view I was led to adopt of the duty which devolved upon me as professing to lay before you a comprehensive view of the great health question, I did not hesitate to suggest to you some doubts of the true Christian expediency of a Poor-law; still less to express my own strong conviction of the impolicy and practical cruelty of a careless and indiscriminate use of money in what so many men unjustly regard as "almsgiving;" nor was I deterred from advert- ing to these important topics by a misgiving which, I confess, has occasionally crossed me, lest, in expressing a doubt of the policy of a law grown almost venerable by the lapse of three centuries, and of habits which have prevailed to a great extent in every Christian community, and which have been, as it were, recognised, sanctioned, and wrought into the very constitution of certain monastic orders by the Church of Rome, I should seem to be almost encouraging a habit of scepticism as to higher and better things. I know, however, that it is not necessary for me to guard myself against this imputation; but, if it were, I should content myself with the simple reply, that the evidence in favour of the wisest of human laws, and the most venerable of human customs, falls infinitely short of the marvellous array of testimony upon which the Christian religion is built up.

I have only, in conclusion, to thank you for the regular attendance which you have given in this room, and for the attention which you have paid to these lectures; and to promise those of you who may be in attendance next year, that I will use my best endeavour to make the next course of lectures as practically useful, by laying down precise rules for your guidance, in your efforts to preserve and restore the health, and improve the comforts, of the poor, as I would fain hope this short course of lectures has been in convincing you of the importance of the subject, and of the extent and promise of that field of usefulness which it opens out to you. May I not also hope that by the reference which I have made to the philanthropic labours of Cook, Jenner, and Howard, and to the unwearied exertions of the good pastor Oberlin, for the improvement of the physical condition of the people committed to his charge, (exertions which in no way interfered with the performance of his duties as a clergyman) I have presented you with some models which you may hereafter imitate with the highest satisfaction to yourselves, and the greatest possible advantage to your parishioners.

CLINICAL LECTURE ON SURGERY.

DELIVERED

By WILLIAM FERGUSSON, Esq., F.R.S.,

AT

KING'S COLLEGE HOSPITAL.

ON STONE IN THE BLADDER AND ON LITHOTOMY.

GENTLEMEN,—I propose, in my clinical lecture this day, to draw your attention to some cases of interest which have lately been under treatment in the hospital. These cases are examples of stone in the bladder, treated by the operation of lithotomy.

Perhaps this class of disease, and the operation which has been put in force for it, would have been more appropriately brought under your notice at a later period of the session; but I do not think that the present opportunity of saying something about it should be allowed to pass, as there are now four cases in the house in each of which a stone has been removed from the bladder by the operation of lithotomy within the last month; and I therefore think the opportunity a good one of giving you some information in connexion with the cases, and with the operation itself, which it is highly necessary for you, as future practitioners of surgery, to understand. The course I intend to take in this lecture is, firstly, to note the leading features of each case;

secondly, to describe the kind of operation performed; thirdly, make such observations on lithotomy as may be most appropriate.

I shall now just briefly mention the particulars of each case; and, having done so, shall make some special observations.

Here are the chief features of each case briefly noticed. The first patient was a man of the name of Peam, aged 60, who was sent to me from Scarborough, by my old pupil, Mr. Pritchard. His symptoms have lasted for about a year; but have not been very severe. A stone of considerable size was detected. The urine was alkaline, and contained some pus. On Saturday, October 4th, I performed the operation of lithotomy, and extracted a stone the size of a large chestnut. On the next day he had some slight tenderness at the lower part of the belly, which was relieved by a turpentine stupe; he went on without any bad symptom. By the tenth day, the whole of the urine passed by the urethra, and he is now about to leave the house.

The second case was that of a boy, Charles Hibbert, aged 4½, also from Yorkshire, a healthy, happy-looking child, whose symptoms were by no means severe. On Saturday, October 11, I performed lithotomy, and extracted a stone about the size of a filbert. On the following day there was great pain in the belly, and tension over the bladder, and the child had passed a restless night; the urine appeared to pass pretty freely through the wound; but, on the introduction of a flexible catheter through it into the bladder, a large quantity of urine and blood was evacuated, which gave great relief; for two or three days the urine remained discoloured by blood, and the child complained a good deal of pain, and was restless; but he was ordered to take small doses of opium and nitric acid, and these symptoms yielded. Now the boy is running about the ward well.

The third case was that of the boy James Jennings, aged four, admitted on the 14th of October. The symptoms of stone in the bladder were all very marked, and he suffered a great deal with difficulty and pain in making water. On the 18th the operation of lithotomy was performed. The concretion, being very small, was brought away by the scoop. On the following day, the patient complained of pain about the lower part of the belly, and a catheter was passed, under the idea that the bladder might be full, but there was no accumulation. Hot fomentations were ordered, and the pain quickly yielded. From that time he has gone on admirably,—nearly all the urine passing by the urethra on the 11th day.

The remaining case is that of Edward Granger, aged 6, but really not looking older than a child of 4. He was very thin, and sickly-looking; he had been ill the greater part of his life; severe symptoms had lasted upwards of a year, and latterly had become very distressing. On Saturday, the 25th, the operation of Lithotomy was performed. The grasp of the forceps broke the stone into pieces; it was therefore necessary to introduce them several times, as well as the scoop, by which means the whole of the fragments, consisting of phosphatic deposit, surrounding a nucleus of oxalate of lime, were removed, and the bladder was washed out with warm water. The patient has not had a single bad symptom since the operation; and the last report, taken on November 3, says, "wound in the perinæum is healing rapidly, urine passes by the urethra and wound; appetite good."

Now you perceive we have here examples of stone in the bladder at various ages. We may almost say that we have an instance of it occurring in extreme old age, and also in the earliest youth; although, of course, we are often in the habit of meeting with cases of stone in the bladder at a more advanced age than sixty, and not unfrequently we find children below the age of four years with the same disease. You will observe, that in most of these cases the duration of the symptoms had been about the same length of time; but with respect to this, it is often difficult to tell at what time symptoms of stone actually appear. Many patients go about with a stone in their bladder for a long time, and yet no symptoms, at least none sufficiently urgent to call their attention, are noticed. A stone may form at a very early period, yet neither patient nor surgeon knows anything about it; it is obvious, however, that, in the majority of cases, when a surgeon first sees his patient, the stone has existed for some time previous, for, when it is detected, it is generally of a more or less considerable size. In some instances we are able to

discover the stone when it is extremely small, when, in fact, it is not larger than a pea; in some cases we can trace the origin and history of a stone,—we can find from symptoms, that it has originated in the kidney, and can tell at what period it has entered into the bladder; but it is impossible to say what was the first palpable size. In most cases, when the disease is in its earliest stage, the symptoms themselves are not sufficiently striking to induce the patient to consult a surgeon.

Now, as you perceive, in these four cases, the concretions which I have removed are of various sizes. Here [showing it to the class] is the stone which came from the old man; it is of considerable bulk, larger than a chestnut; and here are the others, of a much smaller size. Various degrees of suffering were here, and there were various conditions of the urine when it was examined previous to operations; it is not always easy to explain why it is that there should be so much more pain in one instance of stone in the bladder than in another; but such is the case.

In the first example, that of the old man, the urine was found to be alkaline and purulent. Now, there are certain cases in which a surgeon can tell, from the appearance of the stone after it has been removed, what condition the urine had been in before; and this stone, which has for its nucleus uric acid, and is covered with phosphates, is such an one as gives rise to an alkaline and muco-purulent condition of the urine. Again, in the fourth case, there was a great deal of mucus and pus in the urine, and here, you see, the nucleus was a small concretion of oxalate of lime, extensively coated with phosphates.

In the case of the boy Hibbert, the first of the three children operated on, where the stone was about the size of a sparrow's egg, it is somewhat difficult to understand how it was that he suffered so very little annoyance previous to the operation. Jennings, the second child upon whom I operated, who had this little stone, about the size of a small bean, suffered a great deal of pain. Now, some of you may not understand how it is, that in the one case, where the stone was much larger, there was so little pain, whilst, where the stone was so small, there should be so much. It may be explained in this manner: When the patient passes water, the stone is carried to the neck of the bladder, blocks up its outlet, and thus causes the pain and difficulty in urinating. Now, a small stone like this is carried much more easily to the orifice of the bladder than the larger one; the passage becomes obstructed, and the patient is obliged to change his position before he can evacuate the bladder, which is only effected with difficulty, and thus it is that a small concretion gives rise to so much pain.

I do not consider it requisite to go over the subsequent history of all these cases; but there are one or two points connected with the old man's case worthy of note. We may, I think, say, that here we have had an example of lithotomy in which there has been the smallest possible amount of hazard or annoyance after such a formidable procedure. Now, if you were to come to a conclusion about this operation from this one case, you would fancy that lithotomy is a simple affair, not attended with much danger to the patient, or trouble on the part of his surgeon, for here, with the exception of a little tenderness about the lower part of the belly, there was not a bad symptom from beginning to end. It is worthy of note that the patient passed most of his urine by the urethra for the first three days. Usually, in the cases operated on by me, the water comes away by the the urethra on the second day, and continues doing so for two days,—then passes all by the wound until about the ninth or tenth day, when it again comes permanently by the urethra; the reasons for these changes are, that a certain amount of inflammation and swelling of the deep part of the wound takes place immediately after the operation, which is sufficient to close the opening for a short time; then, when these subside, the urine again flows through it. I think I may say, that in my own cases the urine finds its way again through the natural passage at a somewhat earlier period than is the case with some other operators, and this I attribute to the smallness of the opening I make in the neck of the bladder.

It is worth while to refer to the fact, that in the case of Hibbert, where there had been the most remarkable absence of suffering before the operation, there was the most distress afterwards; whilst, in the case of Grainger last operated on, there was no distress at all after the operation, although prior to it, he had suffered much more than any of the other patients. You recollect what a poor weakly child he

was, being six years old, but really not looking more than three or four, and so exhausted by suffering, that I should not have been at all surprised, if an unfavourable result had taken place; but he has gone on admirably, although, in this instance, there was much more injury, if I may so speak, done in the operation, than in any of the others. You may remember that when I seized the stone with the forceps, it was so friable, it broke to pieces, (that is, its outer coating constituting the chief portion of the stone did) and I was obliged to introduce the forceps several times, as well as the scoop, to get the fragments fairly away; yet there has been comparatively little suffering since. This is a point we cannot well explain: we know not why it is, that in one case, where the operation has been simple, there should afterwards be great suffering, and that in another where the proceeding has been difficult and protracted, there should not be a single bad symptom; such different results, however, are very often seen.

I must now refer to the particular kind of operation which has been performed in these cases; it is the operation of Cheselden,—and is termed the lateral operation of lithotomy, in contradistinction to other operations for stone, such as the high operation—mesial, recto-vesical, bilateral, all of which have been resorted to for the cure of this painful disease. The history of the operation of lithotomy is exceedingly interesting to those who are anxious about the literature of this part of surgery. Here is one of the most valuable works on the subject, published by the late distinguished and lamented Mr. Crosse, of Norwich; and, from the size of the volume, and a cursory view of its contents, you can have some idea how complicated this history is.

At the present day we are in the habit of referring the operation of lithotomy to Cheselden, for to him are we most indebted for a knowledge of the subject; he was the most eminent of all English lithotomists. Prior to him Frere Jaques had performed the operation for stone very frequently; but in an unscientific way, (in the early part of his career, at least,) by plunging a dagger-shaped knife through the perinæum at random. After his time, notwithstanding the wonderful practice of Ran, and the descriptions of his operation by Albinus, the history of the operation became obscure until Cheselden arose. He himself wrote very clearly about lithotomy, and practised it a great deal; but there are people in our Profession who write freely on matters they understand imperfectly. Unfortunately, Cheselden has had some such commentators as these, and consequently the history of his operation has been somewhat obscured. He had various modes; but it is evident that what he practised most frequently and most successfully was the lateral operation, wherein he divided the prostate gland and neck of the bladder as he pushed the knife towards that viscus. Such a proceeding is often now termed Liston's operation. Where this last named great and lamented surgeon learnt his method of performing it, I cannot tell you; certain it is, that when he first began to operate in Edinburgh, the proceeding differed from that which was generally performed in his time; and he was so dexterous, and showed his dexterity before so many pupils and surgeons, that numbers have been induced to follow in his steps, and, probably out of respect for their teacher, have called it by his name. Perhaps the chief feature of difference between the operations of Cheselden and Liston consisted in the shape of the knife, the situation of the groove in the staff, and in the shape of forceps; in all these points Mr. Liston differed from Cheselden. I think I ought to mention another feature of difference; this was, that after the operation was performed, Mr. Liston introduced a tube through the wound into the bladder, and kept it there, so that the urine should flow through it. This practice, although an old one, was revived by Mr. Liston. In the work of Scultetus, you will find a representation of this tube.

Notwithstanding all that has been written and practised on lithotomy, frequent attempts have been made to improve the operation; these attempts have been directed to the cutting instruments, as to their length, breadth, and shape; much attention also has been devoted to the shape of the staff. Here you will perceive, that in these two staffs I hold in my hand, the groove is differently placed; in one it is on the convexity of the curve, in the other it is on the left side. Surgeons differ even on this matter, although you see it is but a slight one.

The operation which I have performed is such as I was in the habit of seeing Mr. Liston practise, with only one differ-

ence, which I will mention presently. I will now describe the operation as you have seen me do it. In the first place, I always make a point of introducing the staff myself when I am going to operate; this should not be left to another person, for if any mishap occurs, the fault is sure to be thrown upon the unlucky man who holds the instrument. The operator himself ought always to be responsible for every step of the operation. When the staff is introduced the patient should be tied up, but not before. The surgeon now takes a glance at the perinæum, introduces the finger into the rectum to ascertain the position and size of the prostate gland and the condition of the gut itself, which ought to be unloaded previously by an enema. Then, having all his instruments by his side, the principal part of the operation is proceeded with. The knife I use is a scalpel, with a cutting edge only half-way down,—such, indeed, as Mr. Liston used, and which goes under his name: and, curiously enough, I have the opportunity of showing you the very knives which he was constantly in the habit of using some twenty years ago. The incision is now commenced, about one inch and a-half in front of the anus on the left side, and carried downwards towards the ischium to the extent of three inches, or even four in a fat subject. This incision divides skin, fat, and superficial fascia. Then it is carried on between the erector penis and the accelerator urinæ; and, in the triangular space bounded by these muscles and transversus perinei, the operator, at the second or third incision, can place his finger on the staff, and feel the groove through the membranous portion of the urethra. He now puts the point of the knife into the groove, and pushes it along until it has passed through the prostate, keeping its cutting edge outwards and a little downwards towards the ischium; then, generally, there is a gush of urine, by which he learns that the blade has got into the bladder. The finger is then carried into the wound,—the tissues gradually yield before it,—and, if the operator has a nice touch,—which is so necessary here,—he will be able to distinguish the mucous membrane of the bladder from the rest of the wound. Having now got the finger into the neck of the bladder, he cautiously dilates the opening, by moving his finger round, and at the same time feels for the stone; these objects being attained, the staff is taken out and the forceps being slowly introduced as the finger is withdrawn, the stone is seized and extracted. Now, the peculiarity in my own operation is this, that I make the smallest possible opening in the neck of the bladder, so as just to admit the forceps into it. Many lithotomists make a very free opening; and some use this instrument, which is termed a blunt gorget, and pass the forceps along its groove; but I prefer using my finger as a guide, withdrawing it gradually as the forceps makes progress; then, just as the blades enter the bladder, a gush of urine takes place, at which instant I open them, and, by a slight twist of the wrist, usually catch the stone at once, when, with the utmost care, I draw it gradually downwards until the tissues yield, and it is removed. As I told you before, some advise free incisions; but I only notch the prostate. I consider it a much safer plan to make a very limited cut in this part. I believe the data we have of the operation go to show, that the most successful lithotomists were those who made small incisions into the neck of the bladder. Martineau made a small incision, dilating it afterwards; so did Liston. If necessary, the opening can be enlarged; but you may consider it a much safer plan to make a small wound with the knife, and then to stretch it well with the finger: it is extraordinary how the notch will enlarge by dilatation.

Perhaps the chief difference between Mr. Liston's practice and my own consists in the treatment immediately after the operation, and this is in reference to the employment of the tube. I used it in all my early operations, but I had frequent occasions to think that it caused both physical and mental discomfort. The patient had an idea, in wearing the tube, that the whole of the operation was not finished; consequently I, although an Edinburgh pupil, ventured to differ from the surgeons there upon this point. I left the wound entirely to itself, as was the custom with Cheselden, Martineau, Key, Green, and other eminent lithotomists; and I was so well satisfied with this plan, that I now never use this instrument. My friend and former house-surgeon at Edinburgh, Dr. Richard Mackenzie, has recently given up the use of the tube, and he writes me, that he is well pleased with this practice.

The rest of the treatment necessary, after the operation

must be carried on according to those general principles of surgery which guide the surgeon in other matters; and any one who is thus well-informed will be able to understand, and be prepared for, those mishaps which will every now and then occur after such a proceeding.

Having now finished the remarks I wished to make, I have only to state, that the operation just described to you is that which I consider the simplest, therefore the safest; and I would strongly advise you, in your future practice, to give it the preference to all other methods.

ORIGINAL COMMUNICATIONS.

REMARKS

ON THE

ETIOLOGY OF PHTHISIS.

By EDWARD SMITH, M.D., LL.B., B.A., Lond.

Fellow of the Royal College of Surgeons of England,

Lecturer on Botany at the Charing-cross Hospital Medical School, &c.

PAPER V.

INFLUENCE OF OCCUPATION OVER THE DURATION OF PHTHISIS.

The writers of the Report of the Hospital for Consumption for the year 1849, give the following analysis of the duration in 201 fatal cases of phthisis:—

	No. of Cases.
Under 3 months' duration	1
From 3 to 6 "	22
" 6 to 9 "	36
" 9 to 12 "	30
" 12 to 18 "	34
" 18 to 24 "	22
" 24 to 30 "	23
" 30 to 36 "	6
" 36 to 42 "	9
" 42 to 48 "	4
Above 4 years	14

201

"The half-yearly periods, extending in the Table from 12 months to 4 years, contain in each period, with one trifling exception, a decreasing number of cases. For whilst we observe that nearly 17 per cent. of the cases have a duration of from 6 to 9 months, not 2 per cent. are found in the period from 3½ to 4 years." "6½ per cent. live for periods above 4 years." "Considerably more than half the entire number of cases were fatal within a period of 18 months, the numbers being 123 to 78."

Of the cases which terminated within 18 months, 60·5 per cent. were among males, and 50 per cent. among females, marking a greater rapidity in the course of the disease in males than in females; but of the cases which continued beyond a period of 18 months, the females were in excess of the males in the proportion of 45·5 to 31·9 per cent.

M. Louis analyses 193 fatal cases in the following manner:—

Under a month	1
One month	3
From 35 to 84 days	11
" 3 to 6 months	52
" 7 to 12 "	62
" 13 to 24 "	41
" 3 years to 8	23

193

Sir James Clarke quotes the opinions of MM. Bayle, Louis and Andral, and deems M. Louis in error in stating that "age has little effect upon the duration of phthisis, except in very acute cases, which are not frequent in early life." He also states, that "in the upper ranks of society, where patients have all the advantages that the best regimen, change of air, and medical treatment can afford, the medium duration of phthisis is probably not much short of three years; under

other circumstances it is less." M. Andral fixes the average duration of the disease, as observed by him at La Charité, at 2 years.

I have prepared the following Table, in order to contrast the statements made by these observers, and to compare them with others which will subsequently appear; but since the mode of arrangement of the Table contained in the report of the Hospital for Consumption is not identical with that of the following Table, I am doubtful if those numbers marked with an asterisk (*) are correct.

Duration.	Bayle. 203 cases.	Louis. 1st Edition. 114 cases.	Louis. 2nd Edition. 193 cases.	Hospital for Consumption. 201 cases.
3 months & under	1 in 12·5	1 in 14·2	1 in 10·1	1 in 20·1*
6 " "	3 3	3·4	2·9	8·7*
9 " "	1·9	1·9	1·8	3·4*
12 " "	1·6	1·6	1·5	2·2*
2 years and under	6·6	4·2	5·6	3·5

The total number of deaths from phthisis among males abstracted by me, in which the occupation of the individual and the duration of the disease are together stated by the Registrars, is 1232, and the duration varies from seven days to thirty years. In preparing the following Tables, I have not always abstracted the periods of duration precisely as they are recorded in the Returns, but have arranged them under about twenty-three heads, always referring to the highest of two any duration which fell at an intermediate period. The indefinite durations of "years" and "months" have generally been excluded. The following Table shows the periods of duration arranged in the order of their frequency, with the number of cases occurring at each period, and the proportion which such number bears to the whole:—

Table 32.

Men Occupied—No. 1,232.

Order.	Periods of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
1	12 months	224	1 in 5·5
2	6 "	211	5·8
3	2 years	131	9·4
4	9 months	121	10·1
5	4 "	105	11·7
6	3 "	85	14·4
7	2 "	61	20·1
8	3 years	59	20·8
9	12 months	51	24·1
10	6 years	36	34·3
11	years	35	35·2
12	15 months	30	41·
13	months	22	56·
14	1 month	20	61·6
15	2 weeks	10	123·2
16	12 years	11	112·
17	2½ "	8	154·
18	21 months	6	205·3
19	14 years	8	410·6
20	10 "	1	1232·
21	30 "	1	
22	1 week	1	

Table 33.

6 months and under	493	1 in 2·5
9 " "	614	2·
3, 4, 6, and 9 months	582	2·1
6, 9, and 12 months	556	2·2
12 months and under	838	1·4
2 years and upwards	250	4·9
3 months and under	177	6·9

These Tables present a larger proportion of cases in which the duration was very short and very lengthened than we have been accustomed to regard as the duration of phthisis; but they corroborate the ordinarily received statement, that one-half of all the cases survive 9 months from the first development of the disease.

I have collected 134 instances of deaths from phthisis amongst females, with which the occupation and duration of the disease are together registered. The duration varied from 7 days to 12 years.

The following Table is constructed after the plan of Table,

No. 32, but has exclusive reference to females "occupied:"—

Table 34.

Women Occupied—No. 134.

Order.	Periods of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	6 months	22	4.7
2	12 "	22	6.2
3	9 "	20	6.7
4	3 "	13	13.4
5	2 years	12	11.1
6	4 months	7	14.8
7	18 "	8	16.7
8	2 "	4	33.5
9	3 years	4	33.5
10	6 "	3	44.5
11	years	3	44.5
12	15 months	2	67.
13	12 years	2	67.
14	2½ "	1	134.
15	10 "	1	
16	1 month	1	
17	1 week	1	

Table 35.

6 months and under ...	56	1 in 2.3
8 "	76	1.7
3, 4, 6, and 9 months...	70	1.9
6, 9, and 12 "	71	1.8
12 months and under...	99	1.3
2 years and upwards ...	26	5.1
3 months and under ...	19	7.

These data correspond very nearly to those given in the Table for males, but evince a slight disposition to a shorter duration.

If to the number comprehended in the preceding Table, we add the numerous cases occurring in widows and spinsters, it will be increased to 336, and the results may be found in the following Table:—

Table 36.

Women Occupied, with Widows and Spinsters—No. 336.

Order.	Periods of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	6 months	62	5.4
2	12 "	49	6.
3	9 "	34	6.8
4	2 years	29	33.6
5	3 months	22	11.5
6	4 "	16	15.2
7	18 "	15	21.
8	2 "	13	22.4
9	3 years	11	25.8
10	6 "	7	30.5
11	15 months	5	48.2
12	12 years	4	67.2
13	11 "	3	84.
14	1 month	2	112.
15	15 "	2	168.
16	21 "	2	
17	12 years	1	
18	2½ "	1	
19	10 "	1	336.
20	30 "	1	
21	1 week	1	

Table 37.

6 months and under ...	133	1 in 2.5
8 "	181	1.8
3, 4, 6, and 9 months...	162	2.
6, 9, and 12 "	167	2.
12 months and under ...	237	1.4
2 years and upwards ...	79	4.2
3 months and under ...	48	7.

Thus, a marked uniformity still exists with the results obtained from the males "occupied," but with a tendency to a more lengthened duration. If we add together all the cases now classified under the heads previously mentioned, the number will amount to 2460, and the analysis of the latter connected with the three classes will produce the results mentioned in the following Table:—

Table 38.

General Table, Both Sexes—No. 2,460.

Order.	Periods of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	12 months	416	5.9
2	6 "	356	6.9
3	9 "	296	8.3
4	2 years	250	9.8
5	4 months	186	13.2
6	3 "	182	13.5
7	2 "	117	21.
8	3 years	108	22.7
9	18 months	104	23.6
10	6 years	75	32.8
11	years	65	37.2
12	15 months	60	41.
13	months	42	58.5
14	1 month	33	74.5
15	2½ years	24	102.6
16	12 "	19	129.4
17	11 weeks	10	246.
18	14 years	6	410.
19	1 week	5	410.
20	11 years	4	615.
21	10 "	2	1230.
22	30 "		

Table 39.

6 months and under ...	890	1 in 2.7
9 "	1,186	2.
3, 4, 6, and 9 months...	1,020	2.4
9, 9, and 12 months...	1,068	2.3
12 months and under ...	1,606	1.5
2 years and upwards ...	490	5.
3 months and under ...	318	7.

If we accept this more largely constructed Table as evidence of the true duration of phthisis, and compare with it the three less comprehensive Tables now given, we arrive at the following results in respect of the relative frequency of periods of duration of phthisis:—

Table 40.

Periods of Duration Arranged as in Table No. 38.	Men Occupied. Relative Frequency of periods of Duration.	Women Occupied. Relative Frequency of periods of Duration.	Women Occupied, & Widows and Spinsters. Relative Frequency of Periods of Duration.
12 months	Greater.	Equal.	Equal.
6 "	do.	Greater.	Greater.
9 "	Less.	do.	do.
2 years	Greater.	Less.	Equal.
4 months	do.	do.	Less.
3 "	Less.	Greater.	Greater.
2 "	Greater.	Less.	Less.
3 years	do.	do.	do.
18 months	Equal.	Greater.	Greater.
6 years	Less.	Less.	do.
15 months	Equal.	do.	Less.
1 month	Greater.	do.	do.
2½ years	Less.	do.	do.
12 "	Greater.	Greater.	do.
2 weeks	do.	do.	do.
14 years	Equal.	do.	do.
1 week	Less.	Greater.	Greater.
10 years	Equal.	do.	do.
30 "	do.	do.	do.

Table 41.

Periods of Duration.	Relative Frequency.			
	General Table No. 39.	Men Occupied. Table No. 33.	Women Occupied. Table No. 35.	Women Occupied, Widows & Spinsters. Table No. 37.
6 months and under	1 in 2.5	1 in 2.5	1 in 2.3	1 in 2.5
9 "	2.	2.	1.7	1.8
3, 4, 6, and 9 months	2.4	2.1	1.9	2.
6, 9, and 12 months...	2.3	2.2	1.8	2.
12 months and under	1.5	1.4	1.3	1.4
2 years and upwards	5.	4.9	5.	4.2
3 months and under	7.	6.9	7.	7.

We observe a remarkable accordance in the *résumés* contained in the last Table; the only discrepancies of note indicating a greater relative frequency among females than males in the periods of duration of from 3 to 12 months, and amongst widows and spinsters in the duration of 2 years and upwards.

The following Table shows the frequency of the periods of duration in males in 25 groups, and in females in 4 groups of trades, relatively to the whole number of cases contained in each group and to the groups themselves, and a comparison is effected with the results given in the Tables Nos. 32 to 39 inclusive.

Table 42.

MALES.

General Table, No. 38 & 39, Frequency of Duration in its order.		NOS. OF GROUPS OF TRADES.																									Men in Tables No. 32 & 33 Frequency of Duration.
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	26	32	35	37	
12 months	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in
6 "	...	5.9	6.3	7.1	9.3	4.5	4.5	8.8	3.3	6.5	8.5	15.7	4.5	4.8	5.1	4.4	12.5	5.5	4.5	3.5	6.7	6.6	5.8	14.5	9.5	5.5	5.5
9 "	...	6.9	4.5	4.8	5.6	5.6	10.8	5.2	6.7	6.5	8.5	15.7	4.5	4.8	5.1	4.4	12.5	5.5	4.5	3.5	6.7	6.6	5.8	14.5	9.5	5.5	5.8
2 years	...	8.3	9.5	11.6	14.5	7.2	7.7	8.8	...	52.5	11.3	5.8	5.3	29.5	...	5.5	3.3	...	9.5	21.5	15.6	7.5	17.5	7.5	19.5	6.2	10.1
4 months	...	9.8	8.1	11.6	9.3	16.8	13.5	12.5	...	5.7	6.8	5.8	10.6	5.8	20.5	22.5	4.8	7.5	18.5	21.5	7.8	20.5	17.5	7.5	9.5	12.5	7.6
3 "	...	13.2	8.1	18.6	28.5	16.8	7.7	7.3	9.5	17.3	34.5	13.2	10.6	29.5	10.2	22.5	24.5	15.5	4.5	21.5	47.5	10.5	8.7	7.5	19.5	12.5	7.6
8 "	...	13.5	19.5	13.2	9.3	10.1	27.5	9.7	...	17.3	22.6	13.2	16.5	...	5.1	7.3	24.5	...	6.5	21.5	11.7	15.5	35.5	...	9.5	12.5	12.2
2 years	...	21.5	14.2	15.5	...	25.2	18.5	14.6	...	10.4	22.6	26.5	10.6	...	4.4	...	24.5	...	...	...	47.5	20.5	...	7.5	19.5	25.5	20.3
8 years	...	22.7	57.5	23.2	14.5	25.2	27.5	29.3	6.7	17.3	17.5	26.5	16.5	...	41.5	...	...	5.5	...	11.7	12.5	17.5	...	19.5	25.5	30.5	20.8
18 months	...	23.6	...	18.6	14.5	25.2	18.5	29.3	...	17.3	34.5	17.6	...	14.5	...	22.5	24.5	15.5	...	10.5	15.6	30.5	...	14.5	19.5	...	24.1
6 years	...	32.6	19.5	23.2	...	50.5	...	22.5	...	26.5	...	...	...	...	...	...	...	...	...	21.5	47.5	20.5	17.5	...	...	12.5	30.5
15 months	...	41.5	...	...	...	25.2	13.5	...	...	34.5	26.5	32.5	9.6	20.5	...	...	...	18.5	...	47.5	20.5	15.5	...	...	25.5	61.5	41.5
1 "	...	74.5	28.5	46.5	...	...	...	...	...	68.5	53.5	...	29.5	20.5	22.5	24.5	15.5	18.5	...	...	...	...	...	...	...	61.5	61.6
2 1/2 years	...	102.6	...	...	14.5	101.5	...	44.5	...	52.5	63.5	...	...	...	...	22.5	...	...	...	...	...	...	...	...	...	...	154.5
12 "	...	129.4	...	...	14.5	...	44.5	...	...	68.5	26.5	...	...	...	...	24.5	...	...	...	...	...	...	...	...	...	...	112.5
2 weeks	...	246.5	...	93.5	...	50.5	...	...	...	34.5	...	...	...	...	...	...	...	...	...	47.5	...	...	...	...	...	...	61.5
14 years	...	410.5	...	...	...	...	...	...	52.5	...	...	...	...	...	...	...	...	...	...	...	47.5	...	...	...	...	...	...
1 week	...	410.5	...	...	...	101.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11 years	...	615.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 "	...	1230	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30 "	...	1230	...	...	...	...	...	...	52.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21 months	...	...	...	...	...	...	...	...	...	...	...	...	...	29.5	41.5	22.5	...	...	...	...	...	...	14.5	...	...	61.5	205.5

Table 43.

	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in	1 in
6 months and under	2.7	2.1	2.3	2.5	2.5	3.5	2.5	2.7	2.7	3.5	3.5	2.1	3.6	1.3	2.2	2.6	3.5	1.5	2.6	3.3	2.7	3.1	2.8	3.1	2.5	2.2	2.5
9 "	2.5	1.8	1.9	2.1	1.8	2.1	1.6	2.4	2.6	2.7	2.2	1.5	3.2	1.3	1.5	1.8	3.5	1.2	2.3	2.7	2.5	2.6	2.5	2.7	1.7	1.9	2.5
3, 4, 6, and 9 mona.	2.4	2.5	2.1	2.5	2.1	2.5	1.8	1.9	2.6	3.5	2.5	1.7	3.6	2.5	1.6	2.1	3.7	1.3	2.3	2.5	2.1	2.6	2.8	3.1	1.9	2.4	2.1
6, 9, and 12 "	2.3	2.2	2.3	2.8	1.8	2.2	2.1	2.5	3.5	1.8	2.5	1.8	2.4	3.4	1.6	2.5	2.5	2.1	2.5	2.1	2.5	1.2	2.8	2.1	2.2	2.9	2.2
12 mona. and under	1.5	1.4	1.5	1.7	1.3	1.4	1.3	1.4	1.8	1.4	1.6	1.2	1.7	1.1	1.2	1.5	1.8	1.2	1.7	1.5	1.4	1.4	1.5	1.4	1.5	1.5	1.4
2 yrs. and upwards	5.5	4.4	4.4	3.3	6.7	4.1	4.6	4.7	2.8	4.5	3.5	6.4	3.6	13.6	11.5	4.5	9.5	3.5	3.6	4.6	5.5	4.6	4.7	3.5	4.6	4.9	6.9
3 mona. & upwards	7.5	5.8	5.6	6.3	9.5	5.8	9.5	6.5	7.7	7.5	6.4	29.5	2.1	5.5	3.5	15.5	4.5	21.5	7.8	8.5	35.5	7.5	6.3	8.3	5.5	5.5	5.5

Table 44.

Females.

Women in Tables No. 36 and 37, Frequency of Duration.		No. of Groups of Trades.				Women in Tables No. 34 and 35, Frequency of Duration.
		1.	2.	Widows.	Spinsters.	
12 months	1 in	1 in	1 in	1 in	1 in	1 in
6 "	...	6.5	4.5	6.5	5.9	6.2
9 "	...	5.4	4.5	6.5	8.4	4.7
2 years	...	6.8	5.8	7.6	9.1	6.7
4 months	...	33.6	64.5	9.2	9.1	11.1
3 "	...	15.2	12.8	23.5	16.8	14.8
8 "	...	11.5	32.5	9.2	10.1	16.8
2 years	...	22.4	64.5	15.3	14.4	25.2
3 years	...	25.8	32.5	23.5	9.1	25.2
18 months	...	21.5	32.5	9.2	25.2	25.2
6 years	...	30.5	64.5	23.5	33.6	25.2
15 months	...	168.5	32.5	...	25.2	67.5
1 "	...	112.5	64.5	...	50.5	134.5
2 1/2 years	...	336.5	64.5	...	...	134.5
12 "	...	168.5	64.5	46.5	25.2	67.5
2 weeks	...	...	...	...	...	...
14 years	...	...	...	...	...	...
1 week	...	336.5	...	...	...	134.5
11 years	...	84.5	...	...	...	...
10 "	...	336.5	...	...	...	134.5
36 "	...	336.5	...	...	101.5	...
21 months	...	...	...	...	101.5	...

Table 45

6 months and under...	1 in	1 in	1 in	1 in	1 in	1 in
9 "	2.5	2.7	2.7	2.7	2.5	2.3
3, 4, 6, and 9 months	1.8	1.8	1.8	2.1	1.7	1.7
6, 9, and 12 "	2.5	2.5	2.3	2.6	1.9	1.9
12 months and under...	2.5	1.6	2.3	2.5	1.8	1.8
2 years and upwards	1.4	1.3	1.5	1.5	1.3	1.3
3 months and under...	4.2	5.3	4.2	4.5	5.2	5.1
	7.5	16.5	5.7	5.1	10.1	7.5

From this Table we learn, that in connexion with the following occupations there is increased frequency in the indicated periods of duration over those observed in the general Table, No. 39.

[To be continued.]

THE UNITY OF THE LAWS WHICH GOVERN THE EXCITING AGENTS OF EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.

By JOHN GROVE, M.R.C.S.

THERE is no science in which a correct definition of words is of so much importance as in that of Medicine. "Words," said a late divine, "are an amazing barrier to the reception of truth." These remarks have a peculiar bearing on the state of our knowledge of epidemic diseases. When the late pestilence was sweeping away Her Majesty's subjects, the reproach of indecision and diversity of opinion among the Medical Profession was unhappily but too well merited. If we analyse the cause of all this, it will be found, not so much in the deficiency of our actual knowledge, as in the uncertainty of the terms and expressions made use of in the endeavour to impart that knowledge.

A student (and I believe we are all students on this subject) has barely entered on the investigation of pestilential diseases before he is arrested in his progress for a definition of miasms, mephitic vapours, exhalations, emanations, morbid secretions, effluvia, specific secretions, virus, animal poisons, and many other terms equally vague and unsatisfactory. Then come the words "infection" and "conta-

gion," and here he finds confusion and discord enough to damp the energies of the most ardent spirit in its anxious search after truth. The great bulk of those who endeavour to fathom this subject, generally abandon it in despair; but occasionally one spirit more venturesome than the rest essays to put in order the heterogeneous materials he finds scattered in works on medicine, chemistry, and history in particular, and those on science generally.

With this introduction, I now proceed to the further elucidation of that view which holds, that all pestilential and infectious diseases are due to the existence and development of some form of matter endowed with the properties of life.

It is customary with the expounders of new or but partially received theories, to make outrageous efforts to demolish the arguments and pervert the facts of all those who, with contrary opinions, have come before them. Truth, however, is like light, and speaks for itself. We do not want to be told the mode by which the electric light is produced to discover the murky figure our otherwise luminous gas presents in the company of its antagonist.

Before plunging into the troubled water, it becomes necessary to say something of disease in the ordinary acceptance of the term.

The human body in a state of health is composed of a definite number of elements or forms of matter, combined in a wonderful and mysterious manner by the physical forces inherent in their ultimate particles. (a) It is to a disturbance of the equilibrium of these forces, or, in other words, to a derangement of their normal operation, that disease must primarily be referred. Reveillé Parise said: "However numerous the causes of disease may be in appearance, they may yet be reduced to three principal ones,—wounds, poisons, and moral or physical organic super-excitement;" and he was not very far from the mark. A more simple view still may, however, be taken under the terms matter and force, or any compound word which shall convey their combined signification. Liebig thus defines disease:—"Disease occurs when the sum of vital force which tends to neutralise all causes of disturbance, is weaker than the acting cause of disturbance." "We study the complex in the simple, and only from the intuition of the lower can we safely proceed to the intellection of the higher degrees."—Coleridge, P. 41. These observations and quotations are made for the purpose of reducing the elements of our knowledge to their simplest form, and most concise expression. We have then to consider of matter and the physical forces in relation to each other; but, as our present inquiry is confined entirely to the consideration of pestilential diseases, it is quite unnecessary to pursue in detail the elementary principles of disease. It is sufficient to enunciate a law, if it be a primary law, to render clear and manifest all subsidiary or complementary laws. We know, for instance, that living beings multiply by the faculty inherent in them of reproducing beings similar to themselves. But, though this faculty is common to all, there are subsidiary laws regulating the mode of reproduction or generation, which are readily comprehended when the primary law is understood.

Thus, having stated the primary law of disease to be a disturbance of those forces which in health keep the human fabric with all its functions in equilibrio, we have to interpret those laws which are specially concerned in the production of epidemic diseases.

Without further preliminary I will present to your notice three diseases which are acknowledged to merit the epithet epidemic. The disease I will first mention is one that attacks the vegetable creation, and is known by the name of the vine mildew; this disease prevailed extensively in the years 1849 and 1850. The second I shall refer to, is that known as the epidemic aphthous disease of cattle. And the third, that known as measles among the human species.

1st. The vine mildew is a parasitic vegetation, so generally known as not to need description here. Those who are familiar with its microscopic appearances, cannot fail to trace and understand how powerful must be its influence in causing a disturbance of the healthy functions of the plant upon which it becomes extensively developed. The leaves and

leaf-stalks, the fruit and fruit-stalks may be alike equally covered with this seeming eruption. Dr. Lindley describes its habitat as on the leaves and green parts of vines, and as destroying the functions of the skin of the parts it attacks; but the dark skin of the forced grape becomes equally affected with the leaves and green parts, and the premature shrivelling of the diseased grape would seem to indicate an appropriation of its juices by the parasite. This disease manifestly depends on the development of the spores of the oidium, and their rapid and extensive faculty of reproduction. In this instance of disease, the force or power of growth in the germs of the oidium is superior to that of the tissues of the vine on which they grow. It is on the same principle that the muscardine, or silkworm disease, occurs. The parasite *Botrytis Bassiana*, when communicated naturally or by inoculation to the silkworm, exercises a force of vital action beyond that of the victim's tissues; in fact it would appear that this process must be regarded in the light of cellular endosmosis, for the germ of disease is a simple cell, and were it not to overcome the cellular force of the insect, it would obtain no sustenance; for it can hardly be conceived, that the animal is destroyed by the mechanical pressure exerted by the extension of the parasitic growth. Taking this view of the matter, we arrive at the law discovered by Dutrochet, the law of endosmose and exosmose, by which the vitalized cell-wall maintains a communication with the cells of the insect's body; it is, therefore, most certain that if there were not a predominating vital force in the cell-wall of the parasite, over that of the insect, the latter would remain intact, and the former would fail to increase and multiply.

We are now conducted to that property of all living beings, the power of re-production. It may be thus expressed,—as the faculty of self-multiplication.

In this faculty we recognise a wide difference between organised, or living bodies, and inorganic matter, with its relation to the physical forces, or even the physical forces themselves, for wherever inorganic matter increases, it is by addition or *ab extra*, as in crystallisation. In the development of the physical forces, as of heat, light, electricity, and chemical affinity, it has been shown by Professor Grove, that as they are correlative, each convertible into the other, so they are only modes of force, and that for the communication of this force from one body to another there must be a subtraction from the one and addition to the other; and that in the act, the one has lost exactly what the other has gained.

Now, the vital force of a plant not only increases its own force, but multiplies it indefinitely, in new and independent existences, which again repeat the process, these again continuing in a constant and uninterrupted line. Whatever be the form of matter endowed with life, it has definite relations and characteristics, and a specific sphere of action or destiny. It is by the relations and characteristics of matter and force that we are able to comprehend their nature and properties.

If we require to convert the one into its elements, or to resolve it into other forms, or if we desire to direct or control the other, our efforts would be fruitless unless we possessed some knowledge of the objects we wish to bring under our subjection; thus, whatever may be the exciting cause of epidemic diseases, it is equally important that we should hold some rational opinion on the subject. At present, I have only mentioned the vine mildew as an epidemic disease of vegetation; but there is a great variety of similar or analogous affections due also to the development and reproduction of parasitic vegetation.

I will now introduce to your notice the second form of epidemic disease mentioned, viz., the epidemic aphthous disease of cattle. In the years 1839, 1840, and 1841, this epizootic prevailed extensively in England and Scotland, in France, and other portions of the Continent. The reports, both foreign and domestic, concerning the affection are given with abundant detail, great truthfulness, and much simplicity. The reader cannot fail to notice the almost unvarying testimony given in favour of the highly infectious nature and extensive propagation of the disease-producing agent. It is enough to say, that the common reports show the indisputable fact, that the cattle-markets formed foci of infection; there, diseased and healthy animals were mingled together; the healthy often fell ill before they arrived at the farms of their new masters; here they tainted the pastures and contaminated the stalls; the cow-leech who examined

(a) Since writing this paper, I have read the Review of Carpenter "On the Mutual Relation of the Vital and Physical Forces."

I have further on, as an explanation of the use of the term "physical forces" inherent in particles of matter, suggested the comparison between the vital force and light. That the former bears a similar relation to the physical forces which light does to the rays of the spectrum.

their mouths was frequently observed to have given the disease to other stock, and on other farms, by the infectious matter attaching to his person or his clothes. Indeed, the extension of the disease by infection, and the multiplication of the matter of infection, were proved beyond all doubt. Further, the disease could be propagated by inoculation. Here I would impress the necessity for observing the analogy between this affection and the epidemic disease of the vines. In using the word *analogy*, let me state the true and proper meaning of the term: "It is the sameness of the end with the difference of the means."

All plants and animals breathe; the same end is accomplished, however, by different means; the stomata of plants, the spiracula of insects, the gills of fish, and the lungs of man, are analogous organs.

The epidemic cause, whatever it be, has for its end extensive disturbance of the economy of all those living beings on which its influence is exerted, and the conversion of other matter into a condition capable of exercising the same power; in other words, its end is reproductive.

Dr. Sutherland, in his Report on the Cholera, cannot avoid touching on this peculiarity. He says, "It appears as if some peculiar organic matter, which constitutes the *essence* of the epidemic, when brought in contact with other organic matter proceeding from living bodies or from decomposition, has the power of so changing the condition of the latter, as to impress it with poisonous qualities of a peculiar kind similar to its own." And this is doubtless the fact; but, as far as our present knowledge extends, we have no means of explaining the process by which matter impresses other matter with properties similar to its own, except we assume that such matter possesses the property of life.

The observations made on the epidemic disease of cattle apply equally to the third disease I have mentioned for comment, viz., measles; I shall, therefore, here only allude to the fact, that measles, or rather that which causes the affection, may be multiplied, either by inoculating with the blood, or the serum from the vesicles of a diseased individual, which is truly by contagion; or multiplication may occur by the transmission of the infectious matter by a variety of means from place to place, or from one person to another.

Thus it appears, that, in the three diseases selected, there is a reproductive faculty in the matter which engenders them; and that, during the development of this faculty, a force or power is exercised on the vital fluids and tissues of plants and animals superior to that force, or those forces, which sustain them in health and vigour. That this law applies, with certain modifications, to all pestilential and epidemic diseases will be made manifest in the sequel.

If, then, it be true, that the matter which causes epidemic disease has the power of reproducing its kind, it follows of necessity that that matter should be subject to the same laws as all living beings; and if we take reproduction as the primary law, the germs of disease in their relation to the material world ought to show an obedience to the same subsidiary laws which govern and affect the germs of plants and animals.

It will be my endeavour to demonstrate these relations by a systematic arrangement of the laws universally acknowledged to obtain in connexion with individual life; but, before doing so, it will, perhaps, be useful to refer to that chemical process which has been considered most nearly to resemble the operation of the morbid poisons. The idea of resemblance is, to say the most of it, more fanciful than real; I allude to catalytic action; those who entertain the notion that catalysis explains the action of the morbid poisons on the fluids of the body, or on their chemical constituents, have arrived at this opinion from the necessity they found for explaining how it happened, that so very minute a portion of any matter could induce so extensive a chemical change as is known to occur in the case of inoculation with the morbid poisons. There is no doubt that a wide range of chemical decompositions may be included under the term catalytic; but, from all that can be gathered on this subject, it would appear, that catalysis is really nothing more than a modification of chemical affinity.

Mr. Mercer has pretty clearly demonstrated this, in a communication to the British Association, the details of which are contained in the Report for the year 1842.

But suppose we were to admit that catalysis could explain the morbid chemical changes of the body under the influence of pestilential disease, we have yet to discover in the process of catalytic action, that the agent or excitant

increases in quantity or intensity; and until this discovery is made, neither this nor any other simple process of chemistry can be admitted to offer a plausible explanation of the phenomena attendant on the rise, progress, development, and subsidence of infectious maladies.

The chemists would have us believe that diseases are due to a process analogous to fermentation, or putrefaction, which they explain by saying, that certain (unknown) forms of matter acquire a motion of their ultimate particles which they are capable of communicating to other particles of matter equally unknown; for though we are told that putrefying animal matters possess the power of inducing fermentation and putrefaction, we are quite left in the dark as to the nature of these energetic particles.

We are told that casein and fibrin are convertible into fat, and that the transformation is attended by the development of fungi, which appear to appropriate the nitrogen of the fibrin and casein to their own use. Now, is it not more rational to suppose that the cell-force is, in this instance, the decomposing power, than to imagine some extraordinary molecular arrangement of particles, and to endow them with forces of an unknown character. The very essence of power is resident in the living cell. The cell possesses an arrangement of particles adapted for the exercise of its relations to matters with which it may come in contact, and is unquestionably all-powerful in bringing about a vast amount of the change in elementary arrangements which we know to be constantly going on. The vital force appears to have similar relations to the physical forces which light has to its rays. It may, as it were, be considered primarily divisible into light, electricity, and heat, and an arrangement may be made of the forces to correspond with the colours of the spectrum, thus:—Light, chemical action, electricity, magnetism, heat, motion, and nerve force.

But not to digress.

Passing now to those laws which have special reference to living beings, I have endeavoured to make a classification of them, more for the sake of being explicit, than as an attempt at anything absolutely definite.

We find that all living beings produce their kind, to which we give the term "reproduction." I place this, therefore, as a primary law, and consider all other laws as secondary. The secondary laws I divide into objective and subjective, using these words in their English sense.

Under the objective laws I regard—	Under the subjective laws I regard—
1. The diffusion or dispersion of germs.	1. Seasons of activity.
2. Their static existence.	2. Climatic influence.
3. Duration of active existence.	3. Relation to latitude.
4. Period of Development.	4. Subjection to physical forces.
5. Intermitent reproduction.	5. Influence of locality.

The diffusion or dispersion of everything that lives no one can imagine to be conducted without reference to order, system, or law.

In the investigation of this law, by which the agents of disease become disseminated, or, as it may be called, the law of dispersion, we have but to refer to our own individual experience to discover its principles. We know that the agent of hooping-cough floats in the air, and that the poison of fever is wafted to a distance by the breezes; we know that the virus of small-pox, barely sufficient to moisten an ivory point, may be dried, wrapped in a piece of paper, and enclosed in a chest, it may be transported to any part almost of the habitable globe, harmless as the ivory on which it rests, or the paper which enfolds it; wherever may be its destination, it has but there to be placed in circumstances and under conditions for its dispersion on new lands, or in foreign climes, and its work of propagation and extension proceeds. We carry about with us the invisible poison-germs of scarlet fever, measles, and erysipelas, and are their unconscious disseminators. Waters flowing through paludous districts may and do carry the poisons of cholera and dysentery, so that those who drink of them become affected with these diseases. All this is well known. But what do we gather from these facts?—that, by the air, by the water, and by the hand of man, the dispersion and diffusion of the germs of disease have been brought about, and by the same means also has the earth become clothed with vegetation, and the water and the land peopled with their multitudes of animal existences.

[To be continued.]

PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

QUEEN'S HOSPITAL, BIRMINGHAM.

By W. J. MOORE, Esq.,
House-Surgeon.

DISLOCATION AND FRACTURE OF THE LOWER JAW.

WHEN the lower jaw is fractured, it is often a matter of some difficulty to keep the broken parts in apposition, on account of the strength of the muscles attached, and the strain caused on the parts by their spasmodic action. When the accident occurs to a child, the difficulty is tenfold increased; and it is more than probable in such a case, that union without deformity will not occur; also, when there is dislocation as well as fracture it renders the case an awkward complication. Of course, the more approved method is that of fastening the teeth together, which, with the help of suitable bandages, generally succeeds; but it occasionally happens that this plan will not do, and that the posterior portion is pulled towards the centre of the mouth in spite of all; then, in such a case, a piece of wood passing transversely across the mouth and propping the teeth has proved of great service.

Among other cases, the following have been treated at this hospital.

Edward Cregoe, aged 14, was admitted, under the care of Mr. Sands Cox, on the 15th of October, having received a kick from a horse on the side of the head and face. There were present, pale features, feeble pulse, and other symptoms of partial collapse. He was, however, sensible, and could readily answer questions. The mouth was found open, the chin slightly protruding and somewhat turned to the right side; there was also much swelling about the zygoma and articulation of that side. As it was evident a dislocation existed, pressure with the thumbs was had recourse to; and, after some manipulation, the jaw appeared returned to its proper position. There was, however, no noise heard during the reduction, but he evidently could move it in a greater degree. After the application of suitable bandages, he was put to bed, where he remained some hours before he quite recovered from the collapse consequent on the accident.

The next day the swelling of the side of the face was much increased; but, on examination, Mr. Sands Cox detected crepitus near the upper portion of the perpendicular ramus. This fact, however, required no modification in the treatment, and the boy went on favourably, the only medicines requisite being a dose or two of calomel during the stage of re-action.

He ultimately left the hospital on October 24th, feeling his jaw nearly well; and in the course of another week again presented himself, able to bite the hardest crust with ease.

The features of interest in this case are—1st. That the fracture occurred in the perpendicular portion of the bone, the horizontal ramus being by far the most frequent seat. 2nd. The occurrence of dislocation of one condyle only, dislocation of both being generally present; and 3rd. The occurrence of dislocation in conjunction with fracture. Here, however, no modification of treatment was necessary; but, had the fracture occurred in some other portion of the bone, the treatment would probably have been attended with more difficulty.

COMPOUND FRACTURE OF THE LOWER JAW.

Patrick Welsh, aged 40, admitted June 24th, under the care of Mr. Knowles. He had half an hour before received a kick on the lower jaw, which caused a fracture, oblique in direction of the horizontal ramus of the left side. The mucous membrane was lacerated much, and one of the teeth lost, while the broken parts were more than half an inch separate. There was also a good deal of bleeding. This having been stopped, the parts were brought into apposition, and with much difficulty kept in place by means of thin strong wire passing round the adjacent teeth, aided by a piece of wood passing across the mouth, from the first molar on the right side to the first tooth of the fractured portion on the left, thus

propping the parts in position. A gutta percha support was also adjusted beneath the jaw, and a four-tailed bandage used. He went on well, requiring only a dose of opening medicine. There was swelling beneath the tongue for a few days, but that decreasing, he was eventually made an out-patient, on July 12th, stating that he could eat meat and crust with facility. The support, however, was not taken away for some days afterwards.

In treating such cases, some dexterity is required in the adjustment of the wire, lest, by pressure, ulceration of the gums take place. It is well to use two or three rounds of wire, passing them, not only between the two teeth next to the fractured portion, but also between the second and third from that part, in order that the stress should not all rest on one tooth, and that tooth often shaken in its socket by the violence which produces the fracture. It is also worthy of notice in how short a space of time fractures of the jaw will become firm, which evidently depends on the vascularity of the part.

COMPOUND FRACTURE OF LOWER JAW IN A CHILD.

Bridgett Varney, admitted August 3, under the care of Mr. Knowles. A short time previously she had been run over, and there was a large scalp wound extending over the right parietal bone, and a fracture oblique in direction of the right horizontal ramus of the lower jaw. There was also extensive laceration of the soft parts, and the fractured portions were some distance apart. One tooth, the last molar, was deficient, and the fracture extended from its site obliquely backwards towards the angle of the jaw. Under these circumstances, no retentive means could be employed within the cavity of the mouth; and, indeed, had this been possible, the crying and struggling of the child would have rendered it a matter of no little difficulty. External means were therefore had recourse to, and a very strong piece of gutta percha applied, which, with a bandage, kept the parts somewhat in apposition. Still, however, they could not be accurately adjusted; that is to say, they would not remain so. The child, however, speedily recovered, and now has but little deformity, and that little evidently disappearing as she grows older. The scalp wound was some time healing after the jaw was quite strong.

GENERAL HOSPITAL, BRISTOL.

By WM. MICHELL CLARKE, Esq.,
House Surgeon.

THE following two cases will be found to be exceedingly interesting, and in many points practically important. They touch upon one or two points, which have lately been much talked about, and which have caused some excitement in the surgical world, viz., the perineal section, Wakley's (or Courtenay's) instrument. The first case will show itself to be a successful one of perineal section. The second will demonstrate that there may be a case in which the catheter of Wakley's apparatus cannot be passed into the bladder, though the tube may be already introduced. There is a case now in the hospital, and which I will report on a future occasion, which also exemplifies this point.

RUPTURE OF URETHRA—PERINEAL SECTION FIVE WEEKS AFTERWARDS.

Henry Walton, aged 14, admitted under the care of Mr. Lansdown, on the 29th April, 1850.

By a fall on the perinæum he had ruptured his urethra, and there was a large extravasation of urine, extending forwards to the abdomen. By free incisions this was relieved. An endeavour was made to pass a catheter. The attempt failed, and for a period of about a month the urine was discharged through the wound. At the end of that time the injury was much repaired, and the urine was being discharged through a fistula in perinæo. On the 24th of May he was taken into the operation room, and chloroform having been inhaled, Mr. Lansdown cut down to the membranous part of the urethra, and having opened it, introduced a gum-elastic catheter. This catheter was allowed to remain in for three weeks. It was then taken out, thoroughly coated with earthy matter, which was soft; the catheter was thoroughly destroyed by the action of the urine. However it came out

entire, though its withdrawal gave much pain. A fresh elastic catheter was then introduced, and another every two or three days.

On the 2nd October he left the hospital. His fistulæ were all closed, and he had a good and continuous urethra. He attended occasionally to have a catheter passed, until April 3rd, 1851. During all this time he remained pretty well, and complained but little; usually he passed his urine with great freedom, but occasionally he had great difficulty. On this day he was very ill, suffering from retention of urine, which had existed twenty-four hours. He said that the retention was caused by a lump in his rectum. On passing his finger into the rectum I felt a calculus at the neck of the bladder. This being pushed back, he passed his urine freely.

The operation of lithotomy was afterwards performed for him by Mr. Lansdown, and in a little more than three weeks he was discharged. Now, he is a servant-boy of this hospital, in the enjoyment of perfect health, and having as free a stream of urine as he ever had.

EXTENSIVE LACERATION OF PERINÆUM.— RUPTURE OF URETHRA.

FRACTURE OF LEFT OS PUBIS.—HÆMORRHAGE.—INTRODUCTION OF CATHETER.—WAKLEY'S APPARATUS.—GUTTA PERCHA CATHETER.

Henry Jones, aged 20, a plasterer admitted under the care of Mr. Lansdown, on Jan. 29, 1851. He had fallen from a shed ten feet high. In his fall he came across a beam. There is a very severe laceration of the perinæum, running forwards from the anus. Underneath the integuments, the finger can be passed its whole length, and moved freely from side to side. Hæmorrhage is very profuse, arterial blood running in a stream down his thigh.

An attempt was made to pass a catheter, but the urethra was found to be ruptured, and it came freely through the wound. The further orifice of the torn urethra could not be found. On passing the finger into the rectum, no laceration of it could be felt, but there was now and then an escape of gas through the wound.

A large piece of sponge was pressed into the wound, and over this was placed a graduated compress, which was fastened by a T bandage and roller. He now became somewhat faint, and had some wine given him. He was put to bed, and cloths wrung out of cold water were applied to the lower part of his abdomen and to his perinæum. At 3½ p.m. there was a recurrence of hæmorrhage. He lay in a pool of blood. The bandage had slackened, and the compress was loose. This being the case, a large cork was put on the compress; they were pressed on the wound by the T bandage. To keep up the pressure, a portion of a roller was carried from the front of the abdominal portion of the T bandage over the left shoulder, and fastened to the back of the bandage. By this means considerable force was attained. This was effectual. This hæmorrhage left him exceedingly weak, with a pale, waxen aspect, a moist and clammy skin, and a hæmorrhagic pulse. On the 30th, at one o'clock, there had been no return of the bleeding. He was very weak. His bowels had not moved, nor had he passed any urine. Another attempt was now made to introduce a catheter. But it failed, the further end of the ruptured urethra not being discoverable. The root of the penis seemed to be entirely torn away from its bony connexion.

Compression was continued, and he was ordered:—

Semicupium statim. Ol. ricini, ʒiii., s.s.

He did not bleed in the bath. In the evening he passed urine, with much smarting in the wound. He felt relieved. On the 31st, in the morning, his face was sunken and pale. His pulse 120, full and soft. His bowels had not moved. He had passed urine in the bed; but the bladder was very much distended, and the lower part of his abdomen was very sore. Scrotum and penis purple.

Haust. purg. (pulv. jalap., mag. sulph., ol. menth. pip.) ʒj., s.s.

On Feb. 1st, his general condition was much as on the day before. Bowels not moved; he had passed urine freely, yet the bladder remained much distended. The wound was suppurating freely; it had a grey appearance.

Ol. ricini, ʒj. s.s.; lot. calcis chlor. vulneri.; calcis chlor. aquæ.

On the 2nd, he felt better; his face was less pale; pulse 96, small and soft; bowels moved many times; none of the

motions came through the wound. He had no control over the sphincter ani. He passed enough urine through the wound.

Soon after nine on this evening hæmorrhage to the amount of some ounces took place; it was arrested by compression.

At 11½, it recurred, and more profusely. His bed was lifted under a gas-light, and the wound was carefully examined. The blood came from the anterior part, where the integument was not divided. The vessel was in the position of the superficial perinæal artery, but seemed larger than it. An incision was made down to it, but by this time it had ceased to bleed.

An attempt was now again made to introduce a catheter. The symphysis pubis was searched for, and, while this was doing, the finger passed into a gap, which was bounded by rough bone. This was evidently a fracture of the left os pubis, near the junction of the body and ramus. This gap was widened by separating the thighs, and *vice versa*. After some further trouble, the further orifice of the urethra was found, and a director having been introduced, a catheter (No. 7, gum elastic) was passed along it into the bladder; nearly a pint and a-half of ammoniacal urine at once came through it. He was placed on a double-inclined plane, with his thighs very much bent on the pelvis, and bandaged together. The catheter was fastened in.

On the 3rd he was more comfortable; an abundance of urine had been passed through the catheter; none had come through the wound. In the evening he was ordered

Liq. opii sed. mxx.; tinct. hyosc., ʒi.; aqua, ʒi., s. s.

On the 4th he was reported to have passed a very good night. Bowels not moved; urine came freely through the catheter; a little leaked through the wound.

To have middle diet (broth and rice) and a pint of beef-tea daily.

On the 5th, his bowels not having moved, he was ordered

Ol. ricini, ʒi., s. s.

The same diet, with a mutton-chop daily.

On the 6th the compresses were removed and the catheter was changed, (No. 10 put in). The catheter was fastened in.

He was very feverish; bowels moved freely twice. Ordered

Mist. feb. simp., ʒss.; mist. camph. ʒss. Ft. haust. 6tis horis s.; pt. hst. nocte; ung. terebinth. vulneri; potas. nit. liq. ammon. acet. 9 (turp. et resin ointment).

On the 8th he was better, and less feverish; the urine passed freely through the catheter; bowels not moved. He is kept in the same position; the wound looks well, and is granulating healthily.

On the 9th the catheter again required changing; No. 12 gum-elastic was introduced; but in the evening, as no urine came through it, it was removed, and No. 8 was introduced. The No. 12 was blistered and spoiled. This day he was placed on his right side, with his thighs bent strongly on the pelvis, and fastened to the bed.

Pr. haust. opiat. et mist.

Chop, and beef-tea, a pint daily.

On the 12th the catheter was changed and the bladder washed out with warm water. The mode of passing the catheter was by passing the finger into the wound and keeping it upon the further orifice, as the catheter was withdrawn so as not to lose the orifice. Bowels confined, though he took castor-oil yesterday.

Ol. ricini, ʒss., s. s.

Full diet, (meat six times weekly; potatoes; beer, one pint).

On the 13th the catheter again required changing,—one made of gutta percha (No. 8) was substituted for the gum-elastics previously used.

The bowels had been moved.

On the 17th he had been turned on his left side, the integument over the right trochanter having become sore. The catheter was changed, and a gum elastic put in, as we had only one of gutta percha. The gutta percha catheter was a good deal coated with white deposit. After cleaning, it was quite as good as before it was used.

The wound remains very open, and by measurement the orifices of the ruptured urethra are exactly an inch apart.

On the 18th the catheter was choked, and again required changing; one of gutta percha was introduced.

On the 19th, it was reported for the first time that he had regained perfect control over the sphincter ani.

On the 20th the catheter was changed. The urine has

been very offensive for a week past, and a good deal of mucus comes away with it. Bare bone in the direction of the fracture can be felt with a probe.

The catheter introduced was of gum elastic.

On the 23rd the catheter was changed; one of gutta percha was introduced. This time the catheter remained clean until March 2nd. On that day it was changed. It was a good deal coated. A gum elastic was substituted.

On March 5th the catheter was quite choked, and required to be changed; a gutta percha was introduced.

The catheter remained clean until the 15th, when it was removed, cleaned, and put in again. It was still quite as good as a new one.

On the 21st the catheter was removed, and a fresh one of gutta percha introduced; but the old one remained quite as good as ever.

The one used now is size No. 9. A small piece of exfoliated bone came away through the wound. On this day the wound was filling up gradually. The urethra remains in much the same state.

On the 24th the catheter slipped out, and there was some difficulty in re-introducing it.

On the 29th it was changed.

On the 5th of April the catheter was changed. No. 9, gutta percha was introduced.

On this day an attempt was made to use Wakley's apparatus, in order that it might be necessary no longer to pass the finger into the wound for a guide. It was hoped that the index-rod would guide a catheter or tube. But, though one of the tubes was introduced in the usual manner, the No. 2 catheter of the apparatus could by no means be made to pass along it.

On the 15th the catheter was changed. Another attempt was made with the stricture apparatus, but it failed.

On the 19th catheter changed.

On the 5th May, catheter changed; gutta percha only always used.

On the 4th June the catheter had slipped out. Great difficulty was experienced in introducing another, and it did not seem after all to reach the bladder. Notwithstanding this, the urine came freely through it. A little came also through the wound.

18th.—Catheter changed. It still stopped at the same place, and did not seem to reach the bladder.

On the 28th the urine was still coming very freely through the catheter. None came through the wound, which was filling up very fast.

On July 4, he had an attack of orchitis of the right testicle. It was severe, but subsided under the usual treatment.

On July 21st the urine would not come freely through the catheter; when the catheter is out it comes very freely, per vias naturales, and very little comes through the wound. From this day no catheter was kept in. He had once a severe attack of inflammation of the left testicle, and as this subsided an attack of conjunctivitis and corneitis of the left eye. He went on very well; the inflammation of the eye passed off with active treatment, leaving a slight leucoma.

On September 28th he was discharged, at which time there was a slight fistulous opening in the perinæum, through which some urine dribbled, when he was "making water," but not else. By keeping his finger over the orifice of the fistula, all the urine was made to pass the right way.

By the middle of October, the fistula had quite closed, and the urine came in a full stream, per vias naturales. He had not the slightest incontinence of urine. His strength improved.

On the 1st November I again saw him, and he remained perfectly well. In the anterior part of the perinæum, a deep narrow gap only remains as a mark of the extensive injury.

Remarks.—I am afraid that the preceding report is very long, but it involves several points of such practical importance, that I have thought it best to intrude it.

First, then, I think that the method mentioned for arresting hæmorrhage from the perinæum will be found useful in many cases. Almost any amount of pressure can be obtained, and it can be easily modified. It was effectual in the case noted, and the hæmorrhage was most severe, and from a very large surface.

I think, that in cases of rupture of the urethra, a great deal of trouble should be taken to introduce the catheter, and every practical means should be tried before the attempt be given up as hopeless. It saves the patient so much in point

of time, danger, and suffering. When the catheter is introduced, the reparative process may go on progressively from that time. If it be not got in, at some time or other, the urethra must be restored, and that most probably by an operation, which is a very serious one. This was the case in the first of the present cases. It puts aside the risk of retention of urine, and saves the patient the sloughing and sores, which are so commonly caused by his being obliged to lie upon a bed soaked with urine, as it must be when that fluid is constantly dribbling through the wound. I think that it should be kept in constantly until the fistula is all but closed, and after that all that is necessary may be done by the occasional introduction of a catheter.

We had for a long time no means of introducing the catheter, except by using the finger in the wound as a guide. Much was this wished to be done without, for it would have quickened the case, and saved the man much pain. About this time, a report of Wakley's apparatus for stricture appeared in the *Lancet*, and I saw it. I was much struck with it, and thought that it would be the thing we wanted; for the report seemed to me to say, that the tube once introduced, all the rest was easily managed. That this would not always be the case, I have now proved, and that in a case where such an instrument, if practicable, would have been of extreme value. It was certainly not a stricture case, and perhaps it was one which the apparatus was not intended to meet. But I have made these remarks, thinking that, under like circumstances, they may save some one expense and disappointment. I had wished to say something of the value of gutta percha catheters, but must defer it until I send a report of a third case of the same kind, yet in the hospital.

THE MEDICAL TIMES.

SATURDAY, DECEMBER 20.

EXTRAMURAL INTERMENTS.

THE advice of Franklin,—“If you want a thing done, do it yourself,”—may, it seems, hold as to any individual or body, save and except our present Government; with respect to it, at least, the converse must be the rule,—“If you want a thing done, do nothing yourself.” This is well illustrated by the present position of the Extra-mural Interment question.

In 1849, the General Board of Health were directed (12 and 13 Vict. c. iii.) to inquire into the state of burial-grounds, and to frame, if necessary, a scheme to be submitted to Parliament for the improvement of interment in towns. This was done; and in February, 1850, the Report of the Board was presented to both Houses of Parliament. To detail the contents of that document does not belong to our present purpose,—nor is it necessary, our readers being generally cognisant of the whole subject. Suffice it to say, the Report presented a most fearful *exposé* of the conditions to which a civilised country could be reduced by allowing ecclesiastical emoluments and vested interests to ride roughshod over the sanitary weal of a people. It was there shown, in a special Report on Interments in foreign countries, that England had been one of the latest in Europe to deal with the question; while so far back as the Fifteenth Century the city of Nuremberg won the honour of having achieved the first victory over an ancient and dangerous abuse—a corruption of the practice of the early Christian Church—that of interment within the churches of a city. But not only was the mere practice of intramural interment thus detailed in the Report, but it was shown that the greatest neglect and avarice was evidenced in respect to the condition of the churchyards and vaults; that, whereas the *κοιμητήριον* of the Greek suggested to him “a bed of slumber,” the burial-places of our land were suggestive only of rottenness, corruption, and filth; and the effects produced, misery

and disease to the living. With such a Report before them Parliament could do no less than empower the Government to remedy the evils and guard against the dangers proved to attend the burial of the dead among a dense living population. This they did—and by large majorities. Fifteen months have now elapsed, and in what position are we at the present moment? In these days, when England is vaunting not a little her civilization and general progress in the arts and sciences, one might have thought that fifteen months was a period sufficient for Government, with the powers vested in them, to have done something on this subject; and yet it is now the confessed fact, that the Government have done nothing,—and, moreover that, until the next session of Parliament, they *can* do nothing. This has now come out authoritatively, in consequence of an interview of a Deputation of the Metropolitan Sanitary Association with Lord John Russell and the Chancellor of the Exchequer. It results from this interview, that a Bill having been prepared by the General Board of Health with the concurrence of the Government, the measure was passed in both Houses of Parliament the session before last, but which, though it had been in force as a statute for fifteen months, had resulted in just nothing; and that under the provisions of that Bill—prepared, be it remembered, by the Board of Health,—that very Board now found that they had not the powers requisite to carry into effect the purposes for which they were constituted! In contemplation of some action being taken upon this Bill, many of the burial-grounds in the Metropolis have been closed, and some parishes are absolutely without places of interment, their only resource being the extra-urban cemeteries; thus entailing ruinous expense upon the poor, or offering an inducement to that fearful practice of retaining the putrifying corpse in contact with the living, till the parish authorities interfere, and bury at their own expense. As a specimen of the results of such legislation, we present the following details, given by the Bishop of London to the Government:—

“In Kensington the existing burial-ground was so full, that after the lapse of a few months it would be absolutely impossible to inter more bodies, and the parish would be ready to purchase more ground; but it was felt to be imprudent to do so in the face of the decision of Parliament, that interment within the Metropolis should be discontinued; yet the Act which contemplated a place of sepulture beyond the precincts of the town remains unexecuted, and the consequence would be, that the parishioners would soon have no place of burial unless they dealt with the trading Companies.”

It appears, also, that the case of Lambeth is similar, if not worse.

But what consolation do we receive at the hands of Government, when this representation is made to them? The general tenor of the Premier's reply is, in effect, that he should be very glad to be rid of the matter,—that “Government had a great deal to do; and undertaking to be answerable for the removal and burial of every dead body in a population of 2,000,000 was really a serious matter.” So we should have thought; and that in proportion to its seriousness would have been the energy displayed in meeting the case. Instead of which, the legislation of one session of Parliament, and a period for negotiation extending over fifteen months, have only resulted in a *proposal* to buy up two cemeteries, which two cemeteries were only calculated to inter 6000 bodies in a year, while the mortality of London is to the amount of 58,000 or 60,000 annually. And this comes of the Government undertaking the extramural interment of our dead! But what said the Chancellor of the Exchequer?—that, it having been settled that no good could be done unless all the cemeteries were bought up, the Board of

Health sent in an estimate to the Treasury as to the amount required for this purpose; the result of inquiries, however, proved, that the Board was under the mark, and that it would cost *four times* that amount! Then, since Government were not to advance a sixpence, the question of borrowing was the next that presented itself; but they could not borrow, since they had no power of insuring the payment of a fee; and all this ended with the following sapient conclusion, on the part of the Board of Health: “Unless we have the management of all the burials in London and within fifty miles around it, with a power of charging a fee upon every death, *whether the corpse is buried by us or not*, we cannot borrow money.”

And so the matter rests—until the next session of Parliament. Now, what say our readers to this specimen of legislation? We had jobbery before, on the part of private individuals and bodies,—then Government undertook to clear the Augean stable, but from its first to its last act, in reference to the matter, it is one series of miserable blundering. We do not forget that this is the self-same Government that ousted the City of London of its jurisdiction as to Smithfield cattle-market; who professed that such a market was a nuisance; who steadily refused powers to the Corporation to remedy that nuisance and improve the market,—who, when that Body would have removed the site, and by so doing have got rid of one of the foulest plague-spots in London,—persisted in taking the nuisance away themselves, and just dropping it down (it is said) at Brentford! And yet, if a Deputation were to seek an interview of Lord John and ask,—as did the Bishop with respect to Interments,—What have you done towards a New Cattle-market? the reply must still be—“Nothing!”

Now, in this matter, we have nothing to do with politics. The colour—the political white or black—of the present Government, is nothing to us. Here is a great social evil—a source of demoralisation, disease, and death. We were not lacking in our efforts to induce the Government to take up the matter of Extramural Interments; and we rejoiced at what we then thought the application of an all-sufficient remedy. The result is before our readers; and we can only express our unqualified disappointment and disgust; for it seems to say, that there are matters in a State far more paramount in importance than the morals and health of its people,—that the foul causes which lay our fellow-creatures prostrate in death are of secondary importance, and only such as may be bungled over in a manner which suggests the Government as saying, “We never meant it after all.”

ECCE ITERUM CRISPINUS.

It was but a few weeks ago that we had to call the attention of our readers to an article in the *Edinburgh Monthly Journal* on the treatment of aneurism, emanating from the pen of Professor Syme. On that occasion we noticed, that the Dublin surgeons were those upon whom the Professor had poured forth the vials of his wrath because they had adopted, with great success, a method of treating aneurism which is likely to supersede that which the splenetic Edinburgh dictator of Surgery most affects.

It appears that the *Monthly Journal* cannot exist without some abuse, either of Dublin or London surgery; and an opportunity has lately been afforded to the surgical editor—Mr. Syme—to ring the changes upon the latter, by the publication of Mr. Bransby Cooper's work, on “The Principles and Practice of Surgery.” If our readers wish to see a specimen of impartial (?) reviewing, we beg of them to look

to page 541 of the said journal, where the critique on Mr. Cooper's book magniloquently and generously commences as follows:—

"We feel that a serious responsibility attaches to us in expressing an opinion of any surgical work, in consequence of the importance which is attributed by the London press to Edinburgh criticism in this department. During the last twelve months, the 'Operative Surgery' of Mr. Skey has been constantly advertised, with an intimation, that it has received the approval of our venerable contemporary the *Edinburgh Medical and Surgical Journal*, and a similar publication, by the Professor of Surgery in King's College, has been no less assiduously recommended to public notice, on the ground of having, in its original form, been favourably noticed by this journal before it came under our management."

Now we can assure Mr. Syme, that he need not allow any such feeling of responsibility to disturb his slumbers, or ruffle his temper; for the so much boasted *importance* of his criticism on surgical matters is merely the creation of his own brain. His monthly lucubrations are in truth only "important," inasmuch as they cause no little merriment here, and thus have the effect of producing some relief from the graver studies of our profession. And, indeed, the most curious and amusing production of a disordered mind is shown in the critique now before us. What on earth has the fact of Mr. Skey's and Mr. Fergusson's work having been favourably noticed on prior occasions to do with a review of Mr. Cooper's book? We have heard this question asked; and well may it be asked. Perhaps the surgical editor of the *Monthly Journal* will reply.

We shall not transcribe specimens of our Northern Contemporary's criticism upon Mr. Bransby Cooper and his book; suffice it to say, that if abuse in Mr. Syme's journal could have any of its desired effect, we are afraid that poor Mr. Bransby Cooper would almost be annihilated; but we hope and believe he will sustain the shock hurled by the magnanimous Northern giant against his devoted head. However, to be more serious before quitting this subject, we will treat our readers to the concluding paragraph of this wonderful review, and then they will see the cause of all:—

"Modern improvements in surgery, and their history, seem indeed to have engaged little of the Author's attention. In regard to 'Fissure of the Anus' he tells us, that he is indebted to Mr. Copeland for a knowledge of the disease and its remedy; while it is pretty well known that M. Boyer described the disease, and a surgeon of Edinburgh pointed out the remedy now in use. Excision of the elbow-joint, which has been performed by one surgeon in Edinburgh upwards of ninety times, he never so much as mentions. The division of obstinate stricture of the urethra by external incision, upon a grooved director, is also treated with profound silence; and amputation at the ankle-joint is minutely described without any allusion to the surgeon who introduced this operation; but with the truly original remark, that 'it is true that there is some difficulty in healing the stump, in consequence of the great thickness of the cuticle in this region; and this forms to a certain extent an objection to the operation.'"

Gentle reader, the why and wherefore of this angry review, is contained in this passage. It is curious how little some people have the art of disguising themselves. Mr. Syme has written about Fissure of the Anus; the "one surgeon in Edinburgh" who has performed excision of the elbow more than ninety times, is Mr. Syme; as we all know, he too is the author of that "speedy, safe, and effectual cure!!!" of stricture by external incision; and he it was who introduced amputation at the ankle-joint. *Hinc illa lachrymæ.* All future writers in surgery will now know how to avoid the terrible castigations of the *Monthly Journal*. The remedy is so obvious, and so forcibly pointed out, that we will not insult the understanding of our readers by mentioning it.

CLUB CERTIFICATES.

THERE are some facts connected with hospital practice, and gratuitous advice, to which we have long wished to direct the attention of our readers; and, as we are in possession of some information on the subject, we shall show good cause for occupying their time.

And first, on giving certificates to hospital patients; a point pertinaciously insisted on by many of them; and yielded by the surgeon out of pure kindness of heart, or to put an end to importunity.

Few men stop to consider to what this may lead; but if acquainted with the real state of the matter, they would very seldom do that which is, in a vast number of cases, worse than giving alms to the street beggar, and frequently places the club surgeon at the mercy of a man disposed to show him little consideration.

Let us put the case plainly before our readers. John Smith is member of a slate club at the Yorkshire Grey. He pays 6d. a week to the club, with certain fines in case of non-attendance at the meetings, arrears of payment, etc. One part of these sums, so paid by each of the members, is set aside for the expenses of the club, another for the payment of burials, etc.; and the remainder is devoted to the support of the members when sick. Thus, if John has the misfortune to break his leg, or to be attacked by illness, he receives for the first thirteen weeks from ten to eighteen shillings a week, for the second quarter of a year the half, and for the whole half year afterwards, a quarter of this sum.

To many poor men, this would appear a very snug thing to fall back upon; but John is probably a money-making person. He is also member of one or two other clubs,—he is a Forester or a Druid, and thus receives altogether, when ill, from a guinea to six or seven and twenty shillings a week. If work be slack, or John get some lucrative little job to do at home, a mild fit of indigestion, or a gentle ulcer on the leg, is quite a god-send, and hence, on such occasions, his first care is to be unwell.

To guard against the manifest iniquity of these proceedings, many of the clubs have surgeons attached, to whom they pay from 3s. to 4s. 4d. per head annually for medicines and attendance. This, to a young beginner, is a very comfortable thing, and the clubs are generally very sharply contested. They pay with the regularity of a banker; the post affords a good introduction to the wives and families of the workmen, and thus insures a number of small midwifery fees. Some of the societies number twelve or fourteen hundred members, and even more; and lastly, the average of sickness not being ordinarily above seven in a hundred, some profit is generally squeezed out of these small payments.

It being manifestly the surgeon's interest to maintain the club in the highest prosperity, he will not allow skulkers to batten on the honest members of the society, and he consequently takes care that no one shall have a certificate concerning whom there is ground for suspicion of foul play. Most of these clubs only allow money in cases of unavoidable illness and accidents not the result of the patient's own misconduct, and consequently they reject every case arising from drunkenness and dissipation. Now, this is a distinction the hospital surgeon or physician does not always draw.

From a notion of justice, and from a wish to prevent any member of the club being at the mercy of the surgeon, it has been ruled by most of the clubs that the certificate of any medical man shall be admitted as proof of right to receive sick pay.

Honest John, finding the surgeon will not allow him to sponge on the club, hies off to some hospital, or some medical

man from whom he can obtain gratuitous advice, and there makes out a case for a certificate, which is generally granted him. Now, it is not so much that certificates are given in cases which do not warrant them, as that they are used long after the circumstances which justified the surgeon or physician in giving them have passed away, and that the writers of the certificates know nothing of the persons to whom they grant them.

In many cases, the certificate of a hospital surgeon has been used to gratify private malice against the club surgeon, or has, where the surgeon has refused it, been handed in as a proof of the surgeon's ignorance. Several surgeons have been expelled or subjected to infinite annoyance and expense, in consequence of the use made of these certificates from the medical officers attached to hospitals. More often than otherwise, they are used as a cloak for idleness and peculation, especially by members of the clubs which do not employ a surgeon. Moreover, the majority of those persons who obtain hospital certificates, ought not to be receiving charity, being well able to pay for the advice they may consider requisite.

We therefore beg of medical men to pause before signing certificates, destined, perhaps, to aid some idle knave or hypochondriac in skulking through his time, and preying on what are in themselves useful institutions.

THE CHILDREN'S HOSPITAL.

WE are happy to announce, that Drs. West and Jenner have been appointed Physicians, and Mr. Pollock Surgeon, to the Children's Hospital. These appointments are most judicious, and augur well for the future usefulness of the new Institution. We entertain little doubt that we shall now find the diseases of children investigated with the same industry and success in London as they have been in the hitherto unrivalled hospitals on the Continent. Among the numerous recent charities of the Metropolis we know scarcely one more necessary than the Children's Hospital; and we hope that the public will not be slow in giving it their support.

REVIEWS.

A Practical Treatise on the Management of Diseases of the Heart and of Aortic Aneurism, with especial reference to the treatment of those Diseases in India. By NORMAN CHEVERS, M.D., Civil Assistant-Surgeon, Chittagong, Bengal, &c. 8vo. Pp. 145. Calcutta. 1851.

The author of this work is well known by the very excellent essays on the Structure and Diseases of the Vascular System which have appeared from time to time in Guy's Hospital Reports and in the *London Medical Gazette*.

Dr. Chevers' experience leads him to form the opinion, that diseases of the thoracic portion of the circulatory system are of comparatively unfrequent occurrence in India; and to incline to the prevailing belief, that cases of external aneurism are extremely rare.

A brief but excellent sketch of the principal adaptations which the several portions of the heart experience under circumstances of disease, together with the chief attendant alterations in the condition of other organs, precedes the chapters devoted to the special object of the work.

The organic lesions and their respective compensating adaptations—the latter themselves often constituting organic diseases,—given by Dr. Chevers, are the following:—

Uniform Pressure upon the Heart from Without causes narrowing of the heart in all directions.

Adaptations.—Dilatation of the caval system; dropsical effusions.

Narrow and Imperfect Development of the Chest.

Adaptations.—Dilatation and hypertrophy of the right ventricle; tricuspid regurgitation; great dilatation of the right auricle; venous congestion and its consequences.

Patency of the Foramen Ovale prevents dilatation of the right side of the heart, when the pulmonary circulation is obstructed.

Contraction of the Right Auriculo-Ventricular Orifice.

Adaptations.—Immense dilatation of the right auricle and venæ cavæ; engorgement of the venous system, and its consequences.

Regurgitant Disease of the Pulmonary Valves.

Adaptations.—Hypertrophy, or dilatation of the right ventricle; in the latter case also venous congestion.

Contraction of the Pulmonary Orifice.

Adaptations.—Considerable hypertrophy and moderate dilatation of the right ventricle.

Deficiency of the Ventricular Septum.

Adaptations.—Great hypertrophy of the right ventricle; usually contraction of the pulmonary orifice.

Permanence of the Ductus Arteriosus.

Adaptations.—Great hypertrophy of the right ventricle; dilatation and thickening of the pulmonary artery.

Narrowing of the Mitral Orifice.

Adaptations.—Dilatation of the left auricle and pulmonary veins; congestion of the lungs and bronchial mucous membrane; dilatation of the pulmonary artery; dilatation of the right side of the heart; systemic venous engorgement; dilatation of the aorta; dilatation of the left ventricle. Before obstructive visceral engorgement the left ventricle is small.

Contraction of the Aortic Orifice.

Adaptations.—Dilatation and hypertrophy of the left ventricle; after a while stretching of the left auriculo-ventricular orifice, and inefficiency of the mitral valve, "then the lungs, right cavities, &c., suffer, as in cases of narrow mitral." Dilatation of the aorta above the impediment from delay.

Aneurism of the Aorta and other more Remote Causes of Obstruction to the Systemic Circulation.

Adaptations.—Hypertrophy, and sometimes dilatation of the left ventricle. Dilatation of the aorta, and regurgitation from retroversion of the aortic valves, unless prevented by enlargement of the curtains, and alteration in their plane.

Inefficiency of the Aortic Valves.

Adaptations.—Dilatation and thinning of the left ventricle.

For a more enlarged account of the lesions and adaptations, Dr. Chevers refers to his Memoir on the Diseases of the Orifice and valves of the Aorta, in the seventh volume of Guy's Hospital Reports.

In the Second Chapter, Dr. Chevers lays down the following as the leading indications of treatment in organic disease of the heart:—

"1. To diminish, if possible, the valvular or other immediate causes of obstruction.

"2. To endeavour to remove all causes of impediment to the circulation existing in the lungs, abdominal organs, and capillary system generally.

"3. To lessen vascular distension by reducing the bulk of the circulating fluid, without impoverishing the system.

"4. To sustain or restore the power of the heart, and to reduce the capacity of its dilated cavities.

"5. To equalise the circulation, and to maintain free vascular action on the surface, by regulating the temperature, clothing, etc., and to provide due access of pure and well oxygenised air.

"6. To remove and avert irritation and excitement of the nervous system, and to procure, as far as possible, rest and tranquillity of body and mind."

The next six chapters are occupied with directions as to the best mode of fulfilling the above quoted indications. These directions show Dr. Chevers to be a man who has observed closely, and thought much about the class of diseases he is treating of. The concluding chapter of the work is headed General Principles of Treatment in Aneurism of the Aorta. It is little more than a reprint of a Memoir on the same subject, published in the *Medical Gazette*, Aug., 1845.

We strongly recommend this book to the attention of practical men.

Familiar Letters on the Physics of the Earth; treating of the Chief Movements of the Land, the Waters, and the Air, and the Forces that give rise to them. By HENRY BUFF, Professor of Physics in the University of Giessen. Edited by A. W. Hoffman, Ph. D., F.R.S., etc. Pp. 273. 1851.

The rapid progress of science in relation to the subjects embraced in a study of the Physical Phenomena of the earth, renders the above volume a valuable text-book to the man of education, though not precisely of that character which would commend it to the strictly scientific reader. In fact, the Editor confesses, that the author's object was not so much to offer new facts to the man of science, as to afford to a large circle of readers some assistance in obtaining clearer views and more precise notions of the processes which are at work, on the largest scale, on the theatre of our earth, of the laws by which they are governed, and of their influences on the condition and general features of the surface of the globe. The work appears to us likely, in great measure, to fulfil the intention of the author, who is indebted, we may add, in no slight degree, to Dr. Hoffman for his careful editing.

PROVINCIAL CORRESPONDENCE.

IRELAND.

SALARIES UNDER THE MEDICAL CHARITIES ACT.

THE division of the Irish Unions into Dispensary Districts, and the fixing of salaries by the several Boards of Guardians in pursuance of the provisions of the above-named Act, has been proceeding regularly in the various counties in Ireland since we last brought this Bill under the consideration of our readers. We have watched the proceedings with no little care and anxiety, and, while we have gladly witnessed the liberal spirit in which several of the Boards of Guardians have acted in fixing the salaries of the medical officers to be appointed in their Unions, we have, on the other hand, been pained to learn, that a false economy and parsimonious feelings have been evinced in other quarters. The sum of 100*l.* per annum has been voted in many Unions, while in others 50*l.* has been deemed ample compensation for an officer who, we beg to remind our readers, is not only required to give advice at his dispensary, but also to attend such patients as may require it at their own homes; in addition to which he is obliged to examine and certify in cases of lunacy without any further fee or reward; while, as to the duties of vaccination, also imposed upon him, there is no guarantee as yet, at least, that his services will be requited. This, however, is at the disposal of the Commissioners. At a time when there was but little fear indeed that too large salaries would be voted in any single instance, we have witnessed with indignation the very unnecessary and improper interference of Mr. Senior, himself an officer of the Poor-law Commission,—holding the post of inspector. We cannot conceive anything more distasteful or improper than this gentleman's volunteered opinion as to the proper salaries, as he supposes, for the arduous duties of the dispensary physician under the new Act. He is perfectly well aware of the general tendency on the part of Irish guardians to cut down the stipends of their medical officers to as low a figure as they possibly can get the work done for; and nothing can be more offensive to the professional body, than thus to see any person throw the weight of his official opinion, in the most uncalled-for manner, against their interests. If the Medical Commissioner possesses as much *esprit du corps* as we give him credit for, he will not suffer this gentleman's conduct to go unproved. We confidently anticipate, that he will also have the pecuniary interests of his brethren adequately provided for; and we hope to see the decisions of more than one Board of Guardians, as to salaries and extent of districts, overruled by the fiat of the Commission. How is it, that we see no mention made in the proceedings of any of the Boards of Guardians of provision for apothecaries in the several districts?

NOMINATION OF INSPECTORS UNDER THE MEDICAL CHARITIES ACT.

We are enabled to announce, that the following gentlemen

have been nominated as Inspectors under the above-mentioned Act. Dr. Geary, of Limerick; Dr. Purcell, of Carrick-on-Suir; Dr. Hill, of Dublin; Dr. Knox, of Strangford; and Dr. Dillon, of Castlebar. It is not yet determined, we believe, in what manner, or in what districts these gentlemen are to exercise the offices conferred on them; we may, however, surmise, that a division of all the Unions of Ireland into five chief districts will be made, each of which will come under the supervision of a separate Inspector. The choice of men well known in their respective localities, and who it is to be presumed have acquired an intimate acquaintance with the general medical requirements of their districts, will much facilitate the labours of the Commissioners, especially in determining questions as to the extent of Dispensary districts, amount of duties imposed on the Medical Officers, and consequently the rates of remuneration suitable for particular country neighbourhoods, in many of which the Dispensary physician has but little to expect from private practice.

VACANCIES, &c.

By the appointment of Dr. Hill as Inspector under the Medical Charities Act, the office of Lecturer on Practical Anatomy and Demonstrator in the School, Trinity College, becomes vacant.

The office of Professor of Practical Anatomy to the Royal College of Surgeons, Ireland, vacant by the elevation of Dr. M'Donnell to the post of Medical Commissioner, was, on the 15th current, conferred on Dr. John Hatch Power, University of Dublin. The Right Honourable the Lord Chief Justice Blackburne has been nominated Vice-Chancellor of the University of Dublin in the room of the Lord Primate of Ireland, whom the Board of Trinity College have selected as Chancellor. The name of the Lord Primate is Lord John George Beresford, not Dr. Whately, as was stated by mistake in our last week's impression.

GENERAL CORRESPONDENCE.

LAW AND MEDICINE.

[To the Editor of the Medical Times.]

SIR,—By way of animadversion, allow me to observe, that the gratuitous slander recently levelled at the Profession of Medicine by more than one of the Judges of our law-courts, evinces a disreputable feeling—an animus obviously derogatory of the dignified office of dispenser of justice.

We have read somewhere, that “comparisons are odious,”—a saying never more happily exemplified than as regards the comparison of law with physic, inasmuch as the former has been termed a luxury, the latter a matter of necessity. If the quintessence of chicanery be a luxury, law most certainly is entitled to a place in the same category.

Unfortunately, it is too generally the case, that while we enjoy health we are apt to disregard the value of the noble art and science of medicine and surgery. We do not sufficiently consider their worth until sickness, the destroyer of all our terrestrial enjoyments, has overtaken us. What science, I would ask, can boast of so many victories or triumphs over the King of Terrors, as medicine and surgery? What unspeakable consolation do the promises of preservation by his physician afford a man in sickness, bowed down with despair? Oh, how he would cling to the earth in the dismal hour of dissolution, on the least promise of his physician as to his restoration. Can any other science rescue mortals from the portals of death, and restore them to health and happiness? No. Surely then, above all others, the superiority of the science of medicine and surgery will be evident on aggregating the utilities and advantages resulting from the practice of our noble Profession.

For what would it avail a man suffering from disease, that a new metal was discovered, a new planet seen, or even a new law enacted? What would it profit a sickening mortal, we say, that the speculative sciences are carried to their utmost perfection, if no relief could be afforded to remove or remedy his bodily pain or mental anguish? We repeat, how little would it profit mortals in the agony of their distempers, to hear of the forests of Lebanon or the balmy mountains of Gilead, if there was no balsam for their wounds and no physician there?

It is not enough that we live in the world, but it is necessary that we live in comfort and happiness; it is not enough that we have an existence, but it concerns us all that we possess the fruitions of nature in well being. It therefore manifestly behoves all men in

health, inclusive of the gentlemen of the woollack (the corporeal sanity influencing greatly the mind and disposition,) to appreciate that science and that art which tends to the preservation and restoration of their terrestrial enjoyments and happiness, viz., the science of medicine and surgery, which as far excels all other arts and sciences as the sun excels the moon in glory and influence.

In conclusion, allow me to ask, in which of the Professions will you find so much real charity and liberality displayed, as in the Profession of medicine? Look, for instance, at the gratuitous aid supplied by our Profession in the public hospitals and elsewhere—to maniacs and parturient woman. I would add, Mr. Editor, "*Pulmam qui meruit*," and subscribe myself your obedient servant,
Wyke House, Brentford. E. BASCOMB, M.D.

HOMŒOPATHY—THE INFINITESIMAL DOSE.

[To the Editor of the Medical Times.]

SIR,—Amongst the various and varied methods which have been resorted to to enable the mind to comprehend the minuteness of what homœopaths call "an infinitesimal dose," I have not met with any that appears to me better calculated for that purpose than the following:—

The "homœopathic globule" is composed of two ingredients, namely, sugar and a medicinal substance. Now, small as the globule is, one of the first or strongest dilution contains 99 times as much sugar as it does of medicine; for the first dilution is made by rubbing down, or triturating, in a mortar, 99 grains of sugar with 1 grain of medicine, so that any given quantity of this compound bears a proportion of 99 inert parts to 1 active or medicinal. The second dilution is formed by rubbing down 1 grain of the first with 99 grains more of sugar, so that any given quantity of the second dilution bears a proportion of 9999 inert parts to 1 active. The third dilution contains 999,999 inert parts to 1 active, each succeeding dilution being 100 times weaker than the preceding, and so of all the dilutions to the thirtieth, to which degree there are upwards of seventy medicinal substances in Quin's "*Pharmacopœia Homœopathica*," so directed to be prepared.

Now, to show the quantity of sugar required to dilute one grain of medicine to the 9th degree only, we will suppose a shaft of the former three feet square, (and to begin with) half a mile long, lying before us. Having ascertained that a cubic inch of sugar weighs half an ounce, it follows, that about 3 inches, sliced from the end of this shaft, and weighing 121 lbs., will be the quantity required to dilute 1 grain of medicine to the 3rd degree. To carry on the process of dilution with the said grain to the 4th degree, will require of the above shaft of sugar 25 feet, or about 5 tons: 5th degree, 2500 feet, or 500 tons; 6th degree, 250,000 feet (50 miles), or 50,000 tons; 7th degree, 25,000,000 feet (5000 miles), or 5,000,000 tons; 8th degree, 2,500,000,000 feet (500,000 miles), or 500,000,000 tons; 9th degree, 250,000,000,000 feet (50,000,000 miles), or 50,000,000,000 tons!

Thus, it is undeniably evident, that if the whole of a grain of medicine be diluted (as directed by Hahnemann and the homœopaths) to the 9th degree only, it will require of the above-described shaft of sugar, 50 millions of miles, the weight of which would be 50 thousand millions of tons!

Again, if 250,000,000,000 feet (the length of the said shaft required for the 9th dilution of one grain of medicine), be multiplied by 9, it will give the number of cubic feet which it contains; and if this be divided by 30,000,000, which is about the number of cubic feet of air contained in the Crystal Palace, the quotient will be 75,000. In other words, the quantity of sugar required to dilute a single grain of medicine to the 9th degree only, would fill the Crystal Palace 75,000 times. The above calculations have been made in round numbers for the sake of convenience. The quantity of sugar required, would be considerably more.

A GENERAL PRACTITIONER.

PROVIDENCE ON THE PART OF MEDICAL MEN.— LIFE ASSURANCE—THE MEDICAL BENEVOLENT COLLEGE.

[To the Editor of the Medical Times.]

SIR,—I am a young practitioner, married, and totally dependent for support on my practice, which, I regret to say, is as yet very small. On this point, however, I do not despair. As the district in which I live increases, and the older practitioners are removed, I hope to get on.

At the same time, it is impossible not to look with some degree of apprehension to the future,—to the time when sickness may for

a time interrupt, or death for ever put an end to, my labours; and this, perhaps, before I shall have been able, out of my scanty earnings, to lay by anything for my widow and her orphans, who would be then left to the chance charity of strangers, or else to that last home of not a few of our professional brethren and their families,—the union.

My attention has been frequently drawn to the advantages which are alleged to arise from subscribing to Mr. Newnham's Benevolent Fund, and Mr. Propert's Benevolent College; and, as these projects are being energetically brought under the notice of the Profession, many of the younger members of which may be in the same or a similar situation with myself; perhaps, sir, you will not consider the few remarks I am about to make as quite out of place.

These two objects are doubtless promoted with the very laudable and charitable desire of doing something to alleviate the distress so prevalent in every class of the Profession; and certainly to the poor superannuated practitioner who finds his small practice daily dwindling away, and whose short sojourn in the world is fast drawing to a close—such a relief and such an asylum are of course invaluable. But I do not think that the young beginner should consider such a home as prepared for him. While there are benefit societies—while there are assurance offices—(the benefits of which are certain, and not, as I apprehend the relief to be derived from these medical charities is, very uncertain, and totally depending on the number and the necessity of the applicants, and on the funds in hand)—while he can save four or five pounds a year to invest in some one of the many forms of assurance daily offered to the public; and who, even among our poorest brethren, cannot do this?—while this is possible, I repeat, he should learn to be independent of such relief. The ignorant and starving field-labourer repels with a feeling akin to pride the idea of becoming a claimant for parochial relief; and should the educated professional man make no exertions to provide for the future—lay up no provision for the time of his distress, but be content with the thought, that at the worst, he can become a supplicant for shelter, in what, with all due appreciation of Mr. Propert's benevolent feelings, must be called an almshouse?

I believe, that the feeling that there is a "college" to fly to for relief will do much to increase the improvidence, which is, I may say, a distinguishing feature of medical men; and, although in cases similar to the one I have supposed, such an institution may be very useful to him who is now too old to insure with advantage, and who may soon come to want; still I would have the feeling encouraged, that it would be unfair—dishonest to such an institution itself, to look forward to it for future aid, while one has youth and power to work, and while there are those who have not.

Give a guinea, by all means, if you can spare it, to Mr. Newnham's Fund—to Mr. Propert's College; in our over-crowded Profession, the young and strong should pay something towards the support of the old and infirm, whom they are daily pushing off the field; but let us also remember to be provident before we are generous.

It cannot be provident to depend on relief, which, if it come at all, is but uncertain in its extent. It cannot be called a provident act to subscribe to Mr. Propert's College; for, although the list of subscribers he has published is a long one, still there remains much more money to be collected; and who knows whether, when the building is finished, there will not be more applicants than there is room for? Who knows that the most indigent will be admitted; for it is patent, that in every charity much more is done by interest than by merit; and who will say, that abuses of this kind will not creep into this as they have done into many richer,—better established institutions.

And then, what is to become of the surplus,—the rejected ones, who now find that the doors of the home they helped to build (and, therefore, neglected to provide more certain relief)—of the home they looked forward to—are closed against them?

Let us first be provident,—let us strive to make some provision; and if, having so striven, we fail to make sufficient, we shall still be conscious of having done our best, and will then surely be more deserving of relief and of a home, than he will be who has done nothing for himself and those he leaves in penury.

I am, &c. M.D. & M.R.C.S.

GAS FROM VEGETABLES.—The Exeter papers contain an advertisement respecting the production of gas from vegetables. The author pledges himself that gas can be obtained from vegetables at the rate of 2s. per thousand feet, and that any one can make it for home consumption, by a process equally simple, safe, and secure. In announcing gas from vegetables as something novel, the advertiser seems to forget the vegetable origin of coal.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. Hodgson, Esq., F.R.S., President, in the Chair.

1. A CASE IN WHICH A COMMUNICATION APPEARS TO HAVE EXISTED FOR SEVERAL MONTHS BETWEEN THE STOMACH AND TRANSVERSE COLON, IN A CHILD FIVE YEARS OLD.
2. A CASE OF INTUSSUSCEPTION THROUGH THE ILEO-CÆCAL VALVE.

By ROBERT JONES, Esq., of Caruarvon.
(Communicated by Dr. Watson.)

Case 1.—A boy, five years old, one of a healthy family, was first observed to be unwell on the 10th of December, 1850; there was derangement of the stomach and bowels; patches of erythema nodosum appeared on the arms and legs, accompanied by languor, debility, and loss of appetite. These symptoms continued more or less during the whole month, and the child lost flesh. On the 31st, violent pain in the belly, accompanied by vomiting, occurred, and for two days there was vomiting of a dark-brown fluid, having an offensive smell, like that of pus from an indolent, ill-conditioned abscess. The vomiting ceased, but frequent attacks of pain, and a constipated state of bowels, continued. The food taken did not nourish the child; emaciation was progressive, the abdomen tympanitic, and there was frequent loud rumbling in the bowels; pressure gave relief. On the 20th of February vomiting returned, and lasted at intervals until the 10th of March, when diarrhoea supervened, and both pain and vomiting ceased. The diarrhoea continued, and appeared to give relief; the child took food well and slept comfortably, but did not gain flesh or strength. About the middle of May the bowels again became torpid and the appetite failed. A mild aperient caused great pain, without acting upon the bowels, but vomiting of stercoraceous matter ensued. During June and July the same state continued; there was no pain, but vomiting returned every second day unless the bowels acted. Before relief was obtained by the act of vomiting, he was always languid and oppressed, but for some time afterwards he was more cheerful, and was able to take food with appetite, and did not reject it. Medicine always caused vomiting. On August 2nd he died exhausted.

Post-mortem Examination.—The body was much emaciated; the abdomen distended; the colon dilated to twice its natural size, forming several coils, and appeared to occupy the whole cavity; the peritonæum was injected with some patches of ash-coloured discoloration, and some lymph adhered to it; the stomach was small, and contained some dark thick fluid; there was an adhesion between it and the transverse colon, and an opening allowing the passage of the finger from the one to the other; the small intestines were short and contracted; the colon contained some yellow matter, like that which had been vomited, and some scybala; the mucous membrane of the gut was healthy; the rectum empty; the other organs presented nothing very remarkable.

Case 2.—A man, 37 years old, of spare habit and delicate appearance, had suffered for several years from indigestion, occasional vomiting, and habitual constipation. On the 22nd of October, 1851, a dose of rhubarb, which acted but little upon the bowels, caused much pain, and this was followed by vomiting. A pill of calomel and opium, and afterwards calomel combined with purgatives, saline aperients in different combinations, leeches, embrocations, and enemata, were employed without any effect upon the bowels. On the 30th, the vomiting became stercoraceous, with relief to the pain; the tongue became clean, and he was able to take food. A pill of five grains of calomel and one of opium was then given every night, and frequent enemata were administered, but no other medicine. The patient lingered until the 6th of November, but little change in the symptoms having been observed. No blood was passed by stool or vomited; the urine was abundant and of natural appearance. In this case, there was intussusception of the ilium through the valvula coli. The colon was quite empty, but the small intestines contained liquid fecal matter, and there was a small quantity of the same matter in the stomach.

Dr. Watson observed, that the paper having been sent to the Society through him, he would draw attention to some points of interest. The first case was not very uncommon, he thought, for he had found several such cases on record; there existed a communication between the stomach and the transverse arch of the colon, by means of which the food which had been taken into the

stomach and had passed thence into the bowels, had been returned into that organ, and subsequently vomited. There was a remarkable case of this kind published by Dr. Abercrombie, and he (Dr. Watson) fancied others also had been recorded. Mr. Jones' theory was, that this affection of the alimentary canal was caused by the metastasis of the erythema nodosum from the skin. Whether this opinion was right or wrong he would not say; but it was not altogether indefensible, considering the very extraordinary cases of metastasis that have occurred. With respect to the other case, he should wish to have the opinion of the Society. The preparation, which he regretted to find was not there, exhibited a complete example of intussusception of the lower part of the ilium into the large intestine, so that nothing could pass through; nevertheless the matters vomited at last were, undoubtedly, fecal; both colour and smell showed that they were human excrement. He did not know whether physiologists stated decidedly in what part of the alimentary canal the absolute change into faeces takes place,—he thought it was in the large intestines; but in this case, on account of the obstruction, these matters could not have come from the large intestines; they must have been formed in some part of the small intestines. There was another point worthy of notice. He had seen many cases of fatal intussusception, but had never met with one in which there was not hæmorrhage from the rectum. So much had this been the case, as to constitute with him a guide in doubtful cases. Here, however, no such symptoms had been observed, and he (Dr. Watson) should be glad to receive instruction on that point from the large experience of the Society. The large quantity of urine passed by the patient during the continuance of the obstruction also deserved notice, as, according to Dr. Barlow, it would aid in determining the seat of the obstruction, whether it were high up or low down in the bowels. These, he believed, were the principal points of interest in these cases, in Mr. Jones' opinion.

In reply to a question put by Mr. Hodgson, Dr. Watson observed, that Dr. Barlow had stated, that when the obstruction was high up but little urine was passed; when seated low down in the bowel, a very much larger quantity of urine was discharged.

Dr. Barlow remarked, in reference to this point, that in a number of cases in which the obstruction existed in the duodenum, the diminution of urine almost to absolute suppression, was most marked: in one case none was passed for five days. This case was in Guy's Hospital: at last a catheter was used, but only a spoonful of urine was drawn off. After death the duodenum was found tightly constricted. In the opposite case, the colon being twisted on itself, there was no evacuation from the bowels for twelve days, but large quantities of urine were passed. In the intermediate cases, as of obstruction of the ilium, there was a fair secretion of urine. Those who directed their attention to this point, would find, in obstruction low down, there was generally an abundant secretion of urine. In a case of suspected poisoning, the stomach having a perforation in it, he inquired respecting the urine, and learned that it had been discharged very freely; but on examining the intestines, he found an intussusception low down, which, coupled with the loss of blood *per anum*, led him to conclude that the perforation of the stomach was *post mortem*. This case illustrated two points, the discharge of urine in obstruction of the large intestines, and of blood *per anum* in intussusception. It was almost an invariable rule, that the absolute suppression of urine occurred in obstruction of the small intestines, and a large discharge of that secretion in a similar condition of the larger bowels.

Mr. Hancock inquired, if in the case where there was suppression for several days, there were any symptoms of it during life beyond the mere suppression?

Dr. Barlow replied, Yes; that apathy of the nervous system existed, which indicates the faulty secretion of that fluid.

Mr. Hodgson alluded to a theory promulgated some time ago by Sir E. Home, as to there being some connexion between the upper part of the alimentary canal and the kidneys, other than by the circulation generally; perhaps Dr. Barlow connected this theory with his facts. Obstruction of the duodenum was very uncommon; and he himself had not noticed any alteration of the secretion of urine in cases of obstruction, either of the small or large intestines.

Dr. Barlow's theory was simple enough; absorption proceeding from the upper part of the alimentary canal goes on through the veins converging to form the vena porta. If, then, by the obstruction, the fluids do not remain long enough in the intestines to be absorbed, but very little can be secreted.

ON ALKALESCENCE OF THE URINE FROM FIXED ALKALI IN SOME CASES OF DISEASES OF THE STOMACH.

By H. BENCE JONES, M.D., F.R.S.,
Physician to St. George's Hospital.

In the *Philosophical Transactions* for 1845 and 1849, the author

states that alkalescence of the urine may arise from fixed alkali, and may occur when the health is slightly, if at all, affected. In the present paper two cases of alkalescence of the urine from fixed alkali are recorded; the patients had suffered from pain in the stomach, and almost daily vomiting, for many years; and sarcinæ ventriculi were found in the vomited matter. The first patient was 46 years old, and had suffered more or less for fifteen years before he was admitted into St. George's Hospital. The following may be taken as an example of the variations of the reaction of the urine:—October 4, early in the evening, before vomiting, the urine was acid to test paper, and gave a plentiful deposit of urates. Later in the evening, before he vomited, the urine was also acid. At eleven p.m. he vomited three pints of intensely acid fluid; the urine passed soon afterwards was alkaline from fixed alkali, and was cloudy from a deposit of earthy phosphates. At one a.m. the urine was rather less alkaline; still cloudy from phosphates. About seven a.m. the urine was much less alkaline, clear, and without any sediment. The daily variations in the reactions of the urine are recorded until the 28th of October. By means of the sulphite of soda the vomiting was stopped, and the urine then became acid throughout the day. The second case was very similar to the first, excepting that no sulphite of soda was given. The patient remained in the hospital from the 6th of June to the 19th of August without any relief from the vomiting, and the alkalescence of the urine from fixed alkali was constantly observed. Hence, when an excessive quantity of acid fluid was thrown out of the stomach, an alkaline state of the urine was produced; and the alkalescence of the urine was lessened, or was made to disappear, when the vomiting was stopped. That the occurrence of sarcinæ in the vomited matter has no direct relation to the alkalescence of the urine from fixed alkali, is shown—first, by the details of a case in which sarcinæ were vomited, but no alkalescence of the urine occurred; and secondly, by the details of another case, in which the vomiting depended on organic disease of the pylorus, and was far more urgent than in the previously mentioned cases; the vomited matter contained no sarcinæ, and the urine was almost always alkaline from fixed alkali. The author states, that the following is the practical point of his paper. If the stomach does so directly influence the reaction of the urine as to cause it to be alkaline at one hour and over-acid at another hour of the same day, then the prescription of acid or alkaline medicines must never be made to depend on the reaction of the urine passed at any one period of the day; for at one period acids may appear to be indicated, and at another alkalies. The reaction of the total quantity of urine passed in twenty-four hours ought to determine the prescription of acids or alkalies when their chemical action on the urine is required; while the hourly variations in the reaction of the urine, when excessive, must be controlled by directing our remedies to the stomach, and not to the kidneys.

ON FATTY DEGENERATION OF THE VOLUNTARY MUSCLES.

By EDWARD MERYON, M.D.,

Lecturer on Comparative Anatomy at St. Thomas' Hospital.

The author commenced with the history of a youth, G. H. P., who was born a fine and apparently healthy child; but, at about the age of four years, began to manifest some degree of weakness of the legs, which gradually increased, in spite of all remedial measures, until he was 11, when he could neither walk nor stand; the muscular power of the legs began to diminish; and eventually both legs and arms were perfectly powerless. When about 17, he was seized with simple fever, which terminated fatally; and his body was examined twenty-two hours after death. The viscera of the head, chest, and abdomen were perfectly healthy; the sinuses of the dura mater contained a very loose and thin coagulum, but the brain itself, and the spinal cord, as well as the communicating nerves and the nerves of organic life, were perfectly healthy. The relative proportion of grey matter to white, as compared with the nervous centres of another youth of the same age, and when examined under the microscope, the ganglionic cells of the grey substance, the tubular structure of the white, and the white matter within the neurilemma, wherever examined, whether in the cord itself, or in the outbranching nerves,—all bore evidence of a healthy condition. The chief structural lesion existed in the muscular system, which was throughout the whole body atrophied, soft, and almost bloodless; and although the muscular fibres appeared to exist, yet were they of an ochry colour, and very flabby. When examined under the microscope, the striped elementary primitive fibrils were found to be completely destroyed, the sarcolemma being diffused, and in many places converted into oil-globules, whilst the sarcolemma was broken down and destroyed. Two younger brothers exhibited precisely the

same symptoms and the same physical condition at the same age. A fourth boy exists, but he has not yet arrived at the age when the others began to fail. There are six girls in the same family, but none of them have exhibited the slightest tendency to the same form of disease. The author then related the history of another family at Southampton, in which the two sons were similarly affected, whilst the two daughters entirely escaped. Another family in Sussex he also spoke of, in which there were three sons and one daughter, the sons being similarly affected, but at a later period of life, the daughter remaining in perfect health. In speaking of the cause of the disease, the author attributed it to original weakness and deficient action of the assimilating organs, and an absence of those elements and influences which are necessary for a healthy organisation. Instead of the higher products of animal organisation (albumen and fibrine), those only are produced which are shared in common with plants and minerals. If the cause of the disease were simply a defalcation of nervous energy, he supposes that the fatty deposit would be interstitial, as in paralysis; but it is not so: hence to the deficiency of these plastic elements for the necessary consumption of the peripheral system, he refers for the antecedent physical cause. The diagnostic signs of the disease, he thinks, may be,—1st. The negative one of absence of symptoms indicating active nervous disturbance, such as pains in the back or head, rigidity of the trunk, tremulous motions of the limbs, etc. 2nd. The very slow and almost imperceptible loss of power. 3rd. The perfect command of the bladder, which is not the case in paraplegia. His treatment has been guided by the conditions which Mr. Paget has enunciated as necessary to healthy nutrition, viz., 1st. A right state and composition of the blood. 2nd. A regular and not far-distant supply of blood. 3rd. A certain influence of the nervous system. And 4th. A natural state of the part to be nourished. These conditions he has endeavoured to fulfil:—1st. By supplying to the blood those fibrinous elements in which it appears to be deficient. 2nd. By stimulating the capillary vessels in the interstices of the muscular fibres, by exercises of various kinds. 3rd. By communicating to the muscles artificial electric currents, which in the healthy state have been shown by Matteucci to be produced by the molecular changes which are continually occurring in the muscles themselves, the interrupted current by the toothed wheel of Masson being attended with more beneficial results than the continued current. By such means his surviving patients have thus far been improved.

Mr. Ch. Hawkins mentioned it as a curious fact, that this disease seems to be confined to the male sex. Sir B. C. Brodie had told him of three or four boys so affected; their uncle was similarly diseased, but their sisters were healthy. It was transmitted only to the male branches of a family, the females escaping.

Mr. Arnott had paid great attention to the paper, as he had attended the children before the pulling about and cutting had been practised. He would ask if the spinal marrow had been carefully examined, as he was inclined to refer the disease to some defect in that part, believing the muscles to have been affected secondarily. When he saw the boy, there was no deficiency in the nutrition of the muscular apparatus, and he was able to get up and down stairs, and to mount a pony, but with difficulty. He had not been able to discover any spinal disease; the muscles of the lower extremities were not deficient in size or firmness; those of the upper were scarcely affected. He thought there was a deficiency of nervous energy, and it might be dependent on an hereditary affection; but he declined mentioning its nature. It was satisfactory to find Dr. Meryon's treatment so far successful; he (Mr. Arnott) had only given steel. Had the spinal marrow been as carefully examined as the muscles had been?

Mr. Streeter asked as to the condition of the ganglia in the posterior branches of the spinal nerves?

Dr. Meryon had examined the nervous system as fully as possible. The greater part of the nerves, of the spinal marrow, and of the medulla oblongata had been examined under the microscope, but nothing abnormal could be detected. The same was the case with the posterior ganglia. The bones had not been examined; but the heart and a large number of muscles had, and they were all more or less degenerated. He possessed microscopic preparations of them, which he would have exhibited, had he known his paper was to have been read that night.

Dr. Barker gave a brief notice of a case under his care, alluded to in the paper. The muscular weakness commenced two years before admission into the hospital; it began in the thighs, and afterwards extended to the arms, gradually increasing. The muscles of the thighs and arms literally wasted away; while those of the legs and forearms remained as firm and as powerful as ever. The patient had been a strong and vigorous man; he could give no explanation of the cause of the disease. There were no symptoms of nervous affection from first to last, except the wasting of the muscles, which in

the parts affected was complete, so that they seemed like bones covered with skin only. No remedies were of service, and the man left the hospital, nor did he know what had become of him since.

Dr. Mayo remarked, that the wasting of certain muscles, mentioned by Dr. Barlow, accorded with a physiological law; those of the arms and thighs wasting, as age creeps on, in preference to those of the fore-arms and legs.

Dr. Meryon said, that Dr. Barlow's patient remains as he was; his brother is in a rather better state, which he attributes to having struggled against the disease. The limbs, in his own cases, were certainly well developed; but when forcibly bent, felt like a mass of dough, and had no muscular movement. The disease advanced from the extremities to the trunk, in opposition to the law alluded to by Dr. Mayo.

Dr. Barlow inquired as to the degree of irritability of the muscular fibre? it had not been alluded to in the paper; but he should expect it was much diminished.

Dr. Meryon replied, that there could be no doubt that it was greatly diminished, as it required a strong electric shock to excite the muscles.

Mr. Hodgson said, that if he understood the question, it was whether this condition of the muscles depended on the state of the nervous system, or on the deposit of fat in the muscular fibre itself. The question was one of great importance, and he would like to know whether the muscles had been carefully examined under the microscope, and their condition ascertained, in certain diseases of impaired energy, such as paralysis, or painter's colic?

Dr. Meryon had not himself been able to get a paralysed limb for examination; but Mr. Quekett had done so, and, on his authority, he had made certain statements with reference thereto in the paper. The deposit of fat was interstitial.

Mr. Adams asked respecting the condition of the detrusor urinæ, and whether there was any difficulty in expelling the urine in these cases. He should look to the system of organic nerves—those which regulated the growth of parts, rather than to the cerebro-spinal system.

Dr. Theoph. Thompson said, that all the replies to the different questions tended to carry us beyond the limits of the scalpel or microscope to vital statistics; and to the question, whether a parent may not transmit to his offspring an infirmity to which he is himself subject. That, however, was a question too vast to enter upon at that late hour of the evening.

The meeting then adjourned.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. P. M. LATHAM, President, in the Chair.

THREE CASES OF FRACTURE OF THE SPINE, UNATTENDED WITH PARALYSIS.

Mr. Shaw brought for the inspection of the Society a boy, aged 8, who, three months and a half ago, had fracture of the spine at its lower part, without paralysis. The spinal column was straight to the second lowest dorsal vertebra; at that point there was an abrupt and projecting curve, with the convexity to the left side, formed by the two lowest dorsal and three highest lumbar vertebrae; the whole displaced bones gave rise to a distinct, irregular, hard swelling in the left lumbar region; the most prominent points were the articulation between the left oblique processes of the first and second lumbar vertebrae, which, sticking out between the fibres of the longissimus dorsi and sacro-lumbalis, pressed against the skin, and the spinous process of the second lumbar vertebra. The projecting bones had no motion on each other, having become ankylosed since the injury. The patient, who had been sent from the country, was not seen by Mr. Shaw till nine weeks after the accident. The mother, an intelligent woman, stated that, while getting up behind a waggon in motion, her boy became entangled between the body and the wheel; when extricated, his face was swollen, as if strangled, blood flowed from his nose and ears, his eyes were blood-shot, and the lids presently became black and swollen, so that he could not open them; but there were no wounds about the head or chest; and an hour and a half afterwards, when she first saw him, he was sensible and recognised her by her voice. The surgeon, who did not visit him till he was in bed, had his attention directed to the head or chest, but did not examine the back. Having ordered warm baths for several nights, the mother observed that the movement of placing him in the bath, especially if she lifted him by the loins, made him cry out with pain; and it was the same when she assisted him in passing his evacuations. Although she had previously spoken about the pain, the surgeon did not ex-

amine the spine till five weeks after the injury, when the projection that now exists was noticed; she is positive, that before the accident he was straight and quite strong in the back. He was kept in bed for a fortnight longer; and, before he could stand, was taken to London, where he remained a week. Some days after his return, he began to walk a little, and when brought to the hospital on the ninth week, he walked pretty strongly. After procuring proper spinal supports, he was allowed to run about, and he has remained free from pain in the back or elsewhere till the present time. The mother is quite clear in stating that he never lost either power of motion or sensibility in his legs, that he required no assistance for passing his water, and his stools were regular.

2. Mr. Shaw next exhibited a cast of the back, taken from a patient, aged 48, admitted under his care June 28th, last year, for fracture of the right femur. After recovering from that injury, it having been remarked that he had deformity and stiffness of the back, inquiries were made; and it was found that two years before, while working in a railway cutting, a mass of earth fell, and buried him under it, and it was a quarter of an hour before he was dug out. He was then found lying doubled up, with his head near his feet; and since that time he has never been able to hold his body straight. The parish surgeon visited him once, but did nothing for him; and he lay in bed for eleven weeks without medical attendance. He never lost sensation or power over his legs, and only felt weak in the back. At the end of that time, he walked with difficulty three miles to a railway station, and thence travelled thirty miles to his home. By degrees he regained strength in his back, and, although unable to lift heavy weights, he could work as a field labourer, till he met with his last accident. The cast showed a general incurvation of the spine, from the ninth dorsal to the third lumbar vertebra; besides considerable projection of the spinous processes of the first and second lumbar vertebrae, the articulations between the oblique processes were visible on both sides, but more distinctly on the left; the spine was immovable at the projecting part, the result of ankylosis.

3. For the third case, Mr. Shaw exhibited a drawing. The patient was a sawyer, aged 31; and was admitted into Middlesex Hospital 24th May, 1845. While in a stooping posture, a log of wood, said to be between eight and ten tons in weight, rolled upon the back of his head and shoulders, and bent him down. From the sixth dorsal to the third lumbar vertebra, there was an abrupt, irregular projection of the spine. Below the seventh dorsal vertebra, there was a depression two inches in extent, caused by rupture of the interspinous ligament, and fracture of a spinous process; the greatest prominence of the swelling was formed by the spinous processes of the first and second lumbar vertebrae, and by the oblique processes on each side, which projected through the torn muscular fibres; below the third lumbar vertebra there was another pit caused by laceration of the interspinous ligament. The patient retained power over his legs, as an instance of which, he walked, with the support of his fellow-labourers, some distance before he was put in bed; although his feet and legs were, as he said, "numb," yet he could feel slight pinching, and the contact of the clothes. He afterwards complained much of aching and pricking pains, like that of needles, in both legs below the knees, but that ceased in about six days. Although strictly cautioned against moving in bed, he frequently rolled himself, and that with much force, from one side to the other. He was unable to make water, but was sensible of the passing of the catheter; he had also some difficulty in controlling the action of the sphincter ani; but, in less than a fortnight, he recovered that power; and the command over the bladder was restored at the same time. His eyes were blood-shot, and the lids black from ecchymosis, and, for a few days, the sputa in coughing were tinged with blood. On the tenth week he sat up for some hours in the day, supported by spinal stays. On the fourteenth week, being able to walk about the ward, he requested to be discharged. Five months afterwards he was met in the streets walking, with the aid of two sticks, at a good pace, and he could accomplish three miles at a time. Two years after that (July, 1847) he was heard of as working at light jobs in the fields.

Mr. Shaw, finally, referred briefly to another case similar to the above, which had come under his notice in August, 1828, and was related by him in the 17th Volume of the *Medical Gazette*. He remarked, that they were examples of the extensive injury which the spine might sustain without paraplegia, if the fracture took place below the point where the "cauda equina" begins. At the tenth dorsal vertebra the part so called commences; and from that to the termination of the spinal cord at the second lumbar vertebra, the roots of the nerves enclose and protect that important organ so effectually, that severe injury to the surrounding bones may not reach the cord. When fracture occurs lower down, where the cauda equina alone occupies the

vertebral canal, of course the dangers of paralysis taking place are diminished; for the long, loose, nervous fibrils composing that part can accommodate themselves to the changed direction of the canal, without loss of function.

Dr. Ogle presented a specimen of

A LARGE CYST OCCUPYING THE CAVITY OF THE PELVIS, AND CONTAINING GREAT NUMBERS OF ACEPHALOCYSTS.

This cyst, along with the rectum, bladder, ureters, and kidneys, was removed from the body of a man, aged 51, who died of peritonitis, in connexion with extensive disease of the kidneys. The cyst consisted apparently of condensed areolar tissue, and was of the capacity of about a pint and a half. It pressed considerably upon the rectum and bladder, and upon both ureters, for the distance of about three inches of their vesical extremities, though not to their complete occlusion. The remaining parts of these tubes, and the pelves of the kidneys, were considerably distended with urine. At first sight, the cyst resembled a distended and dilated urinary bladder, the true bladder, which was contracted, being like a foreign body in front. It was of considerable density; at the lower part was of the consistence of cartilage, and was lined by a very thick membrane, which was soft, white, and easily removable. This internal cyst contained a large quantity of limpid, albuminous fluid, in which floated vast numbers of opalescent capsules, of variable size, containing numbers of the *acephalocystis armatus* (Good-sir.) A small portion of the lowest part of the external cyst was greatly hardened, and had in close connexion with it the remains of shrunken and disorganised acephalocysts, which had become converted into a mass of ochreous-coloured, friable substance. This, when examined microscopically, was found to consist of fat and granular matter, altered purulent matter, etc., changing colour, like bile, on the addition of nitric acid, and not effervescing on the addition of hydrochloric acid. Along the sides of the proper external cyst above described, muscular fibres were conducted from the bladder, giving, at first, the idea that the parietes of this viscus were the original habitat of the animalculi, but it appeared that the cyst, from its intimate connexion with the bladder, had, during its growth, drawn some of the muscular fibres along with it. The bladder was entirely healthy, and contained a small amount of highly albuminous urine. No other acephalocysts were found in the body, but in each choroid plexus of the lateral ventricles was found a substance of the size of a pea, consisting of fat, cholesterine, and a number of large rounded bodies of a greyish colour, and when cloven, exactly like those figured by Dr. Quain in Plate III. of the Society's Volume for 1850-51. Other small and pellucid bodies and cells of different sizes and shapes also existed in the mass.

MEDICAL SOCIETY OF LONDON.

DR. MURPHY, President, in the Chair.

RHEUMATIC PERICARDITIS.

In allusion to the paper lately read to the Society by Dr. Bennett, Mr. Dendy related the case of a little boy, nearly four years old, in whom the symptoms indicated the presence of rheumatic affection of the exocardium, speedily proving fatal. The child had suffered many months ago from pain and swelling of the joints, which latter suddenly subsided. Subsequently he was subject to attack of bronchitis, and on convalescence was taken to Gravesend. During his residence there he was merely nursed by his mother, but about three weeks ago he was seen by a physician, who recommended his immediate removal home. On the evening of Monday, November 24, Mr. Dendy saw him, in consultation with Mr. Dutton. His face was slightly livid, its expression that of the deepest anxiety. He complained of pain over the left side of the thorax. There was violent throbbing over the whole chest, the head being forcibly thrown up by the heart's action during auscultation. There was a whirring sound over the region of the heart, and occasionally also that resembling the crumpling of dry leather. At the edges of the sternum the sound was dull on percussion, and no respiratory murmur. The pulse was vibratory, 130 in the minute, and the disparity between its volume and the tumultuous bounding of the heart was most striking. He was thirsty, and had frequent retching; his tongue was of a light colour; the breath sour and tainted; the feet and legs were œdematous. The prognosis was of course most unpromising, there being also no time for remedies. Digitalis, calomel, and James' powder were administered: mercurial ointment placed in the axillæ; very warm water on

sponges, frequently applied, and mustard poultices over the region of the heart; but the symptoms progressively increased, and in about eighteen hours from the consultation he died, having spoken, and even walked, a few minutes previous to dissolution. Mr. Dendy was strengthened in his diagnosis of rheumatic affection of the pericardium by the previous arthritic disorder, and from the malady being hereditary in the family, and also the absence of that degree of bronchial symptoms which might have diverted attention from the malady of the heart. A near relative of the child died within the year of concentric hypertrophy with its distressing sequelæ, from whose right thoracic cavity, five pints of serum were drawn at once, with merely temporary relief. The parents were first cousins, and had before lost two children suddenly without any very evident cause.

CASE OF POISONING BY FRESH COD-FISH.

Dr. Routh related an instance of idiosyncrasy, in which fresh cod had given rise to most alarming symptoms. It was that of a lady, on whom cod-fish acted as a most virulent poison. The lady had partaken of this fish five times in six months, and on each occasion, after two or three hours, the most violent symptoms of irritant poisoning had followed. At first, suspicion had fallen on the cook, and it was feared verdigris or some other accidental poison had been taken with the fish. The recurrence of the symptoms at several different places had dispelled this suspicion. The symptoms were violent purging and vomiting, with intense pain, intermittent pulse, great tendency to syncope, cold perspirations, etc. Dr. Routh did not mention the case as new, since it was well known shell-fish, pickled salmon, and especially fish not quite fresh, would give rise to similar symptoms occasionally, probably owing to some fermenting principle not overcome by digestion. But, from fresh cod this was much less often seen. Whatever the poisonous principle was in this case, it also existed in the oil, which he had prescribed to this lady on one occasion, and although mixed with equal parts of the *mistura amygdal. amar.* (a mixture he had found most useful in practice, as it enabled many patients to take the oil with whom it otherwise disagreed), it had likewise, after the second dose (3j.) given rise to similar symptoms. Dr. Routh, while speaking on the subject of the cod-liver oil, placed a specimen on the table of "sardine flavoured oil," prepared by digesting a number of sardine fishes, as sent over from Italy, in some cod-liver oil. After a month or so, the oil acquired the taste and smell of the sardines, and was very pleasant to take. Spread over a piece of hot toast, it formed really quite a luxury. The bottle was handed round, and seemed to give general satisfaction. It was prepared by Mr. Greenish, of 20, New-street, Dorset-square.

Dr. Willshire asked if oyster-sauce had been taken with the cod?

Dr. Routh said, on one of the occasions it certainly was not taken with the cod; and, as he had given the cod-liver oil, and the same effect had resulted, he thought it rather due to the cod fish.

Dr. Lankester said, the lady in this case must have taken cod at other times, and yet no such effect followed, showing the habit of body of the lady was perhaps on these occasions as culpable as the fish.

Drs. Camps and O. Ward, stated that they had both suffered in similar manner after taking shell fish; but they believed in these cases the fish was at fault, not themselves.

Dr. Ogier Ward read a paper on

COMPRESSION OF THE FETAL HEAD DURING BIRTH;

which he prefaced by stating, that he should not have presumed to bring before the Society a subject that was not original, but that, as a very meagre abstract only of a former paper had been read to the Medico-Chirurgical Society last year, considerable doubt seemed to exist in the minds of most of the speakers on that occasion whether his statements were founded on facts. Further experience having served to confirm his opinions, it was his present object to prove, from cases to be adduced, that, if the usual compression of the foetal head be not relieved spontaneously soon after birth, the child may die of asphyxia; or the deformity of the skull may be continued for an indefinite period, during which the infant usually suffers from nervous symptoms of various degrees of severity. The first case was one of secondary asphyxia, fatal in two hours after birth, in which the parietal bones overlapped the occipital, and the right parietal projected considerably beyond the left at the vertex. No pressure had any effect in removing the deformity in this or in any of the other cases. Another was one of semi-asphyxia, apparently from a fracture of the right parietal

bone, in consequence of the cord breaking, and the child falling from the mother at birth as she was crossing the room to call for assistance. The depressed portion of bone was elevated spontaneously as the respiration was established. Two other cases exhibited the milder forms of nervous affection in extreme flatulence and irregular breathing, and indigestion. The next proposition was, that, besides paralysis, deficient muscular power, convulsions, and epilepsy, even idiocy and insanity, might originate from the same cause; and seven cases were brought forward in support of it, viz.; one of paralysis, four of convulsions, one of atrophy, and one of epilepsy, with weak sight, imperfect speech, and impaired motive power; in all of which, except the two last, in which the deformity is permanent, the symptoms ceased on the restoration of the head to its proper shape. The subjects of the last-named affections—a child with an oblique or diamond-shaped head, and a boy whose head was compressed and elongated in an extraordinary degree—were exhibited to the Society. In support of his idea that insanity and idiocy might be produced by the compression of the skull, only one case was mentioned, in which the head was of the diamond shape; but the author relied mainly, in regard to this point, on the analogy between this natural compression and that caused by bandaging the heads of children in Normandy, the effect of which, according to M. Foville, is to increase greatly the amount and severity of insanity among such persons in that district. The last proposition, that these deformities are not malformations of the skull, was sought to be established by their number,—twenty-eight, of greater or less extent, having been observed in the limited practice of the author; next, by the want of proportion between the extent of the deformity and the violence of the symptoms, some of the greatest distortions being attended with no symptoms, and *vice versa*; and lastly, by their spontaneous cure, with two or three exceptions, after a shorter or longer time. The proportion of the sexes is nearly equal; but, as might be expected, there are more first children thus deformed, amounting to a third of the whole number observed. The duration of the distortion varies from a few hours to six months, except in a few cases of oblique deformity that seem likely to be permanent, all of them being on the same side of the head.

Mr. Richardson referred to epilepsy and insanity, said by Dr. Ward to be caused by the deformity of the infant's head, and supported by cases in France, where insanity was said to have been induced by the peculiar mode of bandaging. The deformity thus caused was not so great as that exercised by the Nootka Sound Indians, who compress the head from birth, so as to render it perfectly flat, the occipital bone hanging down behind, and yet, although cases of apoplexy frequently occur, no instance of insanity could be found among them. He then referred to a similar practice among the Peruvian chiefs, who, he said, were always selected for their intelligence. Neither with these latter was insanity induced. Pritchard has stated that the skull can be compressed at birth to almost any extent. With reference to the adult, Abernethy has shown that it is not always necessary to trephine in compression of the brain from injury; and if such pressure can be borne by the adult, surely it could by the infant. The symptoms of flatulency, etc., spoken of by Dr. Ward, might depend on errors in diet. He (Mr. Richardson) had made many investigations, and had attended many *post-mortem* examinations of cases of epilepsy, and he was not satisfied, either by written or pathological authority, that the nervous system was engaged in it. There was no alteration of structure of the spinal marrow nor of the brain, but there generally was of the vascular apparatus, especially of the heart, which was usually much hypertrophied or had concretions in it, or it was the seat of some other change. Of this he had seen an instance lately at Richmond, in a carpenter subject to fits, in one of which he died. There was no affection of the spinal cord, but the heart was greatly hypertrophied, and quite empty. If epileptic fits were caused by compression of the brain, why are they not always present, instead of being of occasional occurrence? He thought too much stress was laid on the nervous system, which he regarded as merely subsidiary to the vascular.

Dr. Camps could not admit Mr. Richardson's hypothesis, that epilepsy depended on the condition of the vascular, and not of the nervous system; but he thought there was something valuable in his ethnological researches respecting the American tribes. He objected to Dr. Ward's conclusions, not to his facts; he thought that they did not warrant the conclusions that had been drawn. In the sixth and seventh cases Dr. Ward said the symptoms were relieved in consequence of the bones regaining their proper place. This he (Dr. Camps) thought a mere coincidence, and not a result.

Mr. I. B. Brown gave his full assent to the first proposition, that compression of the foetal head will cause convulsions, and some-

times death; and he thought that all who had seen much of midwifery must have met with cases where the head is protruded in the shape of a cone, and no cries of the child can bring it to a normal condition. When that state continues the infant becomes subject to fits, and during dentition convulsions often set in, and end fatally. To prevent this, if the labour be of long continuance, the head much compressed, and the perinæum rigid, with dry vagina, he would relax the perinæum by the use of chloroform, which would always be effectual for that purpose, and then apply the short forceps, delivering slowly and steadily as the pains came on. If the forceps be well and carefully applied, the child will be born without any injury to the mother, and the deformity of its head, with the subsequent mischief, be prevented.

Mr. Dendy remarked, with reference to Mr. Richardson's theory, as to the vascular system being the seat of epilepsy, that it militated against what might be taken as an axiom, that no condition of the nervous and vascular systems can take place abstractedly. He thought Dr. Ward made too much of the cases. His colleagues at the Children's Infirmary and himself had repeatedly met with cases of disparity of the cranial bones, and even of deformity, without any injurious consequences. The secret is, that the vascularity of the brain accommodates itself to the pressure, if it be slowly exerted, but not if it be suddenly applied. The cases at Nootka Sound may be thus explained; the pressure is gradually effected, and consequently no symptoms of compression follow. It does not matter what shape the head may assume, if the compression be but gradual, the whole of the brain will be there, and unimpaired in its functions.

Dr. Willshire agreed with Mr. Dendy, that he had frequently seen in these cases the mental faculties perfectly normal; nevertheless, he had occasionally met with others in which the cranial deformity seemed to have influenced the brain and its development, the result being epilepsy, etc. He (Dr. Willshire) was so much impressed with this, that those cases of the disease in which he entertained little hope of doing good, were precisely those where this cranial deformity exists. There are at the infirmary now, four cases of this infirmity with setons in the neck, that with him being the last remedy, to be used when all others fail. It is often of use where no deformity exists. He always made inquiries, when he met with deformity of the head, and generally found that the labour had been long and lingering. The difficulty is to discover whether the badly developed brain is due to the deformity of the cranium, or *vice versa*. It is essential, however, to ascertain that point. When the pressure during the birth is so exerted as to cause flattening of the parietals, the occipital projects, and, when this state continues, epilepsy and other mental maladies ensue, and are most difficult to relieve. He (Dr. Willshire), therefore, agreed with the main dogmata of Dr. Ward, and also with the statements made by Mr. Dendy. The question for accoucheurs is, whether the deformity is caused as cephalæmatoma is, by a short and rapid, but intense degree of pressure, or whether it is owing to long-continued compression of the head?

Dr. Murphy said, the point alluded to by Dr. Willshire had also attracted his attention. Bone will follow its contents: an imperfect development of the brain will cause cranial deformity, but in Dr. Ward's cases, when the deformity ceases after birth, all the symptoms likewise disappear, so that Dr. Ward's conclusions seem to be just. He held an opinion directly the reverse of that put forth by Mr. Brown, as to prevention. Mr. Dendy had very properly said, that the head adapts itself to gradual pressure, if left to itself, and no harm will ensue; but if the labour be assisted by the forceps, the pressure being very violent, which it really is, such would not be the case. He had heard of two or three cases of infants born dead in consequence of the use of the forceps.

In reply, Dr. Ogier Ward stated, that his object in bringing the subject forward a second time was his desire to establish the facts, and that these deformities were not original malformations of the cranium of the foetus; and that the paper had been submitted to the Council with this view only. With regard to the absence of insanity and idiocy among the various tribes of flat-heads, he was aware of the fact, but still must rely on the statements of M. Foville in regard to the effects of pressure in inducing insanity in Europeans. As to compression of the skull not affecting the brain, because the quantity of that organ remained the same, though altered in its shape, it was sufficient to state, that the brain did suffer from compression, and must do so in every instance in which there was a change of shape from a greater to a less degree of sphericity. In the cases enumerated, both the duration of the labour and the force of the expulsive power were found to operate equally in regard to the extent of the deformity, though not in regard to the number of cases, as first-births predominated.

MEDICAL NEWS.

UNIVERSITY OF OXFORD.—RADCLYFFE LIBRARY.—The electors of a librarian have appointed Henry Wentworth Acland, M.D., F.R.S. Christchurch, late Fellow of All Souls, Lee's Lecturer in Anatomy, to the vacant librarianship, in the room of the late Dr. John Kidd.

UNIVERSITY OF OXFORD.—All persons who have passed the examinations, and kept the exercises for the degree of LL.B. and M.B., may be candidates for honours in the Commencing Bachelor's Moral Sciences Tripos, to begin on Feb. 9, at 9 a.m., in the Senate-house, if the term be the fourth Lent term after their first term of residence; and in the Middle Bachelor's Tripos, if the term be the fifth Lent term after their first term of residence. Two prizes of 15*l.* each will be given to the two persons who shall show the greatest proficiency in Moral Philosophy in this examination among the Commencing Bachelor Candidates. A prize of 20*l.* will be given to the person who shall show the greatest proficiency in Moral Philosophy in this examination among the Middle Bachelor candidates. The special subjects for the examination in Moral Philosophy are,—Plato, *Meno*, *Laches*. *Republic*. B. II., III., IV.; Aristotle, *Nichomachean Ethics*, B. I.; Cicero, *De Officiis*; Sanderson, *De Obligatione Conscientiæ*, B. I.; Locke's *Treatises on Government*; Cousin, *Philosophie Morale au XVIII. Siècle*, (on Locke.) All persons desirous of being candidates at the examination must send their names, with notices of the requisite examinations they have passed, to the Professor of Moral Philosophy at Trinity Lodge, on or before Friday, Feb. 6, 1852.

UNIVERSITY OF CAMBRIDGE.—The report of the Syndics on the revision of the statutes has been issued. The following is that portion of it directly interesting to medical students. We pass by that part referring to the degrees of B.A. and M.A., as having only an indirect reference to their interests and position:—"That the reading of the dissertation being retained, acts in the faculties of law and physic may be conducted by the Regius Professor, if he think fit, either wholly or in part, after the manner of a *viva voce* examination, the same being restricted to the subjects proposed; and that the Professor himself shall perform the part of opponent or disputant, as well as (of) examiner, and no one else shall be required to do so. That where at present a bachelor of physic must be of five years' standing as such, and a master of arts of seven years' standing as such, before he can be admitted to the degree of doctor of physic, in future a bachelor of physic of three years' standing as such, and a master of arts of four years' standing as such, may respectively be admitted to the degree of doctor of physic. That whereas at present two acts are required to be kept for the degree of doctor of physic, in future one shall suffice." "That graduates of other universities besides those of Oxford and Dublin, may be admitted to titular degrees corresponding to the degrees which they bear in their own universities. That foreigners of distinction, rank, or talent, and natives of the United Kingdoms of Great Britain and Ireland, distinguished by talent or public services, may be admitted to titular degrees of honour in arts, law, or physic, without being called upon to make any subscription or affirmation, provided that none of these persons shall, by virtue of such admission, have any vote in the Senate." "The subscription required of persons admitted to other degrees" (than those in theology) "shall be the same as that required of persons admitted to the degree of bachelor of arts."

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 12th inst.:

BYRNE, WILLIAM AUGUSTUS, Great Coram-street.
CARTER, ROBERT BRUDENELL, Leytonstone, Essex.
CROSSING, JAMES CORNISH, Devonport.
DEAN, THOMAS NAMBY, Manchester.
EVANS, EDWARD HIER, Cardiff, South Wales.
FRANKLYN, HENRY BOWLES, Army.
REECE, RICHARD, Watton-on-Thames.
SAVERY, JOHN CHARLES, Hastings, Sussex.
STABB, WILLIAM WILKING, Ilfracombe, Devon.
SYLVESTER, JOHN HENRY, Cheltenham.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 11:—

FOSTER, JOSEPH, St. Kitts, West Indies.
GANE, HENRY JAMES, Bath.
MUDGE, JAMES, Bodmin.
OSBORNE, ASHEY GREENOUGH, Northampton.

TRINITY COLLEGE, DUBLIN.—The Provost of this University, Dr. Sadlier, died suddenly on Sunday night, in his 75th year. He was elected a Fellow of the College in 1815, and had been its Provost about fifteen years; the emoluments are about 4,000*l.* a-year. The office is in the gift of the Crown,—a valuable bit of patronage.

UNIVERSITY OF ST. ANDREWS.—The next examination for medical degrees in this University commences on the 5th of May, and not on the 15th, as erroneously stated in our last.

OBITUARY.—On the 11th inst., at his residence, 7, Lower Durnford-street, Stonehouse, Charles Corfield, Esq., late surgeon of Her Majesty's 17th regiment of Foot, aged 83.—Lately, in Paris, Mr. Pariss, an English druggist, long established in the French metropolis. The unfortunate deceased had two shops at a distance from each other, where he carried on his business, and while visiting one of these near the Boulevard Poissonnière, on the 4th instant, during the late *émeute*, he was mortally wounded by two musket balls. Whether fired by the insurgents or by the military does not appear. He died in consequence in the course of a few hours. Mr. Pariss was in no way engaged in the insurrection; but, like many other unhappy victims, lost his life through the indiscriminate firing. Mr. Hoffe, an English dentist, was also killed. His body was pierced with twelve balls.

MILITARY APPOINTMENTS.—Hospital staff-surgeon Alexander Campbell, from half-pay 55th Foot, to be staff-surgeon of the 2nd class, vice Powell, deceased.

NAVAL APPOINTMENTS.—Acting assistant-surgeon Francis Hardinge (1851), to the Tortoise store-ship, at the island of Ascension.

MEDICAL APPOINTMENTS AND VACANCIES.—Dr. Semple has been elected physician to St. Mary's Infirmary, Islington.—Mr. F. Ffolliott has been appointed surgeon to the Castle-martyr Dispensary, in the room of Dr. Eames, deceased.—The house surgeoncy to the Bradford Infirmary is vacant by the decease of Mr. Hewett. Salary, 80*l.* a-year, with board and lodging. There is an assistant-house-surgeon. Election on the 23rd.—A clinical assistant is wanted for the Brompton Hospital for Consumption and Diseases of the Chest. Election on the 6th of January.—The trustees of St. Mary's, Islington, intend appointing a dispenser to prepare the medicines ordered by the medical officers of the parish. Candidates must be L.S.A., not under 25 nor above 30, and single. Salary, 60*l.* a-year, with board and lodging. Election on the 3rd of January.—An assistant to the resident surgeon and apothecary of the Western General Dispensary, New Road, is required; the testimonials to be examined on the 22nd, and the election on the 29th, at a quarter past seven p.m.—There is a vacancy in the office of physician to the Dispensary for Consumption and Diseases of the Chest, in Margaret-street, Regent-street. The election will be early in January.—At the Stamford, Rutland, and General Infirmary, a house-surgeon and secretary will be elected on the 13th of next month, at one p.m. Salary not stated.—Dr. T. P. Heslop has resigned the appointment of resident medical officer and tutor to the General Hospital, Birmingham. The election will take place on the 9th of January; testimonials to be sent in on or before the 1st. Candidates must be graduates in medicine, unmarried, and not upwards of 40. Salary, 100*l.* a-year, exclusive of board, washing, and suitable apartments. At the Blenheim Free Dispensary, a surgeon-accoucheur is wanted, Mr. Whidborne having resigned. Date of election the first Wednesday in January.

MEDICAL BENEVOLENT COLLEGE.—The funds of this Institution have just been augmented by the following handsome contributions:—Dr. William Silver, of Addison-street, 105*l.*; and John Churchill, Esq., 100*l.*

MEDICAL SOCIETY OF LONDON.—The subject for the meeting of this Society to-night, is,—Dr. Cogswell on the "Endosmotic Action of Medicines." Eight o'clock.

WESTMINSTER GENERAL DISPENSARY, GERRARD-STREET.—Dr. John Roberts, No. 63 A, Brook-street, Grosvenor-square, has been unanimously elected physician to this institution.

HER MAJESTY is about to establish a fund similar to that called the Royal Adelaide Fund, for patients discharged from Hanwell Asylum. The Victoria Fund is intended for the benefit of patients discharged from the new asylum at Colney Hatch, and will doubtless prove to be a most excellent charity. Her Majesty has already presented 100*l.* to the funds.

PROGRESS OF EPIDEMICS.—The whole of the Brazil coast is reported to be perfectly healthy; there were no signs of fever, either on shore or afloat. The port of Bahia is said to be quite healthy, and the weather very fine. The island of St. Vincent has

been visited by fever and ague, which had attacked almost the whole of the population, and rendered it impossible to obtain labour, even to coal the steamers. These complaints did not prove very fatal, more deaths occurring from absolute want of food during convalescence than from the immediate effects of the disease. Hydrophobia is said to be prevalent in Sweden, dogs becoming mad in consequence of the excessive cold. Several persons have been bitten, and upwards of twenty fatal cases of the disease have already occurred. Orders have been issued that every exertion be used for the destruction of the dogs.

A PROPOSAL is on foot to appoint a sanitary officer to the parishes of St. Andrews', Holborn, and St. George the Martyr. If this very advisable step be taken, a medical man must, as a matter of course, be selected.

CAPE OF GOOD HOPE.—In a report sent in to Sir Harry Smith by Major-General Somerset, on a battle with the Caffres at the Waterkloof, thanks are returned to the medical officers for their care and attention to the wounded, who, it is added, have been well cared for through the judicious arrangements of Surgeon Fraser, 74th Highlanders, senior medical officer. This is all very pleasant and very gratifying; it is on and after a field of battle that the services of our Profession are appreciated by the military authorities, especially if any of the great ones be wounded; but for all that, while promotions and honours await the military man, the medical officer will scarcely get more than the bare honour of having his name mentioned in a despatch.

PRIESSNITZ, the Silesian peasant, the maleficent author of "the Water Cure," died at Gräfenburg, November 26th, 1851, aged 52, of water in the chest. His friends were aware of the nature of his malady, and urged his taking medical advice. This he refused, and stuck to his watery libations to the last hour, which suggested

HIS EPITAPH.

Shade of Priessnitz! Prince of Water!
How could death commit such slaughter
On hydropat?
How could he dare to hurl his dart
At one so strong, so stout of heart,
And lay thee flat?

Silesia! weep thy bitterest tear,
And let thy sorrows pierce his bier,—
Poor hydropat!
Affliction's waters drowned his chest;
And, like a nightmare on his breast,
Malignant sat.

His iron chest, so full of gold,
By noodles filled—both young and old—
Is closed at last!
The German Gull, at fifty-two,
To his old delusion firm and true,
Is with the past.

Ivy-house, Worcester.

E. A. T.

POOR-LAW CONTRARIETIES.—The St. Albans Union lately attempted to saddle upon their medical officers the cost of wine supplied to sick paupers, by declaring that "Wine was physic." *Contra*:—The Ware Union, we understand, has come to a resolution, that "cod-liver oil" be henceforth considered nutriment, and "not physic;" and have directed the clerk at once to procure a supply to be ready for distribution when required. So in St. Albans, wine is physic, and in Ware, cod-liver oil is nutriment—i.e., to paupers.

THE ARSENIC CASE AT EXETER.—HUGGINS v. FROM.—In this case, of which we have already given an account, the judge of the Exeter County Court gave judgment on the 29th ult. He gave a brief sketch of the particulars before doing so: he considered that From's wash was more dangerous than that sold by Biggs, although it contained less arsenic; but would not say whether the increased danger arose from the greater solubility of the mineral, in consequence of there being more potash, or from other causes. The greater danger from From's wash was shown by the large mortality following its use, while scarcely any sheep died in consequence of Biggs' being used. The question of contract he regarded as settled; and, as From had sold his own composition as being equally free from danger as Biggs', which it was not, judgment must be given against him. As, however, if the plaintiff had used more care, his loss might have been less, that would be considered in the damages, which were ultimately awarded to the amount of 23*l.*, being 1*l.* each for eleven lambs that died, 1*l.* 10*s.* for the ewe, 10*l.* for damages to the flock, and 10*s.* for the farrier. Costs were granted. The defendant appealed.

A STRANGE ADVERTISEMENT.—In a recent *Times* there is an advertisement to this effect:—*A Fortune*.—Any one having a slight knowledge of medicine, or desirous of being taught it, may, by embarking 25*l.* in a concern, realise a competency for life. Medical men, well qualified, who have employed ten and twenty times that amount, in a concern, do not generally find 'a competency' so readily realised. The dishonesty of some of their patients is too great a bar to so desirable a result. It is probably a quack affair, and that may tell.

"MUFFINS TO SELL."—The valuable time of Mr. A'Beckett, the magistrate of the Southwark Police Court, was occupied on Monday with a charge against a boy of fifteen, for calling out "Muffins" in the street. It appears that this important case was got up by the Commissioners for Bermondsey parish, in virtue of a Local Act. How is it, that the parish of Bermondsey, who thus show themselves so sensitive on the point of street cries, have no appreciation of stench, rottenness, and malaria. What's "muffins" or "taters all hot,"—even bawled out by a very Stentor at cockcrow, compared with their nauseous, lethal tidal ditch, and their pestiferous Jacob's island? It would hence appear, that the good parishioners of Bermondsey are all ears, *sans* noses, and that of all afflictions—the cry of "Muffins" in the locality of Jacob's island is the most odious. We can tell these wiseacres, that in 1849, "muffins" killed nobody; but the foul condition of parts of their parish threatened so to decimate their population, that Othello's occupation was likely to have gone, as to "muffins," crumpets, and all. When will men show themselves in earnest in the discharge of public duties, and not satisfy themselves with farce and fiction?

MORTALITY NOTABILIA.—For the Week ending Dec. 3.—*Effect of the Temperature*.—Though the rate of mortality in London is still high, the present returns bear witness to a considerable improvement. The deaths, which, after a period of continuous increase, ultimately rose to 1316, declined, under the influence of milder temperature, and in the week ending last Saturday, the number was 1194. The weekly mean temperature, which, during the earlier part of November, fell to 40 degrees, or 12 degrees lower than it had been during the previous month, and afterwards suffered a further reduction to 35 degrees, (which is about 8 degrees less than the average of the period,) again rose, in the week ending 6th December, to 38·8°, and last week to 44·8°, or about 3 degrees above the average. Taking, for comparison, the corresponding weeks of 1841-50, with the exception of that part of the series which belongs to 1847, when influenza swelled the mortality of the week to 2416, it appears that the average number of deaths was 1031, or, with a correction for increase of population, 1134. The return of last week shows an increase of 60 on the corrected average.

Cholera.—At the Hahnemann Hospital, on Dec. 6, a female servant died of Asiatic cholera. The Registrar states, that this case was brought from the Grove, at Kentish-town, and the patient was in the hospital two days previous to death.

DEATHS in the Metropolis for the week ending Saturday, December 13, 1851.

CAUSES OF DEATH.	Dec. 13.			All Ages.	Sum of Ten Weeks.
	■	15	60		
ALL CAUSES	525	399	269	1194	11699
SPECIFIED CAUSES	523	398	268	1190	11651
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	168	00	15	243	2658
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	1	12	20	36	542
3. Tubercular Diseases. ...	00	121	■	190	1746
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses, ...	58	35	02	125	1216
5. Diseases of the Heart and Blood-vessels	1	20	20	41	365
6. Diseases of the Lungs, and of the other Organs of Respiration ...	129	64	91	284	2644
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	19	32	15	66	583
8. Diseases of the Kidneys, &c. ...	...	10	■	15	102
9. Childbirth, Diseases of the Uterus ...	...	5	8	■	118
10. Rheumatism, Diseases of the Bones, Joints, &c.	2	6	...	8	85
11. Diseases of the Skin, Cellular Tissue, &c. ... ..	...	...	1	1	0
12. Malformations	5	...	...	■	36
13. Premature Birth and Debility ...	00	5	...	41	245
14. Atrophy	17	1	...	18	170
15. Age ... ..	...	...	51	51	663
16. Sudden	1	2	2	7	147
17. Violence, Privation, Cold, and Intemperance	22	25	4	51	322
Causes not Specified	2	1	1	4	48

TO CORRESPONDENTS.

[To the Editor of the Medical Times.]

SIR,—In the "Medical Times" of Saturday last, as if quoting from the "Monthly Journal," in which such a passage never appeared, you say:—

"The position, then, which Mr. Syme holds upon this subject is the following:—He has the merit of having revived, with others, an operation which, some few years ago, received condemnation as dangerous and unfit for general performance; and he asserts that he has now operated, without a single loss of life, on fifty-one cases of stricture deemed irremediable under ordinary treatment."—Monthly Journal, Sept. 1851.

With reference to this statement, I shall not, I trust, be considered unreasonable in requesting you to say when, where, and by whom my operation for the remedy of stricture was performed before I proposed it. It is further stated:—

"Now, in the second edition of Professor Lizars' work are drawings representing the present condition of Joseph Antonio and of Francis Rodgers. Are these representations accurate? If so,—and there seems no attempt at any denial,—what is the conclusion which we must form as to the condition of the other cases which Mr. Syme has recorded as cured?"

In reply, I beg to say, that I never operated upon Francis Rodgers for stricture, and that I never performed any operation upon Joseph Antonio.

You also say that the dispute has been characterised by "want of truth," and it is possible that the case may be so. But as this part of the question is about to be determined in a Court of Law, your readers will, I hope, suspend their judgment in the meantime. I am, &c.

JAMES SYME.

[We are happy to have it in our power to attend to a reasonable request from Mr. Syme. Our reference to the "Monthly Journal" is simply to show whence we took the assertion, "that he has now operated, without a single loss of life, on fifty-one cases of stricture deemed irremediable under ordinary treatment." But we cannot again condescend to notice similar "quibbles," under whatever guise they may come. If Mr. Syme reads French, he will find the account of the "Incision Extérieure" or "Boutonnière" in Malgaigne's "Manual de Médecine Opérative," p. 651. This practice of dividing the strictured portion of the urethra from without upon a grooved instrument introduced into the urethra, is pronounced "a very old operation, already condemned by Desault, and lately renewed in Germany, in England, and in France." But it is not upon this point only that we have a word to say to Mr. Syme. When we have leisure from more important matters, we will take the liberty of inquiring how a diagram illustrating the restoration of the lip came unacknowledged into his work. Does he presume to call himself the originator also of that operation? Of course, Mr. Syme is best qualified to state whether or no he operated upon Joseph Antonio and Francis Rodgers. We have no personal feeling in the quarrel between Professor Lizars and himself; but we deprecate the custom of flying to Courts of Law, and of laying bare to judicial sarcasm the littleness, petty animosities, and spite, that blaze among some men, and can be quenched only with a verdict of "damages." Such proceedings are equally disgraceful to him who wins as to him who loses. *Magna est veritas et prevalebit.* Greater even than the decision of a Court of Law, is simple and comprehensive Truth; but out upon the man whose court of honour is the judicial bench—whose code is found in forensic dicta; or who, having outraged the feelings of others, seeks protection beneath the wide-spreading folds of a magisterial robe.]

Medicus.—Empedocles threw himself into the crater of Mount Etna; the doctor your name has done the same thing. The former wished to pass for a god,—the latter, whether he wish or not, might any day be taken for a conjuror. As to the odour of sanctity, we can give you very little information beyond what you may see in Southey's "Omniana." What the odour of the conjuror may be after death, we do not know.

Dr. M. Patterson.—We give our Correspondent credit for the best of motives; but he has misunderstood our remarks. In the review of Dr. Bascome's work, we charged nothing upon religion. And now we further aver, that from the time when Constantine's body was interred in the church of the city which bears his name to the present time, religious establishments have been great drawbacks to sanitary reform. The reviled heathen, in the matter of interment within towns, "would have none of it;" but when once Constantine's corpse had got so far as the porch of the sacred temple, the doors were flung wide open for the reception of the dead; it was found a lucrative business, and a vested pestiferous interest was created for "churches." He must take a very narrow view of what constitutes cleanliness, who considers it solely as a personal matter; taking it, as we do, in its legitimate sense, we say, that if "cleanliness is next to godliness," a man has no right to plume himself on clean hands while his church is the receptacle of all corruption, and that mainly for the sake of gain. Did our correspondent never read the Registrar General's statement of the tragedy in Clapham, in 1849, where a Wesleyan minister, his wife, his mother, a widow, and two servants, met their graves, in one week,—and where it was palpable that such scenes of desolation would not have occurred but for great negligence on the part of the people themselves,—they having lived for some time in a house notorious for, and surrounded by, uncleanness? We are far from being unfriendly to religion, and we pray Dr. Patterson to "discriminate" charitably between strictures on persons, and aspersions cast on what we deem the most sacred things.

M. D.—Jurien had in his abdomen seven cavaliers, who frequently engaged

in hot combat, to the great disquiet of the hypochondriac. That ladies, indolent and overgrown, though past a certain age, should entertain odd notions, is nothing very surprising. We have heard of other cases of difficult diagnosis, where every doubt was finally settled by the unexpected appearance of the "Young Chevalier." The tongue had better not go faster than the head.

[To the Editor of the Medical Times.]

SIR,—An editor is supposed to know everything, and I therefore do not hesitate a moment in asking you to enlighten my ignorance of the merit of the Edinburgh treatment of syphilis,—so much more simple, perfect, upright, and economical than that of London.

Alas, Sir, I have looked in Mr. Syme's works—in his last production even—without seeing any key to this valuable knowledge, the secret of which is, perhaps, very carefully guarded.

Perhaps, Sir, you can tell me if there is in print any exposition of the invaluable Edinburgh line of treatment; and if you know of none, then I shall challenge this anonymous slanderer to throw off his mask, as I will mine, and openly discuss whether he is not a greater empiric and puffer, and more ignorant of the true treatment of gonorrhœa and syphilis than the men he so vehemently abuses. I am, &c.,

CHIRURGICUS.

A Practitioner.—Do you think you could "stop a tiger" with a homœopathic globule? When you try, "may we be there to see?"

Cholera Bubble.—The subject is exhausted.

R. D. S.—The paper must be authenticated with the writer's name and address.

Mr. Carpenter's, St. Thomas's, proposal is accepted.

Mr. W. Smith, of Chesterfield, is thanked. Should occasion require, we will accept his kind offer.

If R. A. L., a Constant Reader and Subscriber, will address us privately and confidentially, we may, perhaps, assist him in carrying out his views.

Letters marked "private," we presume, are not intended for publication; acting upon this principle, we have not inserted three letters we have this week received.

An Old Subscriber and General Practitioner.—Our object all along has been to prevent charges being made without previous investigation; of the necessity of which our letter-box affords but too many examples.

[To the Editor of the Medical Times.]

SIR,—Examining some potato-starch granules by polarised light, I was led to see whether replacing the polarising mirror by the common mirror of the microscope and the plate of glass in which the starch was by a thin plate of light, hair-coloured tourmaline would prove a superior arrangement to that ordinarily followed in the polariscope. I found the cross and prismatic colours brought out remarkably more clear than before. If you consider this device sufficiently known among microscopists, or doubt the accuracy of my observation, I should feel obliged by your advising me of the same in your Notice to Correspondents; if not, I should thank you to insert these few lines in your paper. I am, &c.

University College.

T. Z. LAWRENCE.

[We are not aware that this plan has been before adopted, but having repeated the experiment, we find that, although the field of view is darker, the colours and the cross are brought out with greater force.]

A Subscriber, Maidstone.—It is just gone to press, but from its number of sheets, must necessarily occupy several months in printing.

M. B.—The work deserves no notice from us. In cases of extreme destitution, the Stoics not only allowed, but counselled, the sufferer to die. There is no reason why we should lay violent hands on it; its extreme poverty will, in due time, be the death of it.

Mr. Johns.—Our advice in all such cases is—Be slow to speak; *audi, scrutare.*

A Union Surgeon.—Consider well the conduct of the Spartan boy, and his answer,—*Non serviam.*

Aliquis.—Before you try to put down successful stolidity, be satisfied that you could batter down a mud wall with a pop-gun. When you have continued this "practice" for twelve months, you will willingly leave such a heavy mass of mother earth to tumble down of its own accord.

M. D.—Do not complain. Doctor Thomas Young had probably less practice than you have. What have you done to make yourself known?

ERRATUM.—In Mr. McWhinnie's Transcript of Mr. Farwell's Case of Death under Chloroform, in our last Number, the amount of chloroform inhaled should have been "less than two drachms," instead of "10½ drachms," as there stated.

COMMUNICATIONS have been received from—

A STICKLER; A GENERAL PRACTITIONER; A CONSTANT SUBSCRIBER, Hampshire; R. D. S.; DR. BASCOME, of Wyke House, Brentford; MR. BRANSEY COOPER, of Guy's Hospital and Spring Gardens; MR. McWHINNIE, of St. Bartholomew's Hospital and Bridge-street; CHOLERA BUBBLE; MR. W. SMITH, of Chesterfield; B. A. L.; A CONSTANT READER AND SUBSCRIBER; DR. SEWARD; MR. J. V. SOLOMON, of the Birmingham Eye Infirmary; MR. MOORE, of the Queen's Hospital, Birmingham; DR. BARCLAY, of St. George's Hospital; MR. GROVE, of Wandsworth; DR. DICKENSON, of Liverpool; MR. PROPERT, of New Cavendish-street; MR. PARKER, of Blakenhead; PROFESSOR SYME, of Edinburgh; A SUBSCRIBER, Maidstone; DR. WILLIAMS, of Swansea; SECRETARY OF THE STATISTICAL SOCIETY; PROFESSOR QUAIN, of University College and Cavendish square.

ORIGINAL LECTURES.

CLINICAL LECTURE ON SURGERY,

DELIVERED AT

UNIVERSITY COLLEGE HOSPITAL.

By R. QUAIN, Esq., F.R.S.

"THE PLACES OF ELECTION"
FOR AMPUTATIONS OF THE LOWER LIMB.

HAVING now considered the circumstances which rendered it in my opinion indispensable for me to remove the limb in the case of the patient Thomas Robinson, it becomes necessary to state why I performed the operation in the lower part of the leg. But, as this question involves principles applicable likewise to amputation elsewhere, I will take occasion to review the whole subject of these amputations,—first, considering how the place of operation is to be determined, and then continuing on to describe the plan or method of operation which I adopt in each case.

It used to be said, that in amputations of the upper limb, it was always important to leave as much of that limb as possible; but in the lower limb, a place or places "of election" were indicated. So that, while a finger and each inch of the upper arm or forearm were allowed to have their value in the after-use of the arm, some portions of the lower limb were considered as "in the way," rather than useful; and hence, in certain circumstances it was deemed right that a good portion of this latter should be lopped off, in order to fit the stump to the apparatus to be afterwards worn, or even for sake of an easier operation. I have long been of opinion, that the portion of this rule which refers to the lower limb, was not in any case expedient; and I have, from time to time, during several years, pointed out in this place the grounds upon which I pursue a different course. These grounds I now proceed to lay before you.

In determining the place at which, amputation being necessary, the operation ought to be performed, we are to keep, it seems to me, two objects steadily in view,—namely, the recovery of the patient from the immediate effect of the wound, and the provision for the facility of his progression afterwards.

1. As regards the first of these considerations, it may be stated in general terms, that by the result of a large number of amputations it has been shown, that the more remote the seat of the operation is from the trunk, the greater is the probability of the recovery of the patient. This may be owing, if to no other cause (and there is probably another cause) to the fact, that, as the limb diminishes in size almost uniformly to its end, the wound of the operation in the distant parts is proportionately smaller.

2. The facility of progression with an artificial limb is obviously a matter second in importance only to the consideration of the recovery of the patient from the immediate effects of the operation. In providing for it we have to bear in mind the following facts:—

a. That in no case where the operation is made through the leg or thigh, can the person afterwards rest easily the end of the stump upon the artificial support. It is only where a part of the sole of the foot is made to cover the bone, that the end of the truncated limb will sustain, without pain or injury, the weight of the body. In other words, it is only the structures which are organised for the purpose, that will sustain the pressure in these circumstances without causing pain, and suffering ulceration.

b. It is likewise to be borne in mind, that the greater the length of the limb that remains after the amputation, the greater will be the ease, the steadiness, and the power, in commanding the artificial support, and the greater, therefore, the facility of progression. This general proposition is only limited by the necessity for leaving at certain points sufficient space for the joint of the artificial limb.

When I seek to make special application of the foregoing general propositions, to amputations at various parts of the lower limb (with which only we are now concerned), it is not necessary for me to allude to the foot, as the importance of preserving a portion of it, where practicable, is generally admitted. I proceed, therefore, to—

AMPUTATION AT THE ANKLE-JOINT.

It is only lately that this operation has been so performed

[No. 689.—Vol. III., NEW SERIES.]

as to bring it advantageously within the limits of practical surgery. When the amputation was first performed in this place, the bones of the leg were covered, after the removal of the foot, with flaps of skin taken from the dorsum of the foot, or from its sides. I have not had an opportunity of seeing a case in which the operation was executed in this way; but I have no doubt that the skin derived from either of the parts just mentioned, if it did not slough *ab initio*, would not support, without injury, the pressure to which it would be subjected, if the limb were made to rest upon its end. This being so, the amputation through the lower end of the leg would be more advantageous as regards both the proper formation of flaps to cover the bone, and the adaptation of a mechanical support. But the operation in this form seems to have been discarded almost as soon as proposed. A few years ago, it was suggested by Mr. Syme, of Edinburgh, to cover the bones of the leg from the soft parts beneath the heel. Tested by reference to the two general rules or principles we have been considering, the operation appears to me to be free from any valid objection; and what is more important, the result has been found in practice to be good. The person who has undergone this operation is enabled to bear his whole weight upon the end of the stump without inconvenience, and, on this account, the facility of progression is, with a proper apparatus, decidedly greater than when the amputation is performed at any higher part of the limb. Such an apparatus, I may add, has been constructed by our ingenious mechanician, Mr. Gray. There is at this moment a gentleman in the neighbourhood of the hospital, who, having undergone the operation we are considering, makes so good an appearance, and walks so easily with one of Mr. Gray's apparatuses, that with even careful looking for deformity or lameness, one can scarcely discover any. It was a source of regret to me that the disease of the soft parts above the ankle, as well as in the fibula, prevented me from performing the same operation in the case of Robinson. I may state, however, that even when this modification in the method of performing the amputation was first made known, I took occasion to perform it; and I then advocated the plan on the same grounds that I now offer in recommendation of it.

AMPUTATIONS OF THE LEG.

The "place of election" for amputation of this part of the limb used to be stated, nay, is now stated in books of authority, to be at a hand's breadth below the patella, and this position has been advised on the ground of the adaptation of a stump of that length to the support upon which it was afterwards commonly made to rest. But how stands this operation, regard being had to the two general rules laid down in a former part of this lecture?

1. The wound necessarily made in amputation at the place adverted to,—through the calf of the leg,—is always larger, in some cases very much larger, than it would be in the lower part of the leg, and the operation is proportionately more hazardous.

2. It may be that the shorter stump would be more convenient for the poor man, because it would fit better the supporting ledge of the common pin with which he is obliged to be content afterwards. I believe, however, the superior convenience in this respect to be outweighed by the greater risk attending on the larger wound. But in the case of all those who can afford the expense of the better constructed artificial limb (and the poor man may be able to procure it at some future time) (a) the lower amputation is beyond all question the more advantageous one for the facility of progression. The reason will best be understood by observing the construction and manner of applying the apparatus, and, as this is only to be done with the objects before us, I have had specimens of Mr. Gray's construction for different parts of the limb brought here to day. The artificial limb is, as you see, hollow, and more or less of the truncate member is received into it. Here I may mention, that, inasmuch as the muscles of the leg, and even the bones, dwindle after the amputation from want of use, the wooden case needs to be but little larger, if at all, than the natural limb. The important point for consideration, in connexion with our present purpose, is this, namely, that the greater the length of the stump inserted into the wooden support, the greater is the power the wearer has over this; and this

(a) Since Robinson's limb was amputated, his employer has sent to inquire if the operation was so performed as to allow of his wearing a "cork leg."

greater power is owing to the mechanical advantage given by the longer lever. Influenced by these considerations, I have, during several years, regarded the "place of election" for amputation of the leg, to be within the lower third, wherever a choice was admissible. Full space is of course left for the mechanism of the ankle-joint in the artificial support. You will find, in the wax preparations in the anatomical museum of the College, some models of limbs after amputations performed by me in that part, a good number of years ago. The same reasons, I need scarcely add, influenced me with respect to Robinson's case. You have an opportunity of seeing in that case, as well as in the models, that the cicatrix is a small and close one, and that the stump admits of being well shaped.

AMPUTATION AT THE KNEE-JOINT.

I believe the amputation through this joint to be objectionable, especially for two reasons.

1st. On the score of the large size of the wound necessarily made. The condyles of the femur have been covered in the operations hitherto performed, with a flap raised from the calf of the leg; and, as the flap must be long enough not only to cover the large bone, but likewise to fold upon itself, it must necessarily be of great length.

2ndly. It seems to me that to arrange an apparatus for future progression must be somewhat difficult, seeing that there is no space left for the usual arrangements of the mechanism for a knee-joint.

The force of the first objection is not, I believe, diminished by the experience of the operation in the hands of any surgeon. For myself, I have never thought of amputating at this joint, in consequence of the reasons I have now alleged against it; and I have only seen two instances in the practice of others. The results of these cases, and of others that I have been made acquainted with, were not favourable.

AMPUTATIONS OF THE THIGH.

If the facility of the surgeon's manipulations, or the celerity with which he may go through his part, had any weight in determining the place of operation, the middle of the thigh would be the place selected. For in that situation the flesh is abundant, and the femur is small, smaller than elsewhere; while, on the contrary, the relative size of these structures is reversed towards the lower end of the thigh, the bone being expanded in all directions, and the soft parts not only relatively but positively very much smaller. Hence, to pass the knife across the limb (I speak of the flap amputation) in the higher operation is a matter very easily effected; but to insinuate the instrument between the broad bone and its slender coverings in the neighbourhood of the knee, requires caution and address on the part of the surgeon. When, however, the subject is considered with reference only to the immediate and prospective welfare of the patient, the advantages are, in my opinion, plainly in favour of the lower operation, for—

1st. The wound to be healed is here much smaller. Many years ago I had to amputate the limb of a very muscular person, in consequence of an injury. His thigh was prodigiously large at the upper and middle part, but, as usual, the knee, with the adjacent part of the limb, was of comparatively small size. The operation was performed in the latter situation, and the result was in every way favourable. Ever since, I have invariably followed the same course wherever the state of the limb made it possible, and the results have been satisfactory.

2ndly. When we turn to the second matter of consideration, namely, the facility of progression with an artificial limb, the advantage is equally in favour of the lower amputation. With the common wooden leg or pin, the stump is inserted into the hollow at the upper end of the apparatus, and the pressure is made neither upon the end nor upon the circumference of the truncated limb, but upon the pelvis at its inner side; still, the greater length of the stump gives the advantage of greater leverage in moving the artificial limb.

Again, when the best form of artificial support is worn, the advantage of the longer stump is still more decided. In this case the apparatus does not reach the pelvis; the thigh part is accurately fitted to the surface of the stump, and a great part of the comfort of the wearer depends upon the nice adaptation here, so that the pressure shall be evenly diffused over the sides of the stump, but without bearing upon its end. From the shape of the thigh, its gradual

increase upwards, it is manifest that the greater the extent of it that is inserted into the socket, the more easily will the adaptation be made. On the other hand, when the stump is short, the advantage of the conical shape (so to express it) of the thigh is lost, and practically, it is found by the mechanician that, in this case, he cannot construct his apparatus so that the weight of the trunk shall be effectually supported upon the circumference of the socket. Other expedients are then necessary. To these mechanical disadvantages in the case of a short stump, must be added the defect of leverage. Such then are the grounds upon which, when amputation of the thigh is necessary, and a choice of the place is possible, I prefer very decidedly the operation near the knee.

I have now arrived at the point where the methods or plans of performing the several operations should be described in detail; but in order to make these intelligible, illustrations upon the dead body are necessary, and I shall avail myself of an occasion to take up this part of the subject on another day. I will now only add, that the methods I pursue are not, in several of the amputations, those usually practised by other surgeons. Of one form of deviation from the ordinary course, you have had an example in the case which called forth these observations.

ORIGINAL COMMUNICATION.

THE MARCH OF DEATH IN ST. GILES'S.

BY DR. KING, M.D.

Medical Superintendent of Bilston and Darlaston, in Staffordshire, in 1832, and
Superintending Medical Inspector of Lambeth, Newington,
Camberwell, St. Giles', St. Martin's, and the
Strand and Holborn Unions in 1849.

[Continued from page 277.]

MEASLES.

THE geographical distribution of Death in measles is as follows:—

No. 1.

Street.	No. of House.	Deaths.	Houses.
Abbey place ...	8, 5, 0	1	3
Bloomsbury market ...	9, 7 ^a	1	2
Broad street ...	36, 24	1	2
Brownlow street ...	36, 25, 11, 7, 10	5	5
Burnett's buildings ...	1	1	1
Bowl yard ...	10	1	1
Carrier street ...	12, 11, 4, 3, 1	5	5
Chenies street ...	21, 14, 9	3	1
Charlotte street ...	20	1	1
Church lane ...	28, 27, 26, 24 ^a , 22, 21, 16, 17, 9 ^a , 8, 5, 4 ^a , 7	17	13
Charles street ...	52, 29, 8, 4, 3	5	5
Church street ...	26, 17	2	2
Church passage ...	2	1	1
Clark's buildings ...	15 ^a , 13, 4	4	3
Coram place ...	15, 13, 11, 8 ^a , 7 ^a	8	5
Coal yard ...	23, 21, 17, 9, 6	5	5
Crown place ...	8	1	1
Colonnade ...	22, 21, 20 ^a , 19, 1	6	5
Cross lane ...	3 ^a , 7	1	2
Chenies mews ...	30, 24	2	2
Chapel place ...	19, 1	2	2
Denmark street ...	26, 15	2	2
Dudley court ...	5, 1	2	2
Dudley street ...	{ 80, 75, 74, 67 ^a , 65 ^a , 59, 55, 54, 53, 51, } { 49, 37 ^a , 33, 26, 52, 24, 23 ^a , 20, 19, } { 16, 15, 14 }	20	22
Griffith court ...	4 ^a , 3	3	2
Gilbert street ...	15, 13	2	2
Great Queen street ...	43, 42, 21	3	3
Great Earl street ...	21 ^a , 17	1	2
Gt. St. Andrew street ...	40, 41, 37, 32, 28, 18, 17, 9	1	1
Great Turnstile ...	6	4	4
Gt. White Lion street ...	15, 5, 4, 1	1	1
Great Russell street ...	97, 75	15	11
Great Wild street ...	52, 13 ^a , 55, 48, 40, 26, 25, 21, 20, 7 ^a , 6	1	1
Great Coram street ...	2	3	3
High street ...	54, 12, 3	2	2
Hyde street ...	30, 4	1	1
Hampshire Hog yard ...	10	1	1
Kenton street ...	10	1	1
Kennedy's court ...	2, 1	10	6
King st., Drury lane ...	41, 25, 24 ^a , 20, 15, 1 ^a	10	9
King st., Seven Dials ...	37 ^a , 28, 42, 29, 57, 48, 49, 23, 22	2	1
Keppel mews, North ...	39 ^a		

			1849	24		
			1848	...		
			1847	...		
			1846	...		
		1	1845	...		
		...	1844	...	15	
	30	...	1843	...	...
5	28	2 ²	1842	19, 21	26	3
Star-court.	Museum-street.	Orange-court.	YEAH.	Little Guildford- street.	Denmark-street.	Crown-place.
						Bowl-yard.

Measles and scarlet fever both held a cycle in 1839; but during the measles' cycle of 1845, scarlet fever was at its lowest ebb but one, and during the scarlet fever cycle of 1848

No. 8.

Vernon-pl.	7	1, 2	1	1, 11	12	3, 8, 52	15	12	6, 9	1	3	26	15	5	6	7	33, 41 ^a , 46	7, 36	1839	18	4, 7	9, 20	15, 26, 37, 53, 80	13 ^a	42	9	14, 27	20, 24 ^a	6, 9, 17	44	17, 21 ^a	6	Shulton School.	4
Kennedy-court.																			1843															
Bell-court, Drury-lane.																			1844															
Carrier-st.																			1845															
Queen-street																			1846															
Charles-st.																			1847															
Southampton-mews.																			1848															
High-street.																			1849															
Princes-st.																			1849															
Great White Lion street.																			1849															
Stonecutters'-alley.																			1849															
Little Queen-street.																			1849															
Clark's-bldg.																			1849															
Lincoln court.																			1849															
Cross-lane.																			1849															
Parker st.																			1849															
Brownlow-street.																			1849															
YEARS.																			1849															
Great St. Andrew-st.																			1849															
Nottingham-court																			1849															
Stagey-street.																			1849															
Dudley-street.																			1849															
Newton-st.																			1849															
Gr. Queen-st.																			1849															
Shorts-bldg.																			1849															
Tower-street.																			1849															
King street, Drury-lane.																			1849															
Titchborne-st.																			1849															
Coal-yard.																			1849															
P. to place																			1849															
Lincoln's Inn-fields.																			1849															
Great Earl-street.																			1849															
Gr. Turnstile.																			1849															
Little Den-mark-st.																			1849															
Woburn-st.																			1849															

No. 9.

Regent-place.	3	13 ^a	1849	2 ^a	52	7
Maynard-street.			1849	19		
YEARS.			1849	19		
Little Cornhill-street.			1849	8		
Torrington-square			1849			
Lawrence-street.			1849			

No. 10.

Hog-yard.	10	5	1848	17	97	39 ^a	1
Queen's-place.			1847	...	75		
Dudley-crescent.			1846	...	75		
YEARS.			1845	26	75		
Church-street.			1844	26	75		
Great Russell-st.							
Kennel-Mews North.							
Burnett's-building.							

No. 11.

Woburn-mews, West.	21	2, 5, 11, 13, 19	14	1847	28, 37	15	24, 30
Steward's-place.			...	1846	...		
Lascelles-place.			3	1845	22, 23, 29, 37, 42, 48, 49, 57,	13	
YEARS.							
King-street, Seven Dials.							
Gilbert-street.							
Chenies-mews.							

No. 12.

Kenton-street.	10	1847	4
YEARS.		1846	8
Monmouth-court.			

No. 13.

New Turn-stile.	2, 7	1849	19	4
YEARS.		1848	...	
Chapel-place.		1847	1	
Red Lion-yard.				

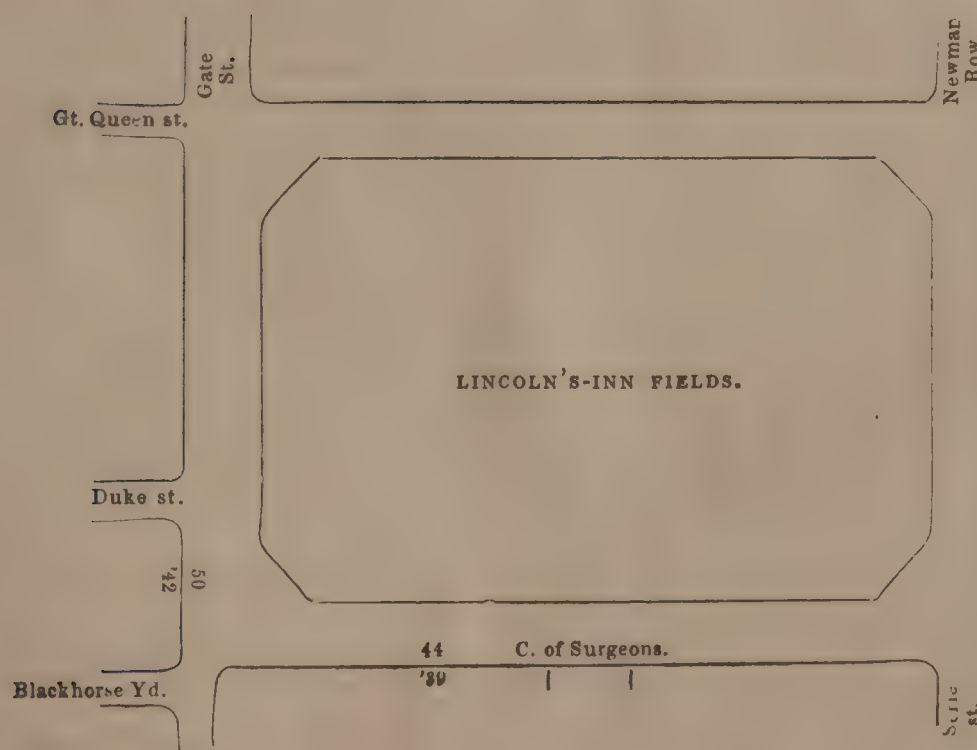
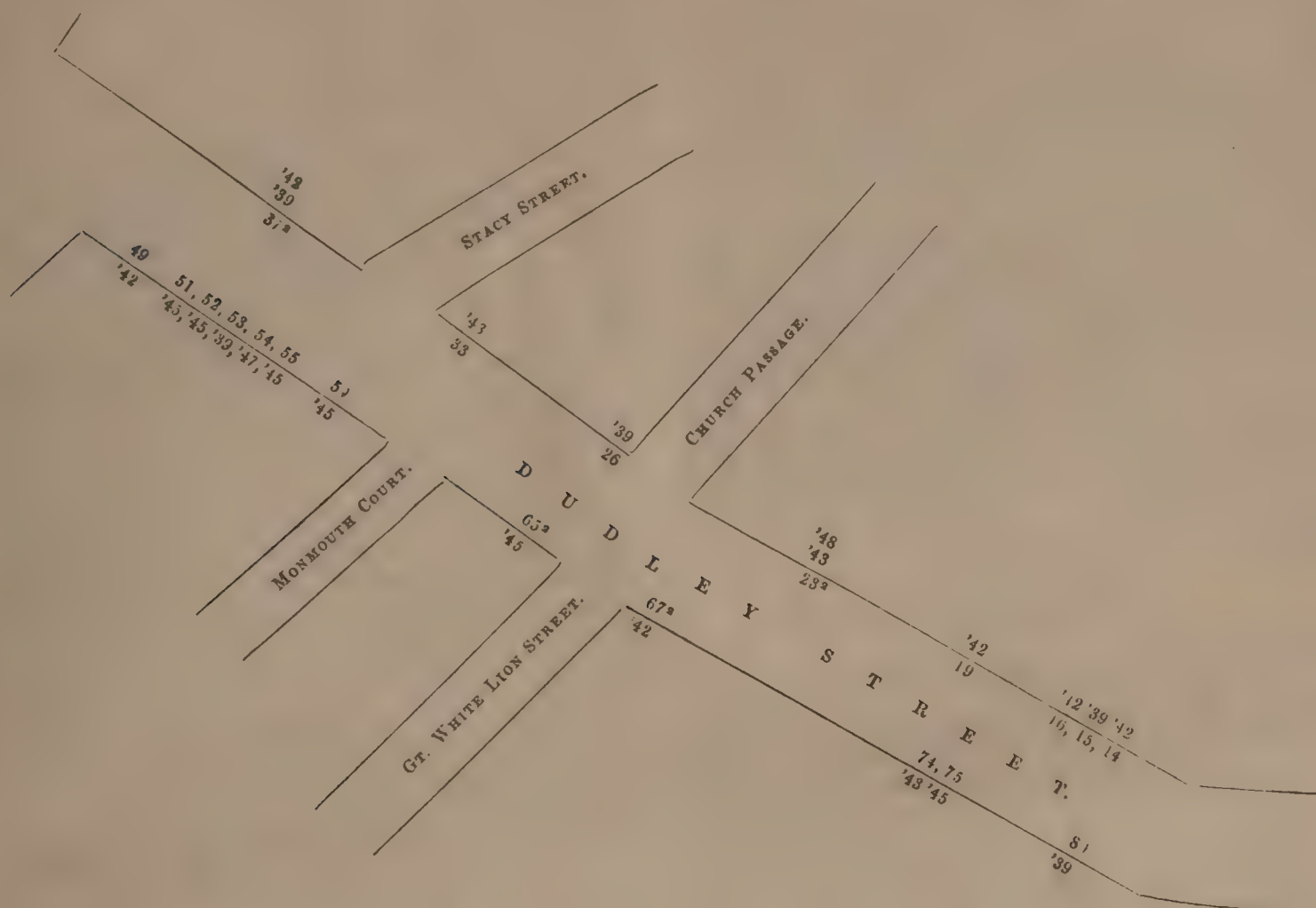
No. 14.

Upper Montague-mews.	22	20	1849	2, 4	29	1
Moor-street.			1848			
YEARS.						
Lloyd's-court						
Whetstone-park.						
Great Coram-st.						

No. 15.—This year presents a blank in this series of tables, for, although there were thirteen deaths distributed over eleven streets, no one street was involved in the mortality for the first time.

This series of tables demonstrates that measles harps back upon its locality year after year, as strictly as cholera and scarlet fever, (a) as in Dudley-street, at 23 and 37, or the

next house, at 74 and 75, or the opposite house, at 74 and 19, or within a house or two of one or the other, of which there are several examples.



The illustrations—Lincoln's-inn-fields and Dudley-street, demonstrate that measles falls in isolated groups, and thus follows the law of cholera and scarlet fever. This fact,

together with the strict adherence of measles to its own locality—a locality totally different from that of cholera and scarlet fever—tends still further to strengthen the gaseous, and to weaken, if not destroy, the contagious theory attached to these three forms of disease.

(a) See *Medical Times*, 10th August, 1850, and 13th Sept., 1851.

GENERAL CORRESPONDENCE.

COMPRESSION OF THE FŒTAL HEAD AT BIRTH.

[To the Editor of the Medical Times.]

SIR,—On looking over the Report (in your Journal of Friday last) of the discussion which followed Dr Ogier Ward's paper, "On Compression of the Fœtal Head at Birth," at the London Medical Society, I perceive that the reading of some of the remarks I then made with reference to epilepsy, does not exactly express the opinion I intended to offer.

As the Report stands, the intimation would probably be implied, that in no case of epilepsy which I had seen or read of had any lesion of the nervous system been found after death. This, however, is not what I intended to express, because it is not fact; but I desired to say, that I had never been able to satisfy myself that the epileptic convulsion really arose from lesion of the nervous system, although I had often found lesions of the vascular system capable of producing the convulsions in such cases.

That this correction is required, in consequence of my own faulty mode of expression, I have no doubt; but perhaps you will be kind enough, nevertheless, to find a place for it in some coming Number. I am, &c. BENJAMIN W. RICHARDSON.

Mortlake.

MR. GROVE ON EPIDEMIC DISEASES.

[To the Editor of the Medical Times.]

SIR,—In your Journal of this day, (Nov. 20,) I have read with considerable interest the commencement of a series of papers on the Propagation of Epidemic Diseases, promulgated by Mr. Grove in his recent volume on that subject. I am desirous of stating some objections to his opinions thus early, for the purpose of directing his attention to them in the course of the ensuing papers. He refers epidemic (infectious, contagious, or communicable), to special organic germs, which, finding their way into the organism, develop other similar germs by which the disease is propagated. Organic germs must, of necessity, be the earliest undeveloped conditions of animals or plants; and Mr. Grove refers the malignant germs of disease to the fungoid class of the latter. Naturalists are all agreed that germs do not always remain and propagate their like in the germ condition, but go on, excepting under some unfavourable circumstances, to the fully-developed animals or plants. I would ask Mr. Grove, whether he has ever had the good fortune to detect the fully-developed fungus of cholera, scarlatina, measles, or small-pox; and, if he has had that good fortune, to describe the exact individual characters of these fungi.

An attentive study of the parasitic fungi of plants, which are very numerous, has destroyed in my mind the analogy so prominently put forward by Mr. Grove between the parasitic botrytis of the vine and the supposed fungoid germs of epidemic diseases. The real analogy is not with epidemic diseases, but with entozoa, and the effects are similar,—local disturbance, if the parasites are not numerous and confined to particular parts of the plants; general debility only, when these are so numerous as to appropriate a large portion of the nutrient juices of the plant to their own growth and development. Take his own example:—If the development of the botrytis be confined to a few leaves, the remainder continue vigorous and healthy; but if, on the contrary, the greater portion of the leaves be affected, then the remainder suffer more or less from the cause to which I have already alluded. So is it with entozoa.

Returning to the "germs" of epidemic diseases, I conceive it to be incumbent on the propounder of the hypothesis to describe the exact characters by which he determines that the objects he would designate as germs are really such, and not mere granules of organic matter, so common in the organic solids and fluids. Another question, of still greater difficulty, equally demands an explicit answer,—namely, by what means he determines that what he believes to be the germs of fungi are not accidentally present; since we know right well, that fungi are so extensively diffused, that there is scarcely a substance on or within which the more minute fungi are not rapidly developed under favourable circumstances.

I commend these questions to the careful consideration of the author, with the hope that he may be able to ascend from the dim, shadowy realms of hypothesis to the clearer regions of theory, based on indubitable and indisputable data. I have read his

volume on this subject with no small amount of care, and I cannot forbear expressing the opinion, that, unless he is prepared with better data, the laws he has laid down must, for the present, be considered as purely hypothetical.—I am, Sir, &c.

Ph. B. AYRES, M.D. Lond., M.R.C.S. Eng.

Wandsworth-road.

MR. SYME'S ORIGINALITY.

[To the Editor of the Medical Times.]

SIR,—I read in your replies to correspondents a notice regarding my former master, Professor Syme. His wonderful operations have, as is well known in Edinburgh, excited the jealousy of London surgeons, who are still unwilling to admit that all discoveries in surgical science for the last forty years have emanated from our University. Who, before Mr. Syme, introduced the excision of joints? Who, before Mr. Syme, operated at the ankle-joint? As to your notice of the perineal section, stated to have been performed by a French surgeon of little note, I ask, where are the cases which he has recorded? and why are we to believe your simple assertion in preference to others? As for the lip operation, so peculiarly his own, who ever dreamed of restoring that important organ before Mr. Syme? In diagnosis too, Mr. Syme is notoriously pre-eminent. Who but he detected an aneurism of the carotid, and tied it too, when his colleague had diagnosed a strumous gland? Who but he cut down upon the iliac, when others only saw a malignant tumour of the groin? You may attack the professional character of those whom you and your compeers can never hope to equal; but I tell you that there are plenty who, with myself, are willing to believe in Mr. Syme's statement, before all the medical journals put together, and ready to take up more than the cudgel in his defence. I am, &c.

Edinburgh.

A FORMER PUPIL OF MR. SYME.

[As regards our correspondent, it is evidently not true that "the ass knoweth his master's crib."—*Ed. Med. Times.*]

LA BOUTONNIÈRE.

[To the Editor of the Medical Times.]

SIR,—I believe I can adduce evidence to show that the operation "La Boutonnière," is not a novelty of the present day; for when I was a dresser in the surgical wards of the Hôtel-Dieu at Rouen, under M. Flaubert, in 1826-7, I saw that talented surgeon perform the operation in question on a middle-aged patient, who had an impassable stricture. The man had been in the wards for a considerable time, and repeated attempts had been made in vain to pass an instrument into the bladder. The symptoms becoming urgent, M. Flaubert announced one day to the assembled pupils that he should perform the *ancient* operation called "La Boutonnière," which he did forthwith, *i.e.*, by opening the urethra through the perinæum, and then carrying a catheter onwards into the bladder. I do not recollect sufficient of the case to be enabled decidedly to state the result, but I believe it was successful.

As far as I am able to understand the operation, as described by Mr. Syme, that performed by M. Flaubert was precisely similar, with the exception that the Rouen surgeon operated, because of an impassable stricture, and under urgent circumstances; while Mr. Syme recommends his perineal section in cases where an instrument can be got with greater or less facility into the bladder. In addition, I may draw attention to the fact, that M. Flaubert spoke of "La Boutonnière" in 1826, as an ancient operation, thus showing, in his opinion, at least, that even then it was devoid of novelty. I am, Sir, &c.

JOHN FOOTE, M.R.C.S.L.

36, Tavistock-street, Covent-Garden.

"THE PERINEAL SECTION."

MR. GUTHRIE, MR. LIZARS, AND MR. SYME.

[To the Editor of the Medical Times.]

SIR,—I was not less amused than astonished at the re-appearance of Mr. Syme in the last Number of the *Medical Times*. I had imagined, from his opinion "of the feeble and slavish management" of your Journal, that he would have disdained to darken again its portals. But disappointment is an infallible teacher of humility, and curber of hostility. Is it that, having been expelled from the *Lancet*, his former protector, who, in his defence, characterised your periodical as a "disreputable print,"—denounced by

the *Gazette*, and, apparently, set at bay by the conductors of his own miscellany, the *Northern Luminary*,—he has been compelled, at last, to seek for shelter under your wing. After the Clinical Professor awakens from the troubles of his new vocation, of framing so-called *post-prandial* memorials for the purpose of expelling a professor, with whom, it seems, he has had a personal quarrel, from the University of Edinburgh, it is to be hoped a more pacific spirit will enter his perturbed breast,—that his new crusade will employ his old stock of weapons stored against the London school,—and that, in spite of his “unqualified and indignant denial” of all compromise, he may yet condescend to correspond even with Mr. Gay!

My object in asking you to give a place in your next to this communication, embraces two important points contained in Mr. Syme's letter. The first point is already disposed of by your editorial and unanswerable reply to his question, “when, where, and by whom his operation for the remedy of stricture was performed before he proposed it!” Mr. Guthrie, “On the Successful Treatment of Strictures of the Urethra supposed to be Intractable,” remarks, at page 34, “When any kind of solid instrument, however small, can be passed into the bladder, it becomes an operation of no import.” And he goes on to say, “Mr. Syme, Professor of Surgery in the Royal Infirmary of Edinburgh, has lately recommended this or a similar operation to be performed in all cases of irritable and intractable strictures, in which he could pass a grooved staff into the bladder, not as an absolutely necessary, but as a curative process. If he had had the misfortune to meet with a case in which he could not pass an instrument of any kind into the bladder,—a misfortune which has occasionally befallen all surgeons of extensive practice among the poor or the unfortunate,—I presume he would have done the operation precisely as I have done it, and recommended it to be done, for thirty years at least! And I cannot but regret that he had not had the opportunity of knowing what I had done, and had, consequently, confined his observations to reprobating the old operation by the side of the *raphé*, the *bouttonniere* of the French surgeons; which very operation mine was intended to supersede, and had, indeed, superseded, with most well-informed surgeons.” After this,—*credat Judæus!*—Mr. Syme transfers the odium from the French to wholesale condemnation of the English mode of operating!! He admits, in one of his recently published cases, that he only succeeded in passing an instrument through the stricture after repeated ineffectual attempts. Now, I ask him, if retention of urine had supervened during the time occupied by his unsuccessful efforts, how would he have relieved the patient? He must either have sent to London for the assistance which he publicly repudiated, and boasted to afford to its surgeons under similar circumstances of emergency, or employed the mode of operating performed and recommended by Mr. Guthrie more than twenty years before he had even dreamed of the perineal section,—the operation, *par excellence*, which he arrogates as his own!! But his claims for introducing new operations and novel modes of practice are equally unbounded as they are unfounded. He appears to be the fac-simile of a very resurrectionist of subjects, under the form of operative improvements, in every state and every stage of decay. He is so avaricious of fame, that all operations he styles as his own, whether begged or borrowed; and, if he were entitled to the honour of originating only the one-half he lays siege to, he would have the undoubted credit of being the most inventive genius that ever lived!!

The second point refers to Mr. Syme's statement, when he says, “I never operated upon Francis Rodgers for stricture, (?) and never performed any operation upon Joseph Antonio.” The italics and point of interrogation are my own. It was quite unnecessary for Mr. Syme to say one word on Joseph Antonio. No one ever alleged he operated in that case. On the contrary, Professor Lizars, in his “Observations,” at page 16, distinctly states, that the operator was one of Mr. Syme's hospital colleagues. The operation, I presume, was done in Mr. Syme's presence, and under his auspices. The operator himself admits the operation to be a failure, and a most miserable one it is. It is a curious fact, in the history of the controversy relative to the four cases published in your journal by Mr. Lizars, in October, 1850, that Mr. Syme should seize on the occasion, by commencing an attack upon Mr. Lizars' character, personal and professional; for he acknowledges, in his letter addressed to you, of the 1st November, 1850, “of the cases related I know nothing.” He, however, soon discovered he operated in one of them, and furnished an account, from evidence drawn up from one-sided witnesses, procured by him to upset the counter-statements of Mr. Lizars and Dr. Miller. He has been upwards of a year silent on the subject of the three other recorded cases. At last he seems to have recognised Rodgers. Did he require such a length of time to devise a mode of throwing the discredit of the operation

he performed upon him from the back of the urethral stricture to the shoulders of the fistulous perinæum? The patient states, that he was taken into the operation-room, was placed on the table as in lithotomy, and, after chloroform was administered, his perinæum was incised by Mr. Syme. Next morning, his shirt was soaked with blood, and the wound was plugged with lint, etc. etc. In his published declaration, he states, that his urinary passage was cut into from without!! He is still in the most deplorable state, suffering from stricture and perineal fistulous openings. Does Mr. Syme mean to say, that a case of fistula in perineo, complicated with and occasioned by urethral stricture, when operated upon by division of the perinæum and the urinary canal, is not an operation for stricture? Is it upon such “trashy evidence” that the infallibility of his new mode of curing stricture rests? and is it by resorting to such “miserable quibbles” that the cause of truth is to be defended? If Mr. Syme denies the occurrence of the evils resulting from the operation he performed in this case, I will conclude, in the language of Professor Miller, employed under similar circumstances, “that some allowance must, in future, be made in reading his (Mr. Syme's) statements regarding the other patients, in whose treatment no unpleasant consequences are said to have occurred.”

SCRUTATOR.

[We request all future correspondents regarding Mr. Syme or his operations to append their names to their communications. *Ed. Med. Times.*]

MEDICAL NEWS.

UNIVERSITY OF CAMBRIDGE.—A grace has passed the senate to appoint Dr. Paget, of Caius College, an examiner of the Natural Sciences Tripos in the ensuing year. The examination will begin on Monday, March 8, at 9 a.m., in the Senate-house. The order of the examination will be as follows:—Monday, comparative anatomy and geology; Tuesday, physiology and botany; Wednesday, chemistry and mineralogy; Thursday, mixed questions. All persons who shall have the examination required for the degree of B.A. after February, 1851, may be candidates for honours in the commencing Natural Sciences Tripos. Those who have passed that examination between February, 1850, and February, 1851, may be candidates for honours in the Middle Bachelors' Natural Sciences Tripos. Those who have passed the examinations and kept the exercises for the degree of LL.B. or M.B., may be candidates for honours in the commencing Bachelors' Tripos on this occasion, if the term be the fourth Lent term after their first term of residence; and in the Middle Bachelors' Tripos, if the term be the fifth Lent term after their first term of residence. (Grace, May, 1851.) All persons desirous of being candidates in this examination must send their names, with notice of the requisite examinations they have passed, to the Professor of Anatomy, on or before Friday, March 5, 1852.

ROYAL COLLEGE OF PHYSICIANS.—At the usual quarterly meeting of the comitia majora, held on Monday, Dec. 22nd, the following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College:—

BISHOP, Dr., Albion-street, Hyde Park.

GARROD, Dr., Harley-street.

HASSALL, Dr., Park-street, Grosvenor-square.

WILKS, Dr., Bethel-place, Camberwell.

ROYAL COLLEGE OF PHYSICIANS.—The President and Fellows of the Royal College of Physicians have presented to George E. Blenkins, Esq., (assistant-surgeon in Her Majesty's 1st or Grenadier Regiment of Foot Guards,) an elegant silver inkstand, with a purse of fifty guineas. The anatomical and pathological preparations bequeathed to the College by that great practical physician, Dr. Matthew Baillie, and mostly dissected and “put up” with his own hands, have lately been restored by Mr. Blenkins; and the College, in expression of the high sense which they entertain of his labours in their Museum for the advancement of medical knowledge, of their entire satisfaction with the result of his exertions, and more especially of the cordial good-will which they feel towards him for the cheerful spirit and true professional energy with which his self-imposed duty was undertaken and successfully carried through, have thus acknowledged the peculiar excellence of his services. On the inkstand (made by Messrs Turner, of Bond-street.) is inscribed,—“To George E. Blenkins, Esq., in testimony of his skill, assiduity, and experienced judgment, in the execution of the delicate task reposed in him, for the restoration of the Museum. (With a purse of fifty guineas.) From the Royal College of Physicians, London. December, 1851.”

ROYAL COLLEGE OF SURGEONS—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 19th inst. :—

AGNIS, JOHN CROWN, Harewood-square, Regent's-park.
 ARCHER, LEWIS HITCHIN, Southampton-road.
 BREAKEY, JOHN, Monaghan.
 CLARKE, ESLIN, Worcester.
 COVENTRY, GEORGE MALLET, Llanrwst, Denbighshire.
 DOWSE, JOSEPH GIBSON, Manchester.
 GREENWAY, HENRY, Plymouth.
 HARDING, JOSEPH JAMES, Newcastle-upon-Tyne.
 HILL, GEORGE PISHEY THOMPSON, Boston, Lincolnshire.
 KAVANAGH, BERNARD, Limerick.
 O'DONOVAN, DANIEL, Limerick.
 SMITH, ALBERT DANIEL, Nailsworth, Gloucestershire.
 WILKINSON, RICHARD, Bradford, Yorkshire.
 WILSON, JOHN HENRY, Shrewsbury, Salop.
 WOLSTENHOLME, JOHN HANCOCK, Bolton, Lancashire.
 YOUNG, WILLIAM TALBOT, Madras.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 18:—

BANNISTER, HENRY POWELL, London.
 EVANS, RICHARD, Devonport.
 FULCHER, FREDERICK BROOKER, Maidstone.
 HARRISON, HENRY JOHN, London.
 M'CANN, JAMES, Ireland.
 NEWHOUSE, ROBERT BROCKMAN, Dover.
 RAMSKILL, JOSIAH, Leeds.
 TAYLOR, ALBERT, Newcastle-on-Tyne.

NAVAL APPOINTMENT.—Acting Assisting-surgeon, W. D. Haye (1851) to the Impregnable flag-ship at Devonport. Acting Assistant-surgeon, Richard Evans (1851) to the Victory, flag-ship, at Portsmouth. George A. Eversfield (1846), from the Hercules storeship, to the Excellent gunnery ship, at Portsmouth.

NAVAL MEDICAL SERVICES.—We believe it to be the honourable boast of the Board of Admiralty that special services call for special consideration. It will not, therefore, be out of place to bring before their Lordships the services of Mr. John James Caddy, Assistant Surgeon of the Royal Navy. This officer served for nearly three years at the Royal Naval Hospital of Jamaica, amidst the deadly haunts of yellow fever; and the statistics of this establishment, among the junior grade of medical officers, have been, that although upwards of fifty have done duty there since 1826, one in every five have died, whilst only three Assistant Surgeons have been promoted from the establishment. We believe such a lamentable record has not a parallel. This officer's services were also prominent in the fever visitations of Her Majesty's ships *Endymion* and *Pantaloon*, in the West Indies. Mr. Caddy was not allowed much repose after this trying servitude; and, in 1849, we find him associated with cholera of a most malignant and fatal character on board the *Apollo*, commanded by a neglected officer, Commander Rawstone, when the 59th Regiment of Foot was taking passage to Hong-Kong; and when, on the ill-fated 95th Regiment returning to England in the same vessel, an alarming dysentery spread from the soldiery to the sailors and marines. Mr. Caddy, on leaving the *Apollo*, to take upon himself the duties of Surgeon of Her Majesty's sloop *Helena*, 16 guns, was recommended for promotion by his late commanding officer; and the gallant Captain of the *Helena*, we may add, has likewise nobly said, "I consider him a highly meritorious and zealous officer, and one that I can with confidence recommend to their Lordship's favourable consideration for promotion. Influenza has been epidemic in the *Helena*." We hope to record Mr. Caddy's preferment to the rank of Surgeon. Sir Francis Baring, we are assured, cannot but reward a career of unflinching association with the most fatal diseases, more perilous and more to be dreaded than the most active warfare. We have here done for an officer that which he cannot do for himself. In our public capacity such facts would not have passed us, and our private knowledge of this gentleman calls us thus early to do that which is a duty and a pleasure.—*United Service Gazette*.

SIR A. COOPER.—The Medical Society of London have had a magnificent present made them in the shape of a marble bust of the late Sir A. Cooper. The donor, we understand, is Mr. Cock, of Guy's Hospital. His valuable gift—valuable in every sense of the word—has been placed in the library.

MEDICAL BENEVOLENT COLLEGE.—A meeting was lately held

at Liverpool in support of this institution. Robert Bickersteth, Esq., was in the chair. Dr. Dickinson is the local Secretary.

[Advertisement].—**TO THE MEDICAL PROFESSION**.—The members of the Medical Profession are usually dependent upon their own personal exertions for their subsistence. If health fail, they fall into distress; if they die, their families are unprovided for.

The uncertainty of their incomes often prevents them from making provision for infirmity, old age, or death, by the usual methods of assurance. To meet this difficulty, The Law Property Assurance Society has made the following arrangements for the benefit of the Profession:—

1. It grants special policies of assurance, by which the assured, instead of being obliged to pay a fixed sum every year or forfeit their policies, may pay any sum they please, at any time, according to their means, and for which a proportionate sum will be assured to them by their policy. By this means uncertainty of income is provided for, and no forfeiture for non-payment ever takes place.

2. If the assurer in this office should find that the objects of his insurance after death are no longer required, he may convert his policy into an annuity for his own life.

3. On payment of a small annual sum during their own lives, husbands may secure annuities for their wives or daughters after their own decease.

4. On payment of a small sum annually, professional men may secure for themselves an annuity, to commence on the decline of life, or earlier, should they be at any time disabled, by sickness or infirmity, from pursuing their occupations.

Detailed prospectuses, forms of proposal, and every information, will be immediately furnished on application to WILLIAM NEISON, Actuary and Secretary, 30, Essex-street, Strand, London.

DEATHS in the Metropolis for the week ending Saturday, December 20, 1851.

CAUSES OF DEATH.	Dec. 20.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	573	396	233	1206	11485
SPECIFIED CAUSES	569	396	233	1198	11425
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	189	50	12	251	2710
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	23	27	56	480
3. Tubercular Diseases.	61	138	5	204	1652
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses, ...	67	25	20	121	1299
5. Diseases of the Heart and Blood-vessels	8	53	14	55	351
6. Diseases of the Lungs, and of the other Organs of Respiration ...	131	55	66	252	2574
7. Diseases of the Stomach, Liver, and other Organs of Digestion ...	14	26	11	51	533
8. Diseases of the Kidneys, &c. ...	2	11	2	15	97
9. Childbirth, Diseases of the Uterus ...	...	9	3	12	121
10. Rheumatism, Diseases of the Bones, Joints, &c.	7	4	2	13	73
11. Diseases of the Skin, Cellular Tissue, &c.	2	1	...	3	7
12. Malformations	2	...	...	2	26
13. Premature Birth and Debility ...	32	1	...	33	215
14. Atrophy	19	...	...	19	180
15. Age ... ..	...	...	53	52	698
16. Sudden	3	1	2	6	189
17. Violence, Privation, Cold, and Intemperance	26	19	3	48	395
Causes not Specified	4	...	...	3	60

TO CORRESPONDENTS.

COMMUNICATIONS have been received from:—

Dr. DICKINSON, of Liverpool; Mr. SCRIVEN, of the H.E.I.C. Service, Meerut; Dr. PEUND, of Rio de Janeiro; Dr. MACKENZIE, of Bayswater; Mr. FOOTE, of Tavistock-street, Covent-garden; Dr. TODD, of King's College, and Spring-gardens; Mr. FERGUSON, of King's College, and George-street, Hanover-square; Mr. BOWMAN, of King's College, and Clifford-street; Dr. AYRES, of Portland-place, Wandsworth-road; A FORMER PUPIL OF MR. SYME; Mr. ANNAN, of Kinross; Dr. HISLOP, of the General Hospital, Birmingham; Mr. BENJAMIN RICHARDSON, of Mortlake; Mr. BEALE, of King's College Hospital; Mr. BORLASE CHILDS, of the Metropolitan Free Hospital, and Finsbury-place; SCRUTATOR; Mr. NEWNHAM, of Fareham; Mr. CARPENTER, of St. Thomas's Hospital; A SUBSCRIBER FOR MANY YEARS.

INDEX.

A
Aberdeen, Marischal College and University,
 rules and regulations of, 360
 University and King's College, 216
Abortion, enlargements of the uterus which re-
 main after parturition or, 601
 on the treatment of hæmorrhage with,
 199
 procuring, 217, 369
Abscess of the liver, 600
 middle and posterior lobes of the
 left hemisphere of the brain, associated with
 rheumatic symptoms, 545
 prostate, bursting into the urethra,
 258
 tibia, 535
Abstract of the medical sciences, the half-yearly,
 222
Academy of Sciences, Royal, Stockholm, 216
Accident, extraordinary, 255
Acid, sulphuric, poisoning by, 213
Aconite, poisoning by, 395
Act, nomination of inspectors under the Irish
Medical Charities, 649
 salaries under the Irish Medical Charities,
 649
 Sale of Arsenic, 268, 422
 the Law of Evidence, 475
 the Metropolitan Internments, 162, 447
 the Public Health, 536
Action of the uterus, spasmodic : obeism, 306
Acton, W., Esq., on diseases of the urinary and
 generative organs, 17
Actonian prize, the, by T. Wharton Jones, Esq.,
F.R.S., 158
Acute phthisis in the adult, researches on, 538
Adams, John, Esq., F.R.C.S., the anatomy and
 diseases of the prostate gland, 316
Address, inaugural, at the opening of Sydenham
College, Birmingham, 568
 on irregular practice, 315
Adult, researches on acute phthisis in the, 538
Advertisement, a strange, 657
Affections, nervous, connected with dyspepsia, 439
Affinities and prophylaxis of variola, 442
Age, old, teeth in, 423
Agent, on posture as a therapeutics, 407
Agents, exciting, of epidemic, endemic, and in-
 fectionous diseases, on the unity of the laws which
 govern the, 640
Air, foul, in wells, 422
 passages, on the prevention of diseases of the,
 613
Albers, Professor, on hypochondriasis tremulans
senilis, 105
Albert Park, the, 294
Albuminuria and rheumatism, 543
Aldred, Chas. C., Esq., case of ulceration of the
 uterus into the colon, 12
Alkalescence of the urine, on, 651
Alkaline nature of the blood, 75
Allopathy and homœopathy, 393
Alumina, the tannate of, 522
Amenorrhœa. By Edward Rigby, M.D., 8, 374
Ammonia, carbonate of, in chronic psoriasis, 161
Amorphous phosphorus, 111
Amputation at the anklejoint, case of Syme's, 534
 in severe laceration of the leg, 282
 of the os calcis, 418
 tibia, 615
 toe, gangrene after, 510
 statistics of, at the General Hospital,
 Birmingham, 570
Amputations of the lower limb, places of election
 for, 659
Analysis of liquor amnii. By Professor Scherer,
 159
Anastomosis, aneurism by, 172
Anatomy and diseases of the prostate gland, the.
 By John Adams, Esq., F.R.C.S., 316
 Medicine, Theatre of, rules and regu-
 lations of, 339

Anatomy and physiology of the uterus, 9, 144, 204,
 250, 273, 377, 453, 583
 of bronchitis, the pathological, 493
 lecture on the recent progress of, 29
 pathological, and classification of dis-
 locations of the humerus, 160
 surgical. By J. MacLise, Esq., 212
Aneurism by anastomosis, 172
 carotid, 432
 of the aorta, 418
 ascending aorta, 586
 descending thoracic aorta, 206
 popliteal artery, 154
 small, in the ventricular septum, 519
 treatment of, 536
Animal chemistry, lectures on, 1, 57, 113, 167, 219,
 269, 371, 425, 477, 607
Animals and plants, progress of epidemic disease
 in man, 294, 320, 369, 422, 447, 550, 576, 656
Ankle-joint, case of Syme's amputation at the, 534
Annual meeting of the Provincial Medical and
Surgical Association, 156, 176, 315
 and the homœopaths, 175,
 315
ANSWERS TO CORRESPONDENTS:—
 28, 55, 84, 111, 166, 218, 242, 341, 370, 396, 424,
 450, 578, 606, 631, 658, 666
Aorta, aneurism of the, 418
 ascending, aneurism of, 586
 case of aneurism of the descending thoracic,
 206
 compression of the, uterine hæmorrhage
 and, 415
Aortic orifice, obstructive and regurgitant disease
 of the, 520
 valves, diseased and malformed, 520
 obstructive disease of the, dependent
 on malformation, 519
Aperient, on the employment of the rhamnus
frangula as a mild, 469
Aptha, on, and its important relations as an
 epidemic disease. By John Grove, M.R.C.S.,
 95
Apothecaries' Hall, 54, 81, 164, 191, 240, 266, 293,
 319, 368, 394, 421, 445, 475, 501, 527, 549, 575, 603,
 629, 656, 666
 rules and regulations of, 330
Appearance, peculiar, in the gums of consumptive
 patients, 163
Appointments and vacancies, medical, 26, 54, 81,
 110, 164, 191, 216, 267, 293, 319, 368, 395, 447,
 501, 549, 575, 604, 629, 656
 military, 26, 81, 110, 136, 164, 241,
 293, 368, 394, 421, 446, 501, 549, 629, 656
 naval, 26, 54, 81, 110, 136, 164, 191,
 216, 240, 267, 293, 319, 341, 368, 394, 421, 446,
 475, 501, 549, 575, 604, 629, 656, 666
Army, Branding in the British, 293, 309, 320, 368,
 386, 394
 medical department, rules and regulations
 of, 354
Arnold, Hart esq., 604
Arrest of the pulse, voluntary, 469
Arsenic Act, sale of, 268, 422
 eating, 528
 poisoning by white oxide of, 229
 the external use of, 576
Arterial system, gangrene after amputation of the
 toe, in consequence of diseased condition of the
 whole, 510
Artery, case of aneurism of the popliteal, 154
Articles, editorial, 15, 45, 69, 99, 128, 155, 174, 208,
 234, 259, 284, 309, 351, 383, 409, 435, 460, 490,
 511, 536, 564, 587, 615, 645
Articulate sounds, on, and on the causes and cure
 of impediments of speech, 47
Ascending aorta, aneurism of, 586
Asiatic cholera, 77
Aspects of mesmerism, mental and moral, 50
Assault, fatal, at the Kent County Lunatic Asy-
lum, 284
Assistant surgeons in the navy, 293

Association, annual meeting of the Provincial Me-
dical and Surgical, 156, 176, 315
 and the homœopaths, 175, 315
 Gloucestershire Medical and Surgical,
 447
 the Crewkerne and Yeovil District
 Medical, 320
 the Provincial, 128
Assurance, life, and medical fees, 395
Asylum, City of London Lunatic, 447
 fatal assault at the Kent County Lunatic,
 284
 for Idiots, 501
 Gloucester County Lunatic, 475
 new lunatic, Colney Hatch, 26
 Somerset County, 395
 superintendents, 491
Asylums. Lunatic, of Ireland, report on the, 491
Atmosphere, Dr. Bence Jones, on the nitrogen of,
 214
Audi alteram partem, 590
Augsburg, law of infanticide in, 265
Aurific preparations, use of, 25
Award of the jurors in the Great Exhibition, the,
 410
B
Badeley, Dr., Death of, 341
Baker, W., Esq., A practical compendium of the
 recent statutes, cases, and decisions affecting
 the office of Coroner, 103
Ball, the Polish, 523
Balloons, science in, 515
Baly, Wm., M.D., on epilepsy occasioned by irrita-
 tion in the socket of a tooth, 468
Banquet to Charles, Mayo, Esq., 446
Barclay, Dr., a statistical report on Disease of the
 heart, derived from a consideration of all the
 cases admitted into St. George's Hospital during
 the last two years and a half, 109
 hospital reports, 256, 408
 statistical report on cases of diseases
 of the heart, occurring in St. George's Hospital,
 especially in relation to rheumatism and albu-
 minuria, 543
Barker, T. Herbert, M.D., on infantile coma, 376
Barthelemy, M., death of, 594
Bascome, Edward, M.D., a history of epidemic
 pestilences, 492
Baths and washhouses, public, 576
Batteries, Pulvermacher's patent portable hydro-
 electric chain, 268
Battery, Pulvermacher's chain, cases of rheumatic
 and local paralysis, treated by, 509
Beale, John, Esq., M.R.C.S., case of ovariectomy
 successfully performed, 108
 Lionel John, Esq., on the laws of health in
 relation to mind and body, 104
 S., Esq., hospital reports, 125
Beasley, Henry, the pocket formulary and synopsis
 of the British and foreign pharmacopœias, com-
 prising standard and approved formulæ for the
 preparations and compounds employed in medi-
 cal practice, 592
Beck, T. Snow, M.D., on the pathology of the
 uterus, its anatomy and physiology, 9, 144, 204,
 250, 273, 377, 453, 583
Bedford, J. R., Esq., suggestions for the extension
 and perfection of vaccination, simultaneously
 with the systematic study of epidemic and en-
 demic disease in India, 413
Belfast General Hospital, practice of medicine and
 surgery at, 14
Belgium, the calamine furnaces in, 369
Belladonna, poisoning by extract of, 234
Bell's, Mr., pharmacy Bill, 106
Benefit derived from the inhalation of chloroform
 in a case of pulmonary consumption, by T.
 Spencer Wells, Esq., F.R.C.S., 375
Benevolent College, Medical, 320, 447, 501, 549,
 566, 604, 656, 666
 fund, the medical, 385

- Benevolent Society, Royal Naval, 447
 Bengal medical fund, 422
 Bequests, 26, 54, 241, 266, 293, 320, 448
 Bernard's, M., physiology, 471
 Biceps, displacement of the long tendon of the, 614
 Bichromate of potass in syphilitic vegetations and condylomata, 160
 Bill, Law of Evidence Amendment, 110
, Mr. Bell's Pharmacy, 106
, the Coroner's, 110
, for Regulating the Qualifications of Pharmaceutical Chemists, 69
, Pharmacy, 26, 81, 155
 Biologie, Société de, de Paris, 516
 Bird, Dr. Frederick, reports of practice illustrative of the diagnosis, treatment, and pathology of ovarian tumours, 60, 120
 Birmingham, inaugural address at the opening of Sydenham College, 568
, investigation at the General Hospital, 460, 490, 517
, Queen's College, 368, 421, 447
, rules and regulations of, 354
, Hospital, 110
, rules and regulations of, 354
, the practice of medicine and surgery at, 259, 643
, statistics of amputation at the General Hospital, 570
, Sydenham College, rules and regulations of, 341
 Birth, compression of the foetal head during, 654, 664
, diamond-shaped head, from compression at, 499
 Births, deaths, and meteorology, table of, for first half year of 1851, 52
 Bishop, John, F.R.S., on articulate sounds, and on the causes and cure of impediments of speech, 47
 Blackwall dinner, the, 53
 Bladder, calculus in the, 459
, extraction of foreign bodies from the, 76
, stone in the, and lithotomy, 635
 Blenheim-street Dispensary, 293
 Blight, electricity and the potato, 267
 Blistering in gleet, on, by J. L. Milton, Esq., 302
 Blisters in pleuritic effusion, 213
 Blood, alkaline nature of the, 75
, Dr. Eve's case of transfusion of, 239
, fibrinous element of the, in relation to disease, 548
, transfusion of, 161
 Bloomerism, 386
 Board of Guardians, Marylebone, 26
, Health, the General, 110, 190
, the Poor-law, and the homœopaths, 238
 Bodies far gone in putrefaction, question of pregnancy in, 470
 Body and mind, the laws of health in relation to, 104
, case of cholera in which crystals formed on the surface of the, previous to death, 473
, paralysis of the right side of the face and left half of the, 535
 Bone, disease of, operation, 459
 Bones, caries of, 624
, dislocation of the right scaphoid and mid-cuneiform, 233
 Bony palate, closure of the fissures in the, 547
 Borax in efflorescence of the face, 160
 Botanical Society of London, 603
 Bougies, spiral, 49
 Boutonnière, la, 664
 Bowman, W., Esq., on a new method of treating certain cases of epiphora, 79
 Boy, sarcinæ from the stomach of a, 623
 Bradford Infirmary, the practice of medicine and surgery at, 433
 Bradley, T. W., Esq., on turpentine as a styptic, 534
 Bradshaw's Guide to the Continent, by Edwin Lee, Esq., 593
 Brain, abscess of the middle and posterior lobes of the left hemisphere of the, associated with rheumatic symptoms, 545
, inflammation of, on the variations of the sulphates and phosphates in, 108
, pathology of those affections of the ear which produce disease in the, 80
 Braithwaite's retrospect of medicine, 292
 Branding in the British army, 293, 309, 320, 368, 386, 394
 Brandreth, Dr., 550
 Breast, cancer of the, 383
 Bristol General Hospital, the practice of medicine and surgery at, 233, 643
 British and foreign pharmacopœias, synopsis of, 592
, Guiana and sanitary reform, 286
, Lying-in Hospital, 110
, Medical Fund, the, 50, 153, 630
 Brodie, Sir Benjamin Collins, Bart., 54
 Brompton, Hospital for Consumption, 110, 494
 Bronchitis, the pathological anatomy of, 493
 Bronchocele, on the treatment of, 105
 Brown, W., Esq., on koussou in tænia, 153
 Brucine in paralysis, 160
 Bubo, on. By John L. Milton, Esq., 353
 Buff, Professor, familiar letters on the physics of the earth, &c., 649
 Buildings, on the heating and ventilation of, 43
 Burnett, C.M., M.D., on crime and insanity, 348, 531
 Butler, C., Esq., on placenta prævia, 229
- C
- Cæsarian section, 111, 423
 Calamine furnaces in Belgium, 369
 Calcareous matter, a specimen of, in the cavity of the vestibule, 600
 Calculus, case of, 625
, in the bladder, 459
 Cambridge, University of, 26, 421, 446, 475, 501, 549, 628, 656, 665
, rules and regulations of, 325
 Canarv, the Grand, cholera in, 165
 Cancer of the breast, Mr. Borlase Child's new way of operating, 383
 Cane, W. H., Esq., on a case of epilepsy treated by tracheotomy, 163
 Cape of Good Hope, 657
 Carbonate of ammonia in chronic psoriasis, 161
 Caries of bones, 624
, suppuration and, of the proximal extremity of the tibia, 615
 Carotid aneurism, 432
, division of the inner and middle coats of the, in han red persons, 470
, ligature of the common, 432
 Carpenter, Wm. B., M.D., F.R.S., a Manual of Physiology, 438
, Principles of Physiology, General and Comparative, 291
 Cartilages in the knee, disease of the, 615
 Case, extraordinary, 449
, in which a communication appears to have existed for several months between the stomach and transverse colon, in a child five years old, 651
, of aneurism of the descending thoracic aorta, attended with intractable derangement of the digestive function. By John Gregory Forbes, Esq., 206
, popliteal artery, 154
, abscess of the tibia, 535
, calculus, 625
, cholera in which crystals formed on the surface of the body previous to death, 473
, chronic dysentery, 392
, clairvoyance, 317
, cysts in the kidneys, 622
, death from chloroform, Mr. Farwell's, 620
, deformity of the lower extremities, remedied by division of the hamstring tendons. By John Wiblin, Esq., F.R.C.S., 505
, epilepsy treated by tracheotomy, 163
, extra-uterine pregnancy, 496
, intussusception through the ileo-cæcal valve, 651
, non-descended testicle, 438
, obstruction of the colon, 107
, obturator or thyroidal hernia, 80
, organized polypus of the heart, 163
, ovariectomy successfully performed, by John Beale, M.R.C.S., 108
, phthisis pulmonalis, accompanied by phenomena of unusual character. By Alexander Halley, M.D., 456
, placenta prævia. By Charles Waller, M.D., 534
, poisoning by fresh cod-fish, 654
, oil of turpentine. By Fred. H. Johnson, Esq., 380
, white oxide of arsenic. By R. Jeffreys, Esq., 229
, prolonged mititis, 105
, stricture of the urethra, 514
, Syme's amputation at the ankle-joint. By Mr. Elin, 534
, transfusion of blood. Dr. Eve's, 239
, singular, of foetal non-development, 434
, successful, of parturition in a patient who had previously undergone ovariectomy, 597
 Cases illustrative of various points in chemical pathology, 125
, in surgery. By Henry Smith, Esq., F.R.C.S., 255
, of diseases of the heart, statistical report of, 543
, hernia with double sac, 307
, internal obstruction. By B. Phillips, F.R.S., 118
, inversion of the uterus. By S. Merriman, M.D., 36, 136
, paralysis, 14
, partial separation of the placenta preceding labour. By T. H. Tanner, M.D., 403
, puerperal hæmorrhage. By Stephen Monckton, M.D., 562
, rheumatic and local paralysis treated by
- Pulvermacher's chain battery. By T. J. Vallance, jun., Esq., 509
, secondary hæmorrhage treated by compression of the main trunk, 13
, strangulated hernia, 457
, "successful," Mr. Syme's, 597
, three, of fracture of the spine, 653
 Catalogue of medical and scientific works, 176
 Causes, symptoms, and treatment of spermatorrhœa. By M. Lallemand, 293
 Census for Ireland—1841-51, the, 46
, the, 22
 Cerebro-spinal hæmorrhage, 283
 Certificates, club, 647
 Chaldecott, T. A., Esq., hospital reports, 67
 Chalybeate spring, Sunning-hill wells, 569
 Chancellor, the Lord, and medical men, 566
 Changes, naval, 26
 Charcoal, peat, deodorizing properties of, 49
 Charing-cross Hospital, 604
, Medical School, 165
, rules and regulations of, 338
 Charities, medical, Ireland, 511
, the Medical Irish, Act, salaries under, 649
 Charter, new, of the Royal College of Surgeons, 587, 590
, of the Royal College of Surgeons, 25
 Chatham-street School of Medicine, Manchester, rules and regulations of, 340
 Chemical pathology, cases illustrative of various points in, 125
 Chemistry, animal, lectures on, 1, 57, 113, 167, 219, 269, 371, 425, 477, 607
, familiar letters on, 131
, Royal College of, rules and regulations of, 353
, the first step in, 265
 Chemists, Pharmaceutical, the Bill for Regulating the Qualifications of, 69
 Cherry-stone, death from swallowing a, 293
 Chest, City of London Hospital for Diseases of the, 26
 Chevers, Norman, M.D., on the management of diseases of the heart, and on aortic aneurism, with especial reference to the treatment of those diseases in India, 648
 Chicory nuisance, the, 82
 Child, compound fracture of the lower jaw in a, 643
 Children's Hospital, the, 648
 Child's, Mr. Borlase, new way of operating in cancer of the breast, 383
 China and India, progress of epidemics in, 447
, Hong-Kong, 15
, squadron, 446
 Chirurgical Society, the Edinburgh Medico-, Reports of meetings, 627
, the Royal Medical and, 79, 575, 629
, and homœopathy, 396, 518, 571, 595
, reports of meetings, 79, 107, 163, 543, 596, 621, 651
 Chloride of zinc, poisoning by, 382, 497
 Chloroform, 55
, and painters' colic, 415
, a propelling power, 27
, deaths from, 98, 576
, in chorea, 213
, inhalation of, nearly fatal, 529
, in pneumonia, 414
, pulmonary consumption, 375
, lithotomy, 564
, Mr. Farwell's case of death from, 620
, on the inhalation of, 529
, solution of gutta serena in, 213
 Cholera, Asiatic, 77
, at Nottingham, 267
, case of, in which crystals formed on the surface of the body previous to death, 473
, in Jamaica, 27, 51, 110, 341, 448
, Dr. Milroy on, 576
, in the Grand Canary, 165
, on the propagation of, 559, 610
, quarantine and, 515
, the, 51, 82, 138, 216, 369
, in Plymouth and its neighbourhood in 1849, by Ed. T. Roe, M.D., 194
, the prevention of, a Government duty, 100
 Chordee, on, by John L. Milton, Esq., 65, 93
 Choreia, acute, on the variations of the sulphates and phosphates excreted in, 108
, chloroform in, 213
 Chronic diseases, the prevention and cure of many, by movements, 568
, dysentery, case of, 392
, hydrocephalus, 550
, psoriasis, carbonate of ammonia in, 161
 Churchill, O'Reilly &c., 513
,—Court of Exchequer, 524
 City of London Hospital for Diseases of the Chest, 26
, Lunatic Asylum, 447
, Orthopædic Hospital, 110, 550

- Civil Hospital on the Gambia, 422
 Clairvoyance, 310
 case of, 317
 Clapham General Dispensary, 267
 Clarke, W. M., Esq., hospital reports, 233, 643
 Classes and professors in London and provincial medical schools, sessional synopsis of, 342
 Cleansing, street, 16, 310
 Clergy, duration of life among the, 572
 Cline, Mr., MSS of John Hunter and, 241
 Clinical lecture at University College Hospital.
 By R. Quain, Esq., F.R.S., 116, 141, 659
 By Ed. Stanley, Esq., F.R.S., 529
 on surgery, by Bransby B. Cooper, Esq., 4, 503, 579
 W. Fergusson, Esq., F.R.S., 480, 635
 the use of the neutral sulphites in the treatment of diseases, attended by the development of parasitic plants, especially the *sarcinae ventriculi*. By Wm. Jenner, M.D., 191
 medicine, 15
 observations on diseases of the genito-urinary organs. By Henry James Johnson, Esq., 352
 Closure of the fissures in the bony palate, 547
 Club certificates, 647
 Clubs, medical, and self-supporting dispensaries, 214
 Coats of the carotid, division of the inner and middle, in hanged persons, 470
 Cod-fish, case of poisoning by fresh, 654
 Cod-liver oil, 594
 Coffinites, the, and the President of the Royal College of Surgeons, 213
 Colic, painters', chloroform and, 415
 College, election the, 15
 Hospital, University, rules and regulations of, 337
 King's, 575
 and University, Aberdeen, 216
 Hospital, 604
 rules and regulations of, 338
 Marischal, and University, Aberdeen, rules and regulations of, 360
 Medical Benevolent, 656, 666
 news, 81
 of Chemistry, Royal, rules and regulations of, 353
 Medicine and Practical Science, Newcastle-upon-Tyne, rules and regulations of, 340
 Physicians, Royal, 25, 81, 136, 368, 665
 the Royal, of London, rules and regulations of, 328
 translation of the pharmacopœia of, 72
 King and Queen's, 495
 Queen's, Birmingham, 368, 421, 447
 rules and regulations, of 354
 St. Bartholomew's Hospital and Medical, rules and regulations of, 331
 studentship, 136
 Surgeons, the Royal, 53, 81, 109, 136, 164, 190, 394, 420, 421, 475, 527, 549, 629, 656, 666
 charter of the, 25
 Council election, 73
 examination for the fellowship, 574, 628
 and homœopathy, 588, 619
 the Manchester memorial, 164
 the medical directory and the professors of, 439
 Royal, new charter of the, 587, 590
 President of, and the Coffinites, 213
 Soirées at, 25
 of England, rules and regulations of, 329
 Edinburgh, rules and regulations of, 358
 Ireland, rules and regulations of, 364
 Sydenham, Birmingham, inaugural address at the opening of, 568
 rules and regulations of, 341
 the Fellowship, 446
 the Medical Benevolent, 320, 447, 501, 549, 566, 604
 Trinity, Dublin, 26, 564, 604, 656
 University, 54, 501
 Hospital, 629
 rules and regulations of, 337
 Collodium in diseases of the skin, 75
 Colney Hatch Lunatic Asylum, 26
 Colon, case of obstruction of the, 107
 communication between the stomach and transverse, 651
 rupture of the, 68
 ulceration of the uterus into the, 12
 Coma, infantile, 376
 Commentaries, on convulsive diseases, by C. B. Radcliffe, M.B., 124
 Commission of Sewers, Metropolitan, 447
 Commons, the House of, and the Universities, 81
 Communication between the stomach and transverse colon, 651
 Communications, original, 8, 36, 60, 91, 118, 144, 170, 194, 222, 247, 273, 298, 346, 374, 400, 429, 453, 482, 505, 531, 557, 582, 610, 638, 660
 Company's, East India Service, rules and regulations of, 356
 Compendium of materia medica and pharmacy.
 By J. Hunter Lane, M.D., F.L.S., 212
 practical, of the recent statutes, cases, and decisions affecting the office of coroner, 103
 Composition, the rules of English, 621
 Compound dislocation of great toe, 68
 fracture of the right leg, 258
 lower jaw, 643
 skull, 232
 Compression at birth, diamond-shaped head from, 499
 of the aorta, uterine hæmorrhage and, 415
 foetal head during birth, 654, 664
 secondary hæmorrhage treated by, 13
 Condition, sanitary, of Oxford, 409
 Conduct, provisions against unprofessional practices and, 540
 Condylomata, bichromate of potass in syphilitic vegetations and, 160
 Congenital malformation of the external ear and meatus, 600
 syphilis, 75
 Congress, scientific, of France, 369
 the quarantine, 72
 Conjunctiva, nitrate of silver stains of the, 350
 Consumption, Hospital for, Brompton, 494
 rules and regulations of, 354
 pulmonary, chloroform in, 375
 Consumptive patients, peculiar appearance in the gums of, 163
 Continent, Bradshaw's Guide to the, 593
 Continued fevers, quinine in, 346
 Contrarieties, Poor-law, 657
 Conversational Society, Islington Medical, 564
 Convulsive diseases, commentaries on, 124
 Cooper, Bransby B. Esq., F.R.S., clinical lectures on surgery, 4, 503, 579
 lectures on the principles and practice of surgery, 438
 Sir A., 666
 the late Samuel, 527
 Coote, Holmes, Esq., hospital reports, 381, 408
 on cystic degeneration of the kidney, 197
 Coroner, a practical compendium of the recent statutes, cases, and decisions affecting the office of, 103
 election of, for West Somerset, 395
 Coroner's Bill, the, 110
 Courts and medical men, 518
 inquest—homœopathy, 604
 Correspondence from India, 392, 514
 foreign, 48, 161, 392, 494, 514, 593
 general, 21, 50, 77, 106, 133, 161, 213, 238, 317, 368, 393, 415, 439, 470, 495, 517, 540, 570, 594, 619, 649, 664
 provincial, 49, 76, 494, 514, 539, 649
 Correspondents, answers to, 28, 55, 84, 111, 166, 218, 242, 341, 370, 396, 424, 450, 578, 606, 631, 658, 666
 Council Election of the Royal College of Surgeons, 78
 of the Royal Society, the, 527
 County Asylum, Somerset, 395
 Hospital, Sussex, 216
 Lunatic Asylum, Gloucester, 475
 Court of Exchequer—O'Reilly v. Churchill, 524
 Courts, Coroners', and medical men, 518
 Cowen, W., Esq., on the efficacy of the male fern in tænia, 282
 Creosote in malignant pustule, 213
 therapeutic properties of, 441
 Cretinism and goitre, 515
 Crewkerne and Yeovil District Medical Association, 320
 Crime and insanity, on. By C. M. Burnett, M.D., 348, 531
 Criminal law of lunacy, 284
 post-mortem examinations, 83
 Crispinus, ecce iterum, 646
 Crouch, John, Esq., a successful case of parturition in a patient who had previously undergone ovariectomy by a large incision, 597
 Croup, pathological modifications and treatment of, 574
 tracheotomy in, 161
 Crusade, the judicial, against the Medical Profession, 617
 Crystal Palace, the, 440
 Crystals formed on the surface of the body previous to death, case of cholera in which, 473
 Culverwell, W., Esq., L.S.A., an epitome of the London, Edinburgh, and Dublin Pharmacopœias, 592
 Cuneiform bones, dislocation of the mid-, 233
 Cure of spinal curvatures, the prevention and, 413
 prevention and, of many chronic diseases, by movements, the, 568
 radical, of obstinate stricture of the urethra, description of an operation for the, 80
 Curvatures and other diseases of the spine, 413
 the prevention and cure of spinal, 413
 Cyanide of potassium and cyanide of silver, cases of poisoning by, 41
 silver and cyanide of potassium, cases of poisoning by, 41
 Cyst, large, in the cavity of the pelvis, 654
 of hydatids at the root of the neck. By James Dixon, Esq., 108
 remarkable, in the omentum, 500
 Cystic degeneration of the kidney. By Holmes Coote, Esq., F.R.C.S., 197
 Cysts in the kidneys, case of, 622
 serous, in the kidney, 572
 two kidneys containing, 622
- D
- Daguerre, M., death of, 81
 Davies, Dr. Henry, 550
 Davis, the late Dr. D. D., widow of, 590
 Death by opium, 550
 case of cholera in which crystals formed on the surface of the body previous to, 473
 from chloroform, 98
 Mr. Farwell's case of, 576, 620
 from measles, statistics of, 660
 old age, statistics of, 145
 scarlet fever, statistics of, 274
 swallowing a cherry-stone, 293
 march of, in St. Giles', 145, 274
 of Dr. Badeley, 341
 Kidd, of Oxford, 315, 341
 M. Barthélemy, 594
 Daguerre, 81
 Lugol, 594
 Dr. Moir, 54
 Mr. Moir, of Musselburgh, 76
 Priessnitz, 630
 M. de Savigny, 594
 Deaths, births, and meteorology, table of, for first half year of 1851, 52
 of medical men in Liverpool, 49
 Decoction of fucus vesiculosus in scrofula, 318
 Defence of ignorance, a, 392
 Deformity of the lower extremities, case of, remedied by division of the hamstring tendons, 505
 Degeneration, cystic, of the kidney, 197
 fatty, of the voluntary muscles, on, 652
 fibrous, and deposits in the substance of the heart, 544
 granular, two kidneys affected with, 573
 Delirium tremens, on the variations of the sulphates and phosphates excreted in, 108
 Deodorising properties of peat charcoal, 49
 Department, army medical, rules and regulations of, 354
 navy medical, rules and regulations of, 355
 ordnance medical, 368
 Deposit of tubercle in the peritonæum, 572
 Deposits in the substance of the heart, fibrous degeneration of, and, 544
 Depression of the thorax, lateral, 624
 Derby, west, union, 268
 Design, manifestation of, in morbid phenomena, God in disease, or, 592
 Desmedt, Madame, 369
 Despotism, Prussian, 268
 Devon and Exeter Hospital, 293
 Diagnosis and treatment of ovarian disease, on the, 597
 treatment, and pathology of ovarian tumours, 60, 120
 Diagnostic of the general health, the skin as, 473
 Diamond-shaped head, from compression at birth, 499
 Digestion, respiration, and secretion, lectures on, 1, 57, 113, 167, 219, 269, 371, 425, 477, 607
 Dinner, the Blackwall, 53
 Diploma, surgical, of the University of Dublin 564
 Diplomas, Scotch, 519
 Directory, medical, the, and the professors of the Royal College of Surgeons, 439
 the medical, 439
 for 1852, 210
 Disease, epidemic, on aphtha, and its important relations as an, 95
 progress of, in man, animals, and plants, 294, 320, 369, 422, 447, 550, 576
 fibrinous element of the blood in relation to, 548
 God in, or the manifestation of design in morbid phenomena, 592

- Disease in the brain, pathology of those affections of the ear which produce, 80
 nervous, on hypochondriasis, and other forms of, 150, 201, 252, 279, 429, 557
 obstructive, of the aortic valves, dependent on malformation, 519
 of bone, operation, 459
 the cartilages in the knee, 615
 heart, on the management of, 648
 statistical report on, 109
 testis—excision, 232
 urinary organs, 499
 ovarian, on the diagnosis and treatment of, 597
 progress of epidemic, 267
 regurgitant and obstructive, of the aortic orifice, 520
 the potato, 216
 weather and 49
 transmission from parent to offspring of some forms of, 567
 tuberculous, in the lungs of a monkey, 624
 Diseased and malformed aortic valves, 520
 joints, 418
 Mr. Gay's method of treating, 571
 new operation on, 545
 larynx and trachea, 599
 Diseases, chronic, lectures on the German mineral waters, and on their rational employment for the cure of certain, 593
 the prevention and cure of many, by movements, 568
 commentaries on convulsive, 124
 curvatures and other, of the spine, 413
 incident to women, on some of the more important. By T. Lightfoot, M.D., 298, 507
 of the air passages, on the prevention of, 613
 Chest, City of London Hospital for, 26
 ear, practical observations on. By W. R. Wilde, Esq., F.R.C.S., 91, 247
 the Royal Dispensary for, 320
 eyes; a sketch of the medical history of the 47th regiment. By Geo. Saunders, Esq., 227
 genito-urinary organs, clinical observations on, 352
 heart, 543
 lungs and heart, a practical treatise on the, 315
 mucous membrane of the throat, and their treatment by topical medication. By Wm. Wagstaff, M.A., M.D., 265
 prostate gland, 316
 skin, collodium in, 75
 urinary and generative organs, 17
 on the unity of the laws which govern the exciting causes of epidemic, endemic, and infectious, 640, 664
 Disguising taste of medicines, 160
 Dislocated femur, reduction of a, 547
 Dislocation and fracture of the lower jaw, 643
 compound of great toe, 68
 of right scaphoid and mid cuneiform bones, 233
 spontaneous, of the shoulder joint, 433
 Dislocations of the humerus, 160
 Dispensaries, self-supporting, and medical clubs, 214
 Dispensary, Blenheim-street, 293
 Clapham General, 267
 for Diseases of the Ear, the Royal, 320
 the North, Liverpool, the practice of
 Westminster General, 656
 medicine and surgery at, 563
 Displacement of the long tendon of the biceps. By John Postgate, Esq., 614
 Dissecting rooms, the London; no subjects, 513, 537
 Dissections in the East, 241
 Distorted knee, examination of a, 12
 Division of the inner and middle coats of the carotid in hanged persons, 470
 Dixon, James, Esq., account of a case in which a large cyst, containing hydatids was developed at the root of the neck; death ensuing from rupture of the left subclavian artery, 108
 Dose of gold, homœopathic, in impecuniosity, 393
 the infinitesimal, 650
 Double sac, cases of hernia with, 307
 oblique inguinal hernia with, 307
 Drops, Warburg's, 415
 Dropsy, puerperal, with adherent and partially retained placenta, 595
 Druggists, qualification of, 27
 Dublin and London midwifery institutions, 212
 Edinburgh, and London pharmacopœias, epitome of, 592
 hospitals, the, 110
 surgical diploma of the University of, 564
 Trinity College, 26, 564, 604, 656
 University of, 575, 629
 Dudgeon, Dr., Dr. Routh in reply to, 540
 Duncan, J. F., M.D., God in disease, or the manifestation of design in morbid phenomena, 592
 Dundas, R. M. D., on the efficacy of large and frequent doses of quinine, in arresting the course of continued fever, 346
 Duration of life among the clergy, 572
 pregnancy, 419
 Dwellings of the poor, the, 44
 Dysentery, abscess of the liver, which opened into the lung, consecutive to, 610
 case of chronic, 392
 Dysmenorrhœa, on. By Ed. Rigby, M.D., 431, 582
 Dyspepsia, nervous affections connected with, 439
- E**
- Ear and meatus, congenital malformation of the external, 600
 gelatinous polypus of the, 442
 pathology of those affections of the, which produce disease in the brain, 80
 practical observations on diseases of the, 91, 247
 the Royal Dispensary for Diseases of the, 320
 Earth, familiar letters on the physics of the, 649
 East, dissections in the, 241
 India Company's service, rules and regulations of, 356
 Eating, arsenic, 528
 Ecce iterum crispinus, 646
 Edinburgh, Extra-Academical School, 516
 health of, 516
 London, and Dublin Pharmacopœias, epitome of, 592
 Medical School, rules and regulations of, 356
 Surgeons' Hall, rules and regulations of, 359
 Medico-Chirurgical Society, reports of meetings, 627
 Monthly Journal, the, 176
 and Mr. Syme, 285
 Royal College of Surgeons, rules and regulations of, 358
 Medical Society of, 604
 University of, 79, 267, 516, 628
 rules and regulations of, 357
 EDITORIAL ARTICLES:
 iii., 15, 45, 69, 99, 123, 155, 174, 208, 234, 259, 284, 309, 321, 351, 383, 409, 435, 460, 490, 511, 536, 564, 587, 615, 645
 Education, medical, 21
 Educational provisions, Ireland, 539
 Effects of temperature on the communicability of syphilitic poison, 105
 secondary physiological, produced by electricity, 79
 Efficacy of large and frequent doses of quinine in arresting the course of continued fever. By R. Dundas, M.D., 316
 the male fern in tænia, 282
 Efflorescence of the face, borax in, 160
 Effusion, blisters in pleuritic, 213
 Elbow-joint, excision of the, 613
 Election, Council of the Royal College of Surgeons, 78
 of coroner for West Somerset, 395
 places of, for amputations of the lower limb, 659
 the College, 15
 Electricity and the potato blight, 267
 secondary physiological, effects produced by, 79
 Electro-magnetism, on the therapeutic application of, in the treatment of rheumatic and paralytic affections, 212
 physiology, 494, 519
 Elin, Mr., case of Syme's amputation at the ankle-joint, 534
 Emigration, 216
 Empiricism, on, by J. Malden, M.D., 222
 Employment of the rhamnus frangula as a mild aperient, 469
 Enchondromatous tumour, 172
 Endemic, epidemic, and infectious diseases, on the unity of the laws which govern the exciting agents of, 640
 England, the happy homes of, 27
 English composition, the rules of, 621
 Homœopathic Association, *
 Enlargements of the uterus, the, which remain after parturition or abortion, 601
 Enormous hypertrophy of the mammae, 415
 Enteritis phlegmonosa, 439
 Epidemic disease, on aphtha and its important relations as an, 95
 progress of, 267
 in man, animals, and plants, 294, 320, 369, 422, 447, 550, 576, 656
 endemic, and infectious diseases, on the unity of the laws which govern the exciting agents of, 640, 664
 pestilences, a history of, 492
 power, on the spiral evolution of the, 570
 variola, 472
 Epidemics, 395
 Epidemics, spread of, 241
 Epidemiological Society, 55, 475, 630
 and vaccination, 368, 589, 594
 reports of meetings, 500, 522
 Epilepsy, case of, treated by tracheotomy, 163
 Dr. Marshall Hall on, 49
 occasioned by irritation in the socket of a tooth, 468
 sumbul in, 268
 Epiphora, new method of treating certain cases of, 79
 Epitome of the London, Edinburgh, and Dublin pharmacopœias. By W. Culverwel, L.S.A., 592
 Eruptive fevers, lecture on, 292
 Establishment, report from the National Vaccine, 259, 266
 the National Vaccine, 110
 Ethics, medical, 48, 498, 571
 the homœopaths and, 518
 Etiology of phthisis, remarks on the. By Edward Smith, M.D., LL.B., B.A., 37, 635
 Evans, Alfred, Esq., on the prevention of diseases of the air passages, 613
 W. Price, Esq., on posture as a therapeutic agent, 407
 Eve's, Dr., case of transfusion of blood, 239
 Evidence, Dr. Robertson's, at the inquest at Hard- ington, 495
 the law of, 217, 475
 Law of Amendment Bill, 110
 Evolution, spiral, of the epidemic power, on the, 570
 Examination for the fellowship, Royal College of Surgeons, 574, 628
 of a distorted knee, 12
 Exchequer, Court of,—O'Reilly & Churchill, 524
 Excision in disease of the testis, 232
 of the elbow-joint, successful, by E. W. Lowe, Esq., 613
 Exeter and Devon Hospital, 293
 Exhalation, fetid, from the feet, 630
 Exhibition, another,—the great metropolis, 137
 award of the jurors in the Great, 410
 the Great, 46, 71, 102, 130, 157, 210, 235, 261, 288, 311, 387, 411, 464
 Experiments, meteorological, 293
 Extension and perfection of vaccination, suggestions for the, 413
 Extensive injury of the lower extremity. By G. H. Smith, Esq., 230
 laceration of perinæum, 644
 External use of arsenic, the, 576
 Extirpation, in enormous hypertrophy of the mammae, 415
 Extra-Academical School, Edinburgh, 516
 Extract of belladonna, poisoning by, 234
 Extraction of foreign bodies from the bladder, 76
 Extramural interment, 129, 137, 645
 Extraordinary accident, 255
 case, 449
 Extra-uterine pregnancy, case of, 496
 Extravasation of urine, 255
 Extremities, case of deformity of the lower, remedied by division of the hamstring tendons, 505
 Extremity, lower, extensive injury of the, 230
 Extroversion vesicæ, operation, 381, 408
 Eye fountain, the, 55
 Eyes, diseases of the, 227
- F**
- Face, borax in efflorescence of the, 160
 paralysis of the right side of the, and left half of the body, 535
 Faculty of Medicine, Paris, rules and regulations of, 366
 Physicians and Surgeons of Glasgow, the, 447
 rules and regulations of, 360
 Fallacies of the modern practice of medicine, more especially in relation to homœopathy. By C. H. F. Routh, M.D., 400
 Fallopian tubes, report on tuberculous (?) deposit in the uterus and, 600
 Familiar letters on chemistry, in its relations to physiology, dietetics, agriculture, commerce, and political economy. By Justus Von Liebig, 131
 the physics of the earth, &c. By Professor Buff, 649
 Farwell's, Mr., case of death from chloroform, 620
 Fatal assault at the Kent County Lunatic Asylum, 284
 inhalation of chloroform nearly, 529
 Fatty degeneration of the voluntary muscles, on, 652
 Febrifuge, Warburg's, 23
 Fees, medical, life assurance and, 395
 payment of medical, 161
 to medical referees, 440, 497
 Feet, fetid exhalation from the, 630
 turning with one or two, 213
 Fellowe's gold medal, 629
 Fellows, new, 629
 Fellowship, the, 102, 446

- Fellowship, examination for the, Royal College of Surgeons, 574, 628
- Female somnambulist, a, 422
- Femoral hernia, strangulated, 307, 563
- Femur, reduction of a dislocated, 547
- Fergusson, W., Esq., F.R.S., clinical lectures on surgery, 480, 635
-, on stone in the bladder and lithotomy, 635
-, on tracheotomy, 480
- Fern, efficacy of the male, in tænia, 282
- Fetid exhalation from the feet, 630
- Fever, 54
-, continued, quinine in, 346
-, quinine in, 472
-, scarlet, statistics of death from, 274
-, the yellow, 216, 411
-, views of Dr. Jenner, 394
- Fevers, eruptive, lectures on, 292
- Fibrinous element of the blood in relation to disease, 548
- Fibrous degeneration of, and deposits in the substance of the heart, 544
- First step in chemistry, the. By R. Galloway, Esq., F.C.S., 265
- Fissures in the bony palate, closure of the, 547
- Fistula, salivary, 563
- Fletcher, F. D., Esq., hospital reports, 173
-, T. B. G., M.D., on a case of organised polypus of the heart, 163
- Fly poison, 294
- Fœtal head, compression of the, during birth, 654, 654
- non-development, singular case of, 434
- Forbes, John G. Esq., case of aneurism of the descending thoracic aorta, attended with intractable derangement of the digestive function, 206
- Forceps, new, 442
- Foreign bodies, extraction of, from the bladder, 76
- FOREIGN CORRESPONDENCE:
- 48, 161, 392, 494, 514, 593
- pharmacopœias, synopsis of British and, 352
- Formulary, the pocket, and synopsis of the British and foreign pharmacopœias, 592
- Foul air in wells, 422
- Fountain, the eye, 55
- Fracture, compound, of the lower jaw, 643
- right leg, 258
-, dislocation and, of the lower jaw, 643
- of both olecranon, 173
- the skull, compound, 232
- spine, three cases of, 653
-, simple, of the left leg, 253
- France, correspondence from, 48, 161, 494, 515, 593
-, rules and regulations of examining medical bodies in, 366
-, Scientific Congress of, 369
- Free Hospital, the Metropolitan, the practice of medicine and surgery at, 382, 614
- Royal, 550
-, the practice of medicine and surgery at, 232
- Frequency of pericarditis, on the. By John Taylor, M.D., 482
- Fucus vesiculosus in scrofula, 318
- Fund, Bengal Medical, 422
-, the British Medical, 50, 153, 630
- Medical Benevolent, 385
- Victoria, 656
- Furnaces, calamine, in Belgium, 369
- G
- Galloway, R., Esq., F.C.S., the first step in chemistry, 265
- Gambia, civil hospital on the, 422
- Gangrene after amputation of the toe, in consequence of diseased condition of the whole arterial system, 510
- Gardner, W. H., Esq., on small-pox and vaccination, 523
- Gas from vegetables, 650
- Gavin, Dr., 395
- Gay's, Mr. method of treating diseased joints, 571
- Gazette, the Medical Times and the, 615
- Gelatinous polypus of the ear, 442
- General Board of Health, the 110, 190
- GENERAL CORRESPONDENCE:—
- 21, 50, 77, 106, 133, 161, 213, 238, 317, 368, 393, 415, 439, 470, 495, 517, 540, 570, 594, 619, 649, 664
- Dispensary, Clapham, 267
- Westminster, 656
- Hospital, Birmingham, investigation at the, 460, 490, 517
-, statistics of amputation at the, 570
- Bristol, the practice of medicine and surgery at, 233, 643
- Infirmary, Sheffield, rules and regulations of, 341
- Generative and urinary organs, diseases of the, 17
- George, the late Mr., 603
- German medical literature, 576
- mineral waters, lectures on the, 593
- Germany, student life in, 404
- Gibbons, S., Esq., on the treatment of hæmorrhage with abortion, 159
- Giraldès, Dr., des maladies du sinus maxillaire, 264
- Gland, the anatomy and diseases of the prostate, 316
- Glasgow, Faculty of Physicians and Surgeons of, 447
- rules and regulations of, 360
- University of, 549
- Gleet, blistering in, 302
- Gloucester County Lunatic Asylum, 475
- Gloucestershire Medical and Surgical Association, 447
- God in disease, or the manifestation of design in morbid phenomena, by J. F. Duncan, M.D., 592
- Godfrey, Mrs., or the prevention and cure of spinal curvatures, 413
- Goitre, cretinism and, 515
- Gold, homœopathic dose of, in impecuniosity, 393
- medal, Fellowe's, 629
- Gorini, Professor, 476
- Government duty, the prevention of cholera, a, 100
- treatment of the surgeon to the Indian, 174
- Grand Canary, cholera in, 165
- Grant, Dr. Klein, on the medical topography of London, 64
- Granular degeneration, two kidneys affected with, 573
- GREAT EXHIBITION, THE—
- 46, 71, 102, 130, 157, 210, 235, 261, 288, 311, 387, 411, 464
- award of the jurors in the, 410
- metropolis, the, 217
- another exhibition, 137
- Greeks and Romans, influence of the literature of, on science and medicine, 285
- Green ground, the, 241
- Gregory, Geo., M.D., lectures on the eruptive fevers, 292
- Gresham Life Assurance Society, Hooper v., 82
- Ground, the Green, 241
- Grove, John, Esq., M.R.C.S., on aphtha, and its important relations as an epidemic disease, 95
- the unity of the laws which govern the exciting causes of epidemic, endemic, and infectious diseases, 640, 664
- Growth, malignant, within the thorax, 256
- Guardians, the Marylebone Board of, 26
- Guiana, British, and sanitary reform, 286
- Guide, the medical practitioners', 390
- to the Continent, Bradshaw's, 593
- Gutta serena, solution of, in chloroform, 213
- Guy, W. A., M.B., Cantab., lectures on public health, addressed to the students of the theological department of King's College:—
- Lecture VIII.—Illustrations of the baneful effects of over-crowding—The black-hole at Calcutta—St. Martin's round-house—The Londonderry steamer—Church-lane, St. Giles's—Metropolitan improvements, and their bearing upon the condition of the poor—Increase of population in Church-lane—State of the houses—Heavy burden of sickness and mortality imposed upon the parish—Prevalence of fever—High mortality from the cholera—Contrast afforded by the model lodging-houses—Filthy and over-crowded state of other streets and districts in London—Reports of the Statistical Society—Overcrowding in the provincial towns—Quotation from the report of the sub-committee of the Statistical Society on Church-lane, 32
- Lecture IX.—Overcrowding in small country towns and villages—In Lancashire and Dorsetshire—State of the poor-houses—Reports of the Times' Commissioner and of the correspondent of the Morning Chronicle—Extract from the report on "The laws of settlement and removal of the poor"—Disastrous operation of the law of settlement—Impolicy of Poor-laws—Poor-rates levied on the employers of labour, often upon the very poor—The condition of the pauper often better than that of the rate-payer who supports him—A humane Poor law impossible—The Poor-law immoral, and an encouragement to the idle and vicious—Close and open parishes—The law of settlement a premium on the dilapidation and destruction of cottages—A disorganizer of labour in the rural districts—The labourer forced to walk or ride several miles to his work—The operation of the law of settlement brings about the same consequences in the country as Metropolitan improvements have occasioned in London—Overcrowded state of union workhouses—Marlborough House, Peckham—Mr. Drouet's establishment at Tooting, 87
- Lecture X.—Overcrowding in workhouses—Report on the Metropolitan workhouses in 1848—Cubic space per bed in 36 workhouses, varying from upwards of 800 to less than 300 cubic feet—Cubic space per bed in 260 wards, varying from 1110 down to 130 cubic feet—High mortality in workhouses—The Poor-law destructive of human life—Description of the sick-wards in Christ-church workhouse—State of the low lodging-houses—Dr. Duncan's description of the lodging-houses at Liverpool—Contrast afforded by modern prisons—This contrast supplies irresistible arguments in favour of sanitary measures—Analogies of typhus and gaol fever resumed—A Board of Guardians in Ireland infected with typhus fever in the same manner as a Court of Law at the famous Black Assize at Oxford—Typhus fever fatal to large numbers of police, relieving officers, clergymen, and medical men—It attacked the boys in Westminster School, and closed the London Mendicity Society—Typhus fever conveyed on board emigrant vessels as gaol fever was formerly on board ships of war—Frightful mortality on board the Larch, Virginus, and Avon—Typhus fever conveyed from town to town by tramps and vagrants sleeping at the low lodging-houses—Extracts from the reports of the Registrar-General, 243
- Lecture XI.—The subject of tramps and vagrants resumed—The philosophy of vagrancy—The Classes Dangereuses, how created and sustained—Indiscriminate almsgiving contrasted with true charity—Pecuniary burdens imposed upon the public by typhus fever—Expenses occasioned by it in the London Unions—Deaths from typhus fever in England and Wales, 1838 to 1842—Deaths in London, 1838 to 1849—Estimate of the annual loss of money in England and Wales from typhus fever—Agency of filth and defective cleansing and drainage in causing typhus fever—Fever a contagious malady—Filth rarely other than a predisposing cause—Occasional origin of fever in filth and defective drainage, 295
- Lecture XII.—Additional facts in illustration of the connexion of filth, and defective drainage and sewerage, with fever—Examples of the removal of fever by cleanliness and ventilation—Evidence of Mr. Liddle, Dr. Arnott, and Dr. Alison—Dr. Currie's proposal for superseding fever-hospitals—Moral re-actions of fever, and of its causes—Analogy of former plagues and pestilences—Their demoralising effect—Debasing effects of filthy habitations—Evidence of Mr. Hawksley and Dr. Southwood Smith—Testimony of the Rev. C. Girdlestone—Résumé of the facts and principles established in reference to typhus fever, 397
- Lecture XIII.—Asiatic cholera—Its symptoms—Coincidence of diarrhoea—Treatment of diarrhoea—Treatment of the stage of collapse—Cause of cholera—Question of contagion—Difference of opinion among medical men—Analogies of cholera and typhus fever—Fulfilment of Predictions based upon the experience of the first epidemic of cholera—History and course of the disease in the first epidemic: in the second epidemic—mortality of the two epidemics—Increased mortality in 1848-9—Birth-place of the cholera in the swamps of India—Its preference for low-lying and damp situations—The north and south banks of the Thames contrasted—Ravages of the cholera in Rotherhithe and Bermondsey; in Jacob's Island; at Greenwich—The cholera promoted by defective sewerage—Testimony of the registrars of Portsea Island and Windsor—Occurrence of the cholera in swamps in elevated situations—Testimony of the Registrar of Huddersfield—Cholera from drinking impure water—Facts collected by Dr. Snow—Influence of overcrowding in promoting cholera—The Tooting tragedy—Immunity of well-conducted schools; of model lodging-houses, 553
- Lecture XIV.—The cholera continued—Connexion of the disease with defective sanitary arrangements—Extracts from the reports of the local registrars, in London and in the provinces—Coincidence of fever and cholera—The cholera conveyed from place to place by mendicants—An example in point—Mortality from cholera in the rural districts—The ravages of cholera among the heads of families—In this respect it resembles typhus fever and consumption—The alleged fact, that these diseases do not diminish the population, explained—History of the cholera at Noss Mayo—Visitations of the clergy—The second epidemic of cholera more fatal than the first—An argument in favour of preventive measures—The cholera and the plague compared—The greater fatality of the plague—Presumption in favour of the efficacy of sanitary measures—Conclusion, 633
- Guy's Hospital Reports, Vol. VII., 593
- rules and regulations of, 334
- the practice of medicine and surgery at, 488
- H
- Haddock, J. W., M.D., on somnolism and psychism, 211
- Hæmodynamics, Volckmann's, 18
- Hæmorrhage, cases of puerperal, 562
- cerebro-spinal, 283
- secondary, treated by compression of the main trunk, 13
- the occurrence and cause of it from the perineal section. By J. Lizars, Esq., 170
-, uterine, and compression of the aorta, 415

- Hæmorrhage with abortion, on the treatment of, 199
- Hair and string, sections of two large masses of, 520
- Half-yearly abstract of the medical sciences, 292
- Hall, Apothecaries, 54, 81, 164, 191, 240, 266, 293, 319, 368, 394, 421, 445, 475, 501, 527, 549, 575, 603, 629, 656, 666
-, rules and regulations of, 330
-, Dr. M., and Dr. Quain, 161
-, Marshall, on epilepsy, 49
- Halley, Alex., M.D., case of phthisis pulmonalis, accompanied by phenomena of unusual character, 456
- Hamstring tendons, case of deformity of the lower extremities, remedied by division of the, 505
- Hand presentation, rupture of the uterus complicated with a, 500
- Hanged persons, division of the inner and middle coats of the carotid in, 470
- Hardingstone, inquest at, 437
-, and Dr. Robertson's evidence, 495
- Hart v. Arnold, 604
- Harveian oration, the, 53
-, Society, reports of meetings, 473, 574
- Hayes, John Boon, Esq., inaugural address at the opening of Sydenham College, Birmingham, 568
- Head, diamond-shaped, from compression at birth, 499
-, foetal, compression of the, during birth, 654, 664
- Health Act, the Public, 536
-, of Edinburgh, 516
-, London, 320
-, women, on the preservation of the, 176
-, public, lectures on, 32, 87, 243, 295, 397, 553, 633
-, state of the public, 138, 474
-, the General Board of, 110, 190
-, laws of, in relation to mind and body, 104
-, public, 83, 616
-, the skin as diagnostic of the general, 473
- Heart, a practical treatise on diseases of the lungs and, 315
-, case of organised polypus of the, 163
-, disease of the, statistical report on, 109
-, statistical report on cases of, 543
-, fibrous degeneration of, and deposits in the substance of the, 544
-, on the management of diseases of the, 648
- Heating and ventilation of buildings, on the. By J. Noirsain, C.E., 43
- Helling, Mr. John, bequest, 26
- Hernia, case of obturator or thyroïdal, 80
-, cases of strangulated, 457
-, with double sac, 307
-, incarcerated scrotal, 258
-, oblique inguinal, with double sac, 307
-, strangulated femoral, 307, 563
- Hewett, the late Mr., 629
-, W., Esq., hospital reports, 433
- Highley's catalogue of medical and scientific works, 176
- Hilton, Mr., lithotripsy by, 488, 543
- Hindustan, small-pox in, 99
- Histology, lectures on, 6, 85, 139, 451, 551
- History of epidemic pestilences. By Ed. Bascome, M.D., 492
- Hoffmann, Dr., on the increase of the size of the child in protracted pregnancy, 265
- Holl, H. B., Esq., hospital reports, 307, 563
- Holland, Dr., and Dr. Ranking, 620
-, Henry, 566
- Holmes, Henry, M.D., Sunning-hill Wells; or a practical inquiry into the action of iron as a constituent of the blood, in health and disease, in connexion with that chalybeate spring, 569
- Homes of England, the happy, 27
- Homœopathic dose of gold in impecuniosity, 393
-, "nibblers," 518
-, thunder, 571
- Homœopaths at Huddersfield, the, 45
- Homœopaths, our relations with the, 352, 383, 435
-, the, 396
-, and medical ethics, 518
-, the annual meeting of the Provincial Medical and Surgical Association, 175
-, Poor-law Board and the, 238
-, Royal Medical and Chirurgical Society, and the, 571, 595
-, unlicensed, 563
- Homœopathy, 418, 627
-, and allopathy, 393
-, the Royal College of Surgeons, 588, 619
-, Medical and Chirurgical Society, 396, 518
-, coroner's inquest, 604
-, Dr. Routh on, 439, 470, 495
-, fallacies of the modern practice of medicine, more especially in relation to, 400
-, reasons for embracing, 466
-, resolutions against, 417
- Homœopathy, the infinitesimal dose, 650
-, the pseudo-sciences, 224, 277
- Hong-Kong, 15, 72
- Honours conferred on medical men, 594
- Hooper v. the Gresham Life Assurance Society, 82
- Hospital and Medical College, St. Bartholomew's, rules and regulations of the, 231
-, and Surgical School, St. Thomas', rules and regulations of, 333
-, Belfast General, practice of medicine and surgery at, 14
-, Brompton, 110
-, Charing-cross, 604
-, Medical school, 165
-, City Orthopædic, 110
-, civil, on the Gambia, 422
-, Devon and Exeter, 293
-, for Consumption, Brompton, 494
-, rules and regulations of, 354
-, Diseases of the Chest, City of London, 26
-, General, Birmingham, investigation at the, 460, 490, 517
-, statistics of amputation at the, 570
-, Guy's, rules and regulations of, 331
-, the practice of medicine and surgery at, 488
-, Kent Ophthalmic, 604
-, King's College, 604
-, the practice of medicine and surgery at, 125, 172, 282, 432, 510
-, rules and regulations of, 338
-, London, 501, 550
-, Medical and Surgical School, rules and regulations of, 336
-, the practice of medicine and surgery at, 13, 154, 232, 457
-, Medical School, Charing-cross, rules and regulations of, 338
-, St. George's, rules and regulations of, 335
-, Middlesex, 26
-, School of Medicine, rules and regulations of, 336
-, the practice of medicine and surgery at, 283
-, Northern, Liverpool, the practice of medicine and surgery at, 434
-, Queen's, Birmingham, 110
-, rules and regulations of, 354
-, the practice of medicine and surgery at, 259, 643
-, Reports, Guy's, Vol. VII., 592
-, Seamen's, the practice of medicine and surgery at, 98, 258, 535
-, Society, Seamen's, 83
-, St. Bartholomew's, 527
-, the practice of medicine and surgery at, 381, 408
-, George's, the practice of medicine and surgery at, 256, 307, 408, 563
-, Mary's, 82, 83
-, the practice of medicine and surgery at, 459
-, Sussex County, 216
-, the Bristol General, the practice of medicine and surgery at, 233, 643
-, Children's, 648
-, City Orthopædic, 550
-, British Lying-in, 110
-, Metropolitan Free, the practice of medicine and surgery at, 382, 614
-, Royal Free, 550
-, the practice of medicine and surgery at, 232
-, Orthopædic, 527
-, University College, 629
-, rules and regulations of, 337
-, Westminster, 293
-, School of Medicine, rules and regulations of, 334
- Hospitals, and Medical Schools, rules and regulations of, 331
-, of Paris, rules and regulations of, 367
-, Parisian, medical officers of the, 217
-, the Dublin, 110
- Hôtel Dieu, staff of the, 161
- House of Commons, the, and the universities, 81
- Houses, lodging, 137
- Huddersfield, the homœopaths at, 45
- Humerus, dislocations of the, 160
- Hunt, H., M.D., on hypochondriasis, and other forms of nervous disease, 150, 201, 252, 279, 429, 557
- Hunter, John, and Mr. Cline, MSS of, 241
- Hunterian Museum, the, 101, 240
-, School of Medicine, rules and regulations of, 339
- Hunter's (John) works, by Palmer, with notes by Professors Owen, Bell, &c., 238
- Hydatids, cyst of, at the root of the neck, 108
-, of the liver expelled through the lung, 585
- Hydatids, cyst of, voided per rectum, 586
- Hydrocele, transparency of, 213
- Hydrocephalus, chronic, 550
- Hydro-electric chain batteries, Pulvermacher's, 268
- Hypertrophy, enormous, of the mammae, 415
- Hypochondriasis, on, and other forms of nervous disease. By H. Hunt, M.D., 150, 201, 252, 279, 429, 557
-, tremulans senilis, on, 105
- I.
- Idiots, Asylum for, 501
- Ignorance, a defence of, 392
- Ileo-cæcal valve, case of intussusception through the, 651
- Impecuniosity, homœopathic dose of gold in, 393
- Impediments of speech, on the causes and cure of, 47
- Inaugural address, at the opening of Sydenham College, Birmingham. By John Boon Hayes, Esq., 568
- Incarcerated scrotal hernia, 258
- Income-tax, the, and the medical profession, 268
- Increase in the size of the child in protracted pregnancy, 265
- India, 216, 267
-, and China, progress of epidemics in, 447
-, correspondence from, 392, 514
-, East, Company's service, rules and regulations of, 356
-, on the management of diseases of the heart, and of aortic aneurism, with especial reference to the treatment of those diseases in, 648
-, suggestions for the extension and perfection of vaccination, simultaneously with the systematic study of epidemic and endemic disease in, 413
- "Indian," Government treatment of the surgeon to the, 174
- Infanticide in Augsburg law of, 265
- Infantile coma. By T. H. Barker, M.D., 376
- Infectious diseases, on the unity of the laws which govern the exciting agents of epidemic, endemic, and, 640
- Infinitesimal dose, 650
- Infirmity, Bradford, the practice of medicine and surgery at, 433
-, North Staffordshire, the practice of medicine and surgery at, 434
-, Radclyffe, 604
-, Sheffield General, rules and regulations of, 341
-, the Lancaster, 216
-, Liverpool, the practice of medicine and surgery at, 173
-, Sea-bathing, Margate, 111
- Inflammation and ulceration of the rectum, 547
- Influence of the literature of the Greeks and Romans on science and medicine, 285
- Influenza, the, 111, 217
-, treatment of, 83
- Inguinal hernia, oblique, with double sac, 307
- Inhalation of chloroform in pulmonary consumption, 375
-, nearly fatal, Ed. Stanley, Esq., F.R.S., on, 529
- Injury, extensive, of the lower extremity, 230
- Inoculation, recurrence to, 161
- Inquest at Hardingstone, 437
-, and Dr. Robertson's evidence, 495
-, Coroner's—Homœopathy, 604
- Insane, the public and the, 161
- Insanity, crime and, on, 348, 531
- Inspectors, nomination of, under the Irish Medical Charities Act, 649
- Institution, Royal Polytechnic, 630
-, Sheffield Medical, rules and regulations of, 341
- Institutions, the London and Dublin Midwifery, 212
- Intemperate habits, rate of mortality among persons of, 51
- Interment Act, Metropolitan, 162, 447
-, extramural, 129, 137, 645
- Internal obstruction, cases of, 118
- Intestine, strangulation of, by omentum, 213
- Introductory lecture delivered at the opening of the session of University College. By E. A. Parker, M.D., 343
- Intussusception, case of, through the ileo-cæcal valve, 651
- Invalid lifter, Dr. Thomson's, 501, 519
- Inversion of the uterus, 136
-, cases of, 36
- Investigation at the General Hospital, Birmingham, 460, 490, 517
- Ireland, educational provisions, 539
-, medical charities, 511
-, Queen's University, 54, 394, 423
-, rules and regulations of, 364
-, report on the lunatic asylums of, 491
-, Royal College of Surgeons, rules and regulations of, 364
-, rules and regulations of examining medical bodies in, 364

Ireland, the census for, 1841-51, 46
 Irregular practice, address on, 315
 Irritation in the socket of a tooth, epilepsy occasioned by, 468
 Islington Medical Conversational Society, 564
 Isolation, novel, of a small-pox patient, 241

J

Jamaica, 630
cholera, Dr. Milroy on, 576
 in, 27, 51, 110, 341, 448
 Jaw, dislocation and fracture of the lower, 643
 lower, compound fracture of the, 643
 necrosis of the lower, 459
 Jeffrey's, Mr., respirator, 537
 R., Esq., case of poisoning by white oxide of arsenic, fatal within three hours after exhibition, 229
 Jenner, Dr., statue to, 369
 Jenner's, Dr., fever views, 394
 Jenner, Wm., M.D., clinical lecture on the use of the neutral sulphites in the treatment of diseases attended by the development of parasitic plants, especially the sarcinæ ventriculi, 191
 Johnson, Fred. H., Esq., case of poisoning by oil of turpentine, 380
 Henry James, Esq., clinical observations on the diseases of the genito-urinary organs, 352
 Johnstone, Dr. Edward, 319
 Joint, shoulder, spontaneous dislocation of the, 433
 Joints, diseased, 418
 Mr. Gay's method of treating, 571
 new operation on, 545
 elbow, excision of the, 613
 Jones, Dr. Bence, abstract of a paper on the variations of the sulphates and phosphates excreted in acute chorea, delirium tremens, and inflammation of the brain, 108
 case of cysts in the kidneys, 622
 lectures on digestion, respiration, and secretion
 Lecture VIII.—On the bile, 1
 Lecture IX.—On mechanical and chemical actions in digestion, 57
 Lecture X.—On the blood, in its relation to the food and its secretions, 113
 Lecture XI.—On respiration—On the air, and the action of oxygen out of the human body, 167
 Lecture XII.—On respiration—On the action of oxygen in the body upon nitrogen, hydrogen, and carbon, 219
 Lecture XIII.—On respiration—On the oxidation in the body of hydrogen, sulphur, phosphorus, and salts, 269
 Lecture XIV.—On the substances excreted from the body which may form calculi, 371
 Lecture XV.—The causes leading to the formation of calculi, 425
 Lecture XVI.—On the occurrence of oxalate of lime, and on the variations in the sulphates of the urine, 477
 Lecture XVII.—On alkalescence of the urine from fixed and volatile alkali, 607
 on alkalescence of the urine, from fixed alkali, in some cases of diseases of the stomach, 651
 on the nitrogen of the atmosphere, 214
 Mr. Wharton, 54
 T. Wharton, Esq., F.R.S., on the wisdom and beneficence of the Almighty as displayed in the sense of vision, 151
 Journal, the Edinburgh Monthly, 176
 and Mr. Syme, 285
 Journals, selections from, 18, 75, 105, 159, 212, 265, 414, 468, 493
 Judicial crusade against the medical profession, 617
 Juries in the Great Exhibition, award of the, 410

K

Kent County Lunatic Asylum, fatal assault at, 284
 Ophthalmic Hospital, 604
 Key, portrait of Mr. Aston, 266
 tsai-sing, the, 22
 Kidd, Dr., of Oxford, death of, 315, 341
 Kidney, cystic degeneration of the, 197
 serous cysts in the, 572
 stone in the left, 499
 case of cysts in the, 622
 Kidneys, two, affected with granular degeneration, 573
 containing serous cysts, 622
 King, Dr., on the march of death in St. Giles, 145, 274, 660
 and Queen's College of Physicians, 495
 King's College, 575
 and University, Aberdeen, 216
 Hospital, 604
 rules and regulations of, 338
 the practice of medicine and surgery at, 125, 172, 282, 432, 510
 rules and regulations of, 338
 Knee, disease of the cartilages in the, 615

Knee, examination of a distorted, 12
 Kossuth, Louis, 550
 Koussou in tænia, 12
 By Wm. Brown, Esq., 153
 unsuccessful (?) in the treatment of tape-worm, 408

L

Labour, two cases of partial separation of the placenta preceding, 403
 La Boutonnière, 664
 Laceration, extensive, of perinæum, 644
 of the right lateral sinus, 500
 severe, of the leg, 282
 Lallemand, M., on the causes, symptoms, and treatment of spermatorrhœa, 293
 Lancaster Infirmary, the, 216
 Lane, J. Hunter, M.D., F.L.S., a compendium of materia medica and pharmacy, 212
 Large cyst in the cavity of the pelvis, 654
 Larynx and trachea, diseased, 599
 Lateral depression of the thorax, 624
 Law and medicine, 649
 of Evidence, the, 217
 Act, 475
 Amendment Bill, 110
 Infanticide in Augsburg, 265
 Lunacy, the, 110
 Criminal, 284
 quackery protected by, 234
 Lawrence, R. M., M.D., translation of Froriep's therapeutic application of electro-magnetism in the treatment of paralytic and rheumatic affections, 212
 Laws of health, the, in relation to mind and body. By Lionel John Beale, 104
 the quarantine, 82
 which govern the exciting agents of epidemic, endemic, and infectious diseases, on the unity of the, 640
 Laycock, Dr., of York, 54
 LEADERS:—
 L'Envoy, iii.
 The College Election, 15
 Clinical medicine, 15
 Street cleansing, 16
 The dwellings of the poor, 45
 The homœopaths at Huddersfield, 45
 Children's Hospital, 45
 The Census for Ireland, 1841-51, 46
 The Great Exhibition, 46
 The Bill for regulating the qualification of pharmaceutical chemists, 69
 Water supply for the metropolis, 70
 The Great Exhibition, 71
 Small-pox in Hindostan, 99
 The prevention of cholera, a Governmental duty, 100
 The Hunterian Museum, 101
 The Great Exhibition, 102
 The Provincial Association, 128
 Water supply for the metropolis, 128
 Extramural interment, 129
 The Great Exhibition, 130
 The Pharmacy Bill, 155
 The annual meeting of the Provincial Medical and Surgical Association, 156
 The Great Exhibition, 157
 Government treatment of the surgeon to the "Indian," 174
 The Anniversary Meeting of the Provincial Medical and Surgical Association and the homœopaths, 175
 "The Edinburgh Monthly Journal," 176
 Secret remedies, 208
 "The Medical Directory" for 1852, 210
 The Great Exhibition, 210
 Quackery protected by law, 234
 The University of London, 235
 The Great Exhibition, 235
 Report from the National Vaccine Establishment, 259
 Metropolitan water supply, 260
 The Great Exhibition, 261
 Criminal Law of Lunacy. Fatal assault at the Kent County Lunatic Asylum, 284
 The "Edinburgh Monthly Journal" and Mr. Syme, 285
 The influence of the literature of the Greeks and Romans on science and medicine, 285
 The Great Exhibition, 288
 The new "branding-order" in the Army, 309
 Clairvoyance, 310
 Street cleansing, 310
 The Great Exhibition, 311
 Annual address to the medical students of London, 321
 Prizes to medical students, 351
 Our relations with the homœopaths, 352
 Our relations with the homœopaths, 383
 The principles of medical reform, 385
 The Medical Benevolent Fund, 385
 Dr. Mayne's Lexicon, 386
 The late "branding order" in the Army, 386
 Bloomerism, 386
 The Great Exhibition, 387
 Medical Society of London, 409
 The award of the jurors in the Great Exhibition, 410
 Tinctura Warburgii, 410
 Yellow-fever—quarantine, 411
 The Great Exhibition, 411
 Our relations with the homœopaths, No. II., 435
 Inquest at Hardingsstone, 437
 Mr. Mayo, of Winchester, 438
 Investigation at the General Hospital, Birmingham, 460
 Weekly newspaper physic, 461
 The "The Quarterly Review" versus the microscope, 462
 The Great Exhibition, 464
 Investigation at the General Hospital, Birmingham, 490
 Report on the Lunatic Asylums of Ireland, 491
 Asylum superintendents, 491
 Medical Charities, (Ireland), 511
 Necessity of medical representatives in Parliament, 513
 The London dissecting rooms, 513
 O'Reilly v. Churchill, 513
 The Public Health Act, 536
 Treatment of aneurism, 536
 The London dissecting rooms, 537
 Mr. Jeffrey's respirators, 537
 Surgical diploma of the University of Dublin, 564
 Unlicensed homœopaths, 565
 The Medical Benevolent College, 566
 Dr. Henry Holland, 566
 The Lord Chancellor and medical men, 566
 The New Charter of the College of Surgeons, 587
 The College of Surgeons and the homœopaths, 588
 Vaccination and the queries of the Epidemiological Society, 589
 Audi alteram partem, 590
 The "Medical Times" and "Gazette," 615
 Public health, 616
 Mr. Quekett's lectures, 617
 The judicial crusade against the medical profession, 617
 Extramural interments, 645
 Ecce iterum Crispinus, 646
 Club certificates, 647
 The Children's Hospital, 648
 Lebert, M., on the local and general nature of tumours, 75
 Lecture, clinical. By R. Quain, Esq., F.R.S., 116, 141, 659
 Ed. Stanley, Esq., F.R.S., 529
 on the use of the neutral sulphites in the treatment of diseases attended by the development of parasitic plants, especially the sarcinæ ventriculi. By Wm. Jenner, M.D., 19
 introductory, at University College, 343
 Mr. Quekett's, 617
 on the recent progress of anatomy, By Professor Paget, 29
 Lectures on histology. By J. T. Quekett, Esq., 6, 85, 139, 451, 551
 original, 1, 29, 57, 85, 113, 139, 167, 191, 219, 243, 269, 295, 343, 371, 397, 425, 451, 477, 503, 529, 551, 579, 607, 633, 659
 on digestion, respiration, and secretion. By H. Bence Jones, M.D., F.R.S., 1, 57, 113, 167, 219, 269, 371, 425, 477, 607
 the German mineral waters, and on their rational employment for the cure of certain chronic diseases. By Sigismund Sutro, M.D., 593
 eruptive fevers. By Geo. Gregory, M.D., 292
 principles and practice of surgery. By B. B. Cooper, Esq., F.R.S., 438
 public health. By Wm. A. Guy, M.B., Cantab, 32, 87, 243, 295, 397, 553, 633
 surgery, clinical, 4, 480, 503, 579, 635
 Lee, Edwin, Esq., Bradshaw's guide to the continent, by, 593
 Robert, M.D., F.R.S., on the diagnosis and treatment of ovarian disease, 597
 Left kidney, stone in the, 499
 Leg, compound fracture of the right, 258
 severe laceration of the, 282
 simple fracture of the left, 258
 L'Envoy, iii.
 Letheby, H., M.B., report of two cases of poisoning by cyanide of potassium and cyanide of silver, 41
 Letter to Professor J. Y. Simpson. By Wm. Macleod, M.D., 236
 Letters, familiar, on the physics of the earth, 649
 on chemistry, 131
 Lettsomian professorships, the, 445
 Leudet, T. E., M.D., researches on acute phthisis in the adult, 538
 Lever, Dr., testimonial to, 527
 Levy and Michaelis, Professors, on the London and Dublin Midwifery Institutions, 212
 Lexicon, Dr. Mayne's, 386
 Liberal offer, a, 241
 Liebig, Justus Von, familiar letters on chemistry, in its relations to physiology, dietetics, agriculture, commerce, and political economy, 131
 Life among the clergy, duration of, 572

Life Assurance Society, the Gresham, Hooper & Co., 21
 and medical fees, 395
 in Germany, student, 404
 Lifter, invalid, Dr. Thomson's, 501, 519
 Ligature of the common carotid, 432
 Lightfoot, Dr., in reply to Dr. Simpson, 497
 misstatements of, 368
 Thos., M.D., on some of the more important diseases incident to women, 298, 507
 Limb, places of election for amputations of the lower, 659
 Lindsay, Dr., 231
 Linoli, Dr., on psoriasis, from rupture of psoas muscle, 415
 Liquor amnii, analysis of the, 159
 LIST OF SCIENTIFIC MEETINGS :—
 351, 383, 409, 435, 460, 490, 511, 536, 564, 587, 615
 Smith's visiting, for 1852, 619
 Literature, German Medical, 576
 of the Greeks and Romans, influence of, on science and medicine, 285
 Lithotomy—chloroform, 564
 on stone in the bladder, and, 635
 Lithotripsy by Mr. Hilton, 488, 543
 Liver, abscess of the, 600
 hydatids of, expelled through the lung, 585
 voided per rectum, 586
 rupture of the, 234
 Liverpool, correspondence from, 49
 Infirmary, the practice of medicine and surgery at, 173
 Northern Hospital, the practice of medicine and surgery at, 434
 the practice of medicine and surgery at the North Dispensary, 563
 Living, the philosophy of, 104
 Lizars, J., Esq. On the occurrence and cause of hæmorrhage from the perineal section, 170
 Lizars on stricture of the urethra, 618
 Lobes of the left hemisphere of the brain, abscess of the middle and posterior, associated with rheumatic symptoms, 545
 Lodging houses, 137
 for the poor, 475
 London and Dublin Midwifery Institutions, 212
 provincial medical schools, sessional synopsis of classes and professors in, 342
 City of, Lunatic Asylum, 447
 dissecting rooms, the,—no subjects, 513, 537
 Edinburgh, and Dublin pharmacopœias, epitome of, 592
 health of, 320
 Hospital, 501, 550
 Medical and Surgical School, rules and regulations of, 336
 the practice of medicine and surgery at, 13, 154, 232, 457
 Medical Society of, 409, 501, 629, 656
 reports of meetings, 417, 441, 472, 522, 545, 573, 601, 623, 654
 resolutions against homœopathy, 417
 topography of, 64
 Pathological Society of, reports of meetings, 499, 519, 544, 572, 599, 622, 653
 pharmacopœia, the new, 72
 LONDON PRACTICE OF MEDICINE AND SURGERY :
 13, 67, 98, 126, 154, 172, 232, 256, 282, 307, 381, 408, 432, 457, 488, 510, 535, 563, 585, 614
 Statistical Society, reports of meetings of, 51, 572
 the Botanical Society of, 603
 University of, 215, 216, 235, 239, 527, 602
 rules and regulations of, 326
 Long tendon of the biceps, displacement of the, 614
 Lord Chancellor, the, and medical men, 566
 Lowe, E. W., Esq., excision of the elbow-joint, successful, 613
 Lower extremities, case of deformity of the, remedied by division of the hamstring tendons, 505
 extremity, extensive injury of the, 230
 jaw, necrosis of the, 459
 Lugol, M., death of, 594
 Luke, James, Esq., case of obstruction of the colon relieved by an operation performed at the groin, 107
 Lunacy, criminal law of, 284
 the law of, 110
 Lunatic Asylum, City of London, 447
 Colney-Hatch, 26
 Gloucester County, 475
 Kent County, fatal assault at, 284
 Asylums of Ireland, report on the, 491
 Lung, abscess of the liver which opened into the, 600
 hydatids of the liver expelled through the, 585
 Lungs and heart, a practical treatise on diseases of the, 315
 of a monkey, tuberculous disease in the, 624
 Lying-in Hospital, the British, 110

M

Mackness, James, M.D., memorials of, 492

Macleod, Wm., M.D., letter to Professor J. Y. Simpson, 236
 MacLise, Jos., Esq., surgical anatomy, 212
 Maharajah Gholab Singh, 449
 Maladies du sinus maxillaire. Par Dr. Giraldès, 274
 Malcolm, A. G., M.D., hospital reports, 14
 Malden, J., M.D., on empiricism, 222
 Male fern, efficacy of, in tænia, 282
 Malformation, congenital, of the external ear and meatus, 600
 obstructive disease of the aortic valves, dependent on, 519
 Malformations of the semi lunar valves, 521
 Malformed and diseased aortic valves, 520
 Malignant growth within the thorax, 256
 pustule, creosote in, 213
 Mammæ, enormous hypertrophy of the, 415
 Man, animals, and plants, progress of epidemic disease in, 294, 320, 369, 422, 447, 510, 576, 656
 Management of diseases of the heart, on the, 648
 Manchester, Chatham-street School of Medicine, rules and regulations of, 340
 memorial, the Royal College of Surgeons and the, 164
 Manslaughter, 241
 by quack medicines, 138
 Manual of physiology, a. By Wm. B. Carpenter, M.D., F.R.S., 438
 March of death in St. Giles'. By Dr. King, 145, 274
 Margate, the Sea-bathing Infirmary, 111
 Marines, royal, 575
 Marischal College and University, Aberdeen, rules and regulations of, 360
 Marylebone Board of Guardians, 26
 Mastodon, the, 422
 Materia medica and pharmacy, a compendium of, 212
 Mayne's, Dr., lexicon, 386
 Mayo, Chas., Esq., banquet to, 446
 Dr. Herbert, on the philosophy of living, 104
 Mr., of Winchester, 438
 M'Dougall, Henry J., Esq., translation of Lallemand's causes, symptoms, and treatment of spermatorrhœa, 293
 Measles, 138
 statistics of death from, 660
 Meats, preserved, for the navy, 216
 Meatus, external ear and, congenital malformation of the, 600
 Medal, Fellow's gold, 629
 Medical appointments and vacancies, 26, 54, 81, 110, 164, 191, 216, 267, 293, 319, 368, 395, 447, 501, 549, 575, 604, 629, 656
 Association, the Crewkerne and Yeovil district, 320
 and Chirurgical Society, the Royal, 79, 575, 629
 and homœopathy, 396, 513, 571, 595
 reports of meetings, 79, 107, 163, 543, 596, 621, 651
 Scientific Works, Highley's Catalogue of, 176
 Surgical Association, annual meeting of the Provincial, 156, 176, 315
 and the homœopaths, 175, 315
 Gloucestershire, 447
 School, London Hospital, rules and regulations of, 336
 St. Thomas's Hospital and, rules and regulations of, 333
 Benevolent College, 320, 447, 501, 549, 566, 604, 656, 666
 Fund, the, 385
 charities, Ireland, 511
 Charities Act, salaries under the Irish, 649
 clubs and self-supporting dispensaries, 214
 College, St. Bartholomew's Hospital and, rules and regulations of, 331
 Conversational Society, Islington, 564
 department, army, rules and regulations of, 354
 navy, rules and regulations of, 355
 ordnance, 368
 Directory, the, 439
 and the professors of the Royal College of Surgeons, 439
 for 1852, 210
 education, 21
 ethics, 48, 498, 571
 the homœopaths and, 518
 fees, life assurance and, 395
 payment of, 161
 Fund, Bengal, 422
 the British, 50, 153, 630
 Institution, Sheffield, rules and regulations of, 341
 literature, German, 576
 men, coroners' courts and, 518
 deaths of, 49
 honours conferred on, 594
 providence on the part of, 650
 Society for the Relief of the Widows and Orphans of, 421

Medical men, the Lord Chancellor and, 566

MEDICAL NEWS :—

25, 53, 81, 109, 136, 164, 190, 216, 240, 266, 293, 319, 341, 369, 394, 420, 445, 475, 501, 527, 549, 575, 603, 628, 656, 665
 officer, neglect by a Poor-law, 448
 officers of the Parisian hospitals, 217
 Practitioners' Guide. By F. L. J. Valleix, 390
 Profession, the Income-tax and the, 268
 Judicial crusade against the, 217
 referees, fees to, 440, 497
 reform, a scheme of, 162
 the principles of, 385
 representatives in Parliament, necessity of, 513, 596
 services, naval, 666
 School, Charing-cross Hospital, 165
 rules and regulations of, 338
 Edinburgh, rules and regulations of, 356
 St. George's Hospital, rules and regulations of, 335
 Surgeon's Hall, Edinburgh, rules and regulations of, 359
 schools, hospitals and, rules and regulations of, 331
 sessional synopsis of classes and professors in London and provincial, 342
 science, progress of, 18, 75, 103, 159, 212, 265, 414, 468, 493
 sciences, the half-yearly abstract of the, 292
 Society of Edinburgh, Royal, 604
 London, 409, 501, 629, 656
 reports of meetings, 417, 441, 472, 522, 545, 573, 601, 623, 654
 resolutions against homœopathy, 417
 student, thoughts for the, 568
 students, prizes to, 351
 Medical Times and Gazette, the, 615
 topography of London, the. By Klein Grant, M.D., 64
 Medicine and its kindred sciences, 396
 Practical Science, Newcastle-upon-Tyne College of, rules and regulations of, 340
 surgery, the London practice of, 13, 67, 98, 126, 154, 172, 232, 256, 282, 307, 381, 408, 432, 457, 488, 510, 535, 563, 585, 614
 provincial practice of, 14, 173, 233, 259, 433, 563, 643
 Chatham-street School of, Manchester, rules and regulations of, 340
 clinical, 15
 Faculty of, Paris, rules and regulations of, 366
 fallacies of the modern practice of, 400
 Hunterian School of, rules and regulations of, 339
 influence of the literature of the Greeks and Romans on science and, 285
 law and, 649
 Middlesex Hospital School of, rules and regulations of, 336
 retrospect of, 292
 School of, Paris, rules and regulations of, 367
 Theatre of Anatomy and, rules and regulations of, 339
 Westminster Hospital School of, 334
 Medicines, disguising the taste of, 160
 quack, 54
 manslaughter by, 138
 Medico-Chirurgical Society, the Edinburgh, reports of meetings, 627
 Meeting, annual, of the Provincial Medical and Surgical Association, 156, 176, 315
 and the homœopaths, 175, 315
 Meetings, list of scientific, 351, 383, 409, 435, 460, 490, 511, 536, 564, 587, 615
 Memorial, the Royal College of Surgeons and the Manchester, 164
 to the late Dr. Thomas Young, 475
 Memorials of James Mackness, M.D. By the Author of "Brampton Rectory," 492
 Men, deaths, of medical, 49
 medical, coroners' courts and, 518
 honours conferred on, 594
 providence on the part of, 650
 the Lord Chancellor and, 566
 Society for the Relief of the Widows and Orphans of Medical, 421
 Menstruation, Dr. Tilt on, 440
 Mental and moral aspects of mesmerism, 50
 Merriman, Dr. S., cases of inversion of the uterus, 36, 136
 Meryon, Dr. E., on fatty degeneration of the voluntary muscles, 652
 Mesmerism, mental and moral aspects of, 50
 Metallic tractors, Perkin's, 472
 Meteorological experiments, 293
 Meteorology, deaths, and births, table of for first half-year of 1851, 52

Method of treating diseased joints, Mr. Gay's, 571
 Metropolis, mortality in the, 54
 quality of the water supplied to the, 137
 the great, 217
 another Exhibition, 137
 water supply for the, 70, 128
 Metropolitan Commission of Sewers, 447
 Free Hospital, the practice of medicine and surgery at, 382, 614
 Interment Act, 162, 447
 sewers, the, 241
 water supply, 260
 Michaelis and Levy, Professors, on the London and Dublin midwifery institutions, 212
 Microscope, the Quarterly Review, *versus* the, 462
 Middlesex Hospital, 26
 the practice of medicine and surgery at, 283
 school of medicine, rules and regulations of, 336
 militia, the, 549
 Midwifery institutions, the London and Dublin, 212
 operations, position in, 213
 Military appointments, 26, 81, 110, 136, 164, 241, 293, 368, 394, 421, 446, 501, 549, 629, 656
 prisons, 499
 surgeons, 499
 Militia, the Middlesex, 549
 Milroy, Dr., on cholera in Jamaica, 576
 Milton, J. L., Esq., hospital reports, 232, 382, 614
 on blistering in gleet, 302
 bubo, 353
 chordee, 65, 93
 Mind and body, the laws of health in relation to, 104
 Mineral waters, German, lectures on the, 593
 Mis-statements of Dr. Lightfoot, 368
 Mock surgeon, a, 605
 Mode of propagation of cholera, on the. By John Snow, M.D., 610
 Modern practice of medicine, fallacies of, 400
 Modifications, pathological, and treatment of croup, 574
 Moir, Dr., death of, 54
 Mr., death of, of Musselburgh, 76
 Monckton, Stephen, M.D., cases of puerperal hæmorrhage, 562
 Monkey, tuberculous disease in the lungs of a, 624
 Monthly Journal, the Edinburgh, 176
 and Mr. Syme, 285
 Moore, W. J., Esq., hospital reports, 259, 643
 Moral and mental aspects of mesmerism, 50
 Morbid phenomena. God in disease, or the manifestation of design in, 592
 Mortality in the metropolis, 54
 notabilia, 369, 423, 449, 476, 502, 528, 550, 577, 605, 630, 657
 rate of, among persons of intemperate habits, 51
 table, 27, 55, 84, 111, 165, 217, 241, 268, 294, 369, 396, 423, 449, 476, 502, 528, 577, 606, 631, 657, 666
 Movements, the prevention and cure of many chronic diseases by, 568
 Mucous membrane of the throat, on diseases of the, and their treatment by topical medication, 243
 "Muffins to sell," 657
 Mushrooms, poisoning by, 423
 Muscle, psoriasis from rupture of the psoas, 415
 Muscles, on fatty degeneration of the voluntary, 652
 Museum, Hunterian, 101, 240
 Mutitas, case of prolonged, 105

N

National Vaccine Establishment, 110
 report from the, 259, 266
 Nature of tumours, on the local and general, 75
 Naval appointments, 26, 54, 81, 110, 136, 164, 191, 216, 240, 267, 293, 319, 341, 368, 394, 421, 446, 475, 501, 549, 575, 604, 629, 656, 666
 Benevolent Society, Royal, 447
 changes, 26
 medical services, 666
 promotions, 629
 Navy medical department, rules and regulations of, 355
 preserved meats for the, 216
 assistant-surgeons in the, 293
 Neale, R., Esq., trismus following a wound of the thumb, 231
 Necessity of medical representatives in Parliament, 513, 596
 Neck, removal of a large tumour from the, 624
 Necrosis of the lower jaw, 459
 tibia, 459
 removal of the os calcis for, 67
 Neglect by a Poor-law medical officer, 448
 Nelson, F. G. P., Esq., on the rate of mortality among persons of intemperate habits, 51
 Nerves of the uterus, on the, 448
 Nervous affections connected with dyspepsia. By Wm. Bayes, M.D., 439

Nervous diseases, on hypochondriasis and other forms of, 150, 201, 252, 279, 429, 557
 Neutral sulphites, on the use of the, in the treatment of diseases attended by the development of parasitic plants, especially the sarcina ventriculi, 191
 Nevermann, Dr., on the radical cure of obstinate stricture of the urethra, 80
 New charter of the Royal College of Surgeons, 587, 590
 fellows, 629
 forceps, 442
 London pharmacopœia, the, 72
 method of treating certain cases of epiphora, 79
 operation on diseased joints, 545
 splint, 78
 way of operating in cancer of the breast, 383
 York, 111
 Newcastle-upon-Tyne College of Medicine and Practical Science, rules and regulations of, 340
 News, college, 81
 medical, 25, 53, 81, 109, 136, 164, 190, 216, 240, 266, 293, 319, 341, 369, 394, 420, 445, 475, 501, 527, 549, 575, 603, 628, 656, 665
 Newspaper physic, weekly, 461
 "Nibblers," homœopathic, 518
 Nitrate of silver stains of the conjunctiva, 350
 Nitrogen of the atmosphere, Dr. Bence Jones on, 214
 Noirsain, J. C.E., on the heating and ventilation of buildings, 43
 Nomination of inspectors under the Irish Medical Charities' Act, 649
 Non-descended testicle, 438
 Non-development, foetal, singular case of, 434
 North Dispensary, Liverpool, the practice of medicine and surgery at, 563
 Staffordshire Infirmary, the practice of medicine and surgery at, 434
 Northern Hospital, Liverpool, the practice of medicine and surgery at, 434
 Notabilia, mortality, 369, 423, 449, 476, 502, 528, 550, 577, 605, 630, 657
 Nottingham, cholera at, 267
 Novel isolation of a small-pox patient, 241
 Nuisance, the chicory, 82
 Nuttall, H., M.D., on placenta prævia, 487

O

Obeism: spasmodic action of the uterus, 306
 Obituary, 26, 54, 81, 110, 136, 191, 216, 240, 266, 293, 319, 368, 394, 446, 475, 501, 527, 549, 575, 604, 629, 656
 Oblique inguinal hernia with double sac, 307
 Obre, H. Esq., case of cholera in which crystals formed on the surface of the body, previous to death, 473
 on a case of obturator or thyroïdal hernia successfully relieved by operation, 80
 Observations on nitrate of silver stains of the conjunctiva. By J. V. Solomon, Esq., 350
 Obstruction of the colon, case of, 107
 internal, cases of, 118
 Obstructive and regurgitant disease of the aortic orifice, 520
 disease of the aortic valves dependent on malformation, 519
 Obturator or thyroïdal hernia, case of, 80
 Oedema of the upper half of the body, from malignant growth within the thorax, 256
 Offer, a liberal, 241
 Officer, Poor-law medical, neglect by a, 448
 Officers, medical, of the Parisian hospitals, 217
 Offspring, transmission from parent to, of some forms of disease, 567
 Oil, cod liver, 594
 Oil of turpentine, case of poisoning by, 380
 Ointments, yellow wax for the preparation of, 213
 Oken, Dr., 240
 Old age, statistics of death from, 145
 teeth in, 423
 Olecranon, fracture of both, 173
 Omentum, remarkable cyst in the, 500
 strangulation of intestine by, 213
 Operating, new way of, in cancer of the breast, 383
 Operation, case of obturator or thyroïdal hernia successfully relieved by, 80
 for stricture of the urethra, 259
 the radical cure of obstinate stricture of the urethra, 80
 in disease of bone, 459
 extroversio vesicæ, 381, 408
 new, on diseased joints, 545
 of tracheotomy, 599
 Operations, position in midwifery, 213
 Ophthalmic Hospital, Kent, 604
 Opium, death by, 550
 Oporto, 475
 Oration, the Harveian, 53
 Orderlies, street, 106
 Ord. ance, 446
 Medical Department, 368
 O'Reilly v. Churchill, 513
—Court of Exchequer, 524
 Organs, clinical observations on the diseases of the genito-urinary, 552

Organs, diseases of the urinary and generative, 17
 urinary, disease of the, 499
 ORIGINAL COMMUNICATIONS:—
 8, 36, 60, 91, 118, 144, 170, 194, 222, 247, 273, 298, 346, 374, 400, 429, 453, 482, 505, 531, 557, 582, 610, 638, 660
 ORIGINAL LECTURES:—
 1, 29, 57, 85, 113, 139, 167, 191, 219, 243, 269, 295, 343, 371, 397, 425, 451, 477, 503, 529, 551, 579, 607, 633, 659
 Originality, Mr. Syme's, 664
 Orphans and Widows of Medical Men, Society for the Relief of the, 421
 Orthopædic Hospital, City, 110, 550
 the Royal, 527
 Os calcis, amputation of the, 418
 removal of the, for necrosis, 67
 Ovarian disease, on the diagnosis and treatment of, 597
 tumours, diagnosis, treatment, and pathology of, 60, 120
 Ovariectomy, case of, 108
 successful case of parturition in a patient who had previously undergone, 597
 Oxford, sanitary condition of, 409
 University of, 54, 445, 475, 501, 656
 rules and regulations of, 324

P.

Paget, Professor, on the recent progress of anatomy, 29
 Painter's colic, chloroform and, 415
 Palace, the Crystal, 440
 Palate, the bony, closure of the fissures in, 547
 Palmer, John Hunter's Works, by, 238
 Paralysis, 614
 brucine in, 160
 cases of, 14
 rheumatic and local, treated by Pulvermacher's chain battery, 509
 of the right side of the face, and left half of the body, 535
 three cases of fracture of the spine unattended with, 653
 Paralytic and rheumatic affections, therapeutic application of electro-magnetism in the treatment of, 212
 Parent, transmission from, to offspring, of some forms of disease, and of morbid taints and tendencies, 567
 Paris, Faculty of Medicine, rules and regulations of, 366
 Hospitals of, rules and regulations of, 367
 School of Medicine, rules and regulations of, 367
 Société de Biologie de, 516
 Parisian hospitals, medical officers of the, 217
 Park, the Albert, 294
 Parkes, E. A., M.D., introductory lecture delivered at the opening of the session of University College, 343
 Parliament, necessity of medical representatives in, 513, 596
 Parochial surgeons, 604
 Partem, audi alteram, 590
 Partial removal of the placenta, 496
 Parturition, a successful case of, in a patient who had previously undergone ovariectomy, 597
 or abortion, enlargements of the uterus which remain after, 601
 Passages, air, on the prevention of diseases of the, 613
 Pathological anatomy and classification of dislocations of the humerus, on the, 160
 of bronchitis, the, 493
 modifications and treatment of croup, 574
 Society of London, reports of meetings, 499, 519, 544, 572, 599, 622, 653
 Pathology, chemical, cases illustrative of various points in, 125
 diagnosis, and treatment of ovarian tumours, 60, 120
 of the uterus, its anatomy and physiology. By T. Snow Beck, M.D., 9, 144, 204, 250, 273, 377, 453, 583
 those affections of the ear which produce disease in the brain, 80
 Patient, novel isolation of a small-pox, 241
 Patients, consumptive, peculiar appearance in the gums of, 163
 Pavy, F. W., Esq., hospital reports, 488
 Payment of medical fees, 161
 Peat charcoal, deodorising properties of, 49
 Peculiar appearance in the gums of consumptive patients, 163
 Pelvis, large cyst in the cavity of the, 654
 Perfection of vaccination, suggestions for the extension and, 413
 Pericarditis, on the frequency of, 482
 rheumatic, 654
 treatment of, 624
 Perinaeum, extensive laceration of, 644
 rupture of the, and its treatment, 625
 Perineal section, 133, 434
 rupture of the urethra, 643

- Perineal section, the occurrence and cause of hæmorrhage from the, 170
 Peritonæum, deposits of tubercles in the, 572
 Perkins's metallic tractors, 472
 Persian tambac, the, and its preparations, 546
 Pestilences, a history of epidemic, 492
 Pharmaceutical Chemists, the Bill for regulating the Qualifications of, 69
 Pharmacopœia Collegii Regalis Medicorum Londinensis, 72
 of the Royal College of Physicians, translation of, 72
 the new London, 72
 Pharmacopœias, the pocket formulary and synopsis of the British and foreign, 592
 epitome of the London, Edinburgh, and Dublin, 592
 Pharmacy, a compendium of materia medica and, 212
 Bill, the, 26, 81, 155
 Mr. Bell's, 106
 Phenomena, morbid, God in disease, or the manifestation of design in, 592
 Philips, Dr. Ch., 369
 Phillips, B., Esq., F.R.S., cases of internal obstruction, 118
 Philosophy of living, the. By Herbert Mayo, M.D., 104
 Phlegmonosa, enteritis, 439
 Phosphates and sulphates, variations of the excreted, in disease, 108
 Phosphorus, amorphous, 111
 Phthisis, acute, researches on, in the adult, 538
 pulmonalis, case of, 456
 remarks on the etiology, of, 37, 638
 Phytic, weekly newspaper, 461
 Physicians and Surgeons of Glasgow, Faculty of, 447
 rules and regulations of, 360
 King and Queen's College of, 495
 Royal College of, 25, 81, 136, 368, 665
 rules and regulations of, 328
 Translation of the pharmacopœia of, 72
 Physics of the earth, familiar letters on the, 649
 Physiology, a manual of, 438
 and anatomy of the uterus, 9, 144, 204, 250, 273, 377, 453, 583
 electro-, 494, 519
 general and comparative, principles of, 291
 M. Bernard's 471
 Pickwickian sense, the, 83
 Placenta, partial removal of the, 496
 partially retained, puerperal dropsy with adherent and, 525
 prævia. By H. Nuttall, M.D., 487
 case of, 534
 on. By C. Butler, Esq., 229
 retained, 542, 571, 595, 596, 620
 two cases of partial separation of the, preceding labour, 403
 Places of election for amputation of the lower limb, 659
 Plants, progress of epidemic disease in man, animals, and, 291, 320, 369, 422, 447, 550, 576, 656
 Pleuritic effusion, blisters in, 213
 Plymouth and its neighbourhood, the cholera in, in 1849, 194
 Pneumonia, chloroform in, 414
 Pocket formulary, the, and synopsis of the British and foreign pharmacopœias. By H. Beasley, 592
 Poison, fly, 294
 syphilitic, on the effects of temperature on the communicability of, 105
 Poisoning by aconite, 395
 chloride of zinc, 382, 497
 cyanide of potassium and cyanide of silver, 41
 extract of belladonna, 234
 mushrooms, 423
 oil of turpentine, case of, 380
 sulphuric acid, 213
 white oxide of arsenic, 229
 case of, by fresh cod-fish, 654
 Polish ball, the, 528
 Polypus, gelatinous, of the ear, 442
 organised of the heart, case of, 163
 Polytechnic Institution, Royal, 630
 Poor-law Board and the homœopaths, 238
 contrarieties, 657
 medical officer, neglect by a, 448
 lodging-houses for the, 475
 the dwellings of the, 44
 Popliteal artery, aneurism of, 154
 Popular prejudice, a, 476
 Porta, Professor, on the treatment of bronchocele, 105
 Portrait of Mr. Aston Key, 266
 Position in midwifery operations, 213
 Postgate, John, Esq., on displacement of the long tendon of the biceps, 614
 Post-mortem examinations, criminal, 83
 Posture, as a therapeutic agent, on. By W. Price, Evans, Esq., 407
 Potass, bichromate of, in syphilitic vegetations and condylomata, 160
 Potassium, cyanide of, cases of poisoning by, 41
 Potato blight, electricity and the, 267
 disease, the, 216
 Power, chloroform a propelling, 27
 epidemic, on the spiral evolution of the, 570
 Practical compendium of the recent statutes, cases, and decisions affecting the office of Coroner. By William Baker, Esq., 103
 treatise, a, on diseases of the lungs and heart, including the principles of physical diagnosis. By W. H. Walshe, M.D., 315
 the management of diseases of the heart, and of aortic aneurism, with especial reference to the treatment of those diseases in India. By Norman Chevers, M.D., 648
 Practice and principles of surgery, 438
 irregular, address on, 315
 of medicine, fallacies of the modern, 400
 medicine and surgery, the London, 13, 67, 98, 126, 154, 172, 232, 256, 282, 307, 381, 408, 432, 457, 488, 510, 535, 563, 585, 614
 medicine and surgery, the provincial, 14, 173, 233, 259, 433, 563, 643
 Practices and conduct, unprofessional, provisions against, 540
 Practitioner's guide, the medical, 390
 Prævia, case of placenta, 534
 placenta, 487
 Pregnancy, case of extra-uterine, 496
 duration of, 419
 protracted, increase of the size of the child in, 265
 question of, in bodies far gone in putrefaction, 470
 Prejudice, a popular, 476
 Preparations, on the use of aurific, 25
 the Persian tambac, and its, 546
 Presentation, a hand, rupture of the uterus complicated with, 500
 Preservation of the health of women at the critical periods of life. By E. J. Tilt, M.D., 176
 Preserved meats for the navy, 216
 President of the Royal College of Surgeons, the, and the Coffinites, 213
 Prevention and cure of many chronic diseases by movements, the. By M. Roth, M.D., 568
 spinal curvatures. By Mrs. Godfrey, 413
 Prevention of Cholera, the, a Government duty, 100
 of diseases of the air passages, on the. By Alfred Evans, Esq., 613
 Priessnitz, 657
 death of, 630
 Principles and practice of surgery, lectures on, 438
 of medical reform, the, 385
 physiology, general and comparative. By Wm. Carpenter, M.D., F.R.S., 291
 surgery, supplement to the, 618
 Prisons, military, 499
 Prize, the Actonian, 158
 Prizes, professional, 240
 to medical students, 351
 Procuring abortion, 217, 369
 Profession, the medical, judicial crusade against, 617
 the medical, the Income-tax and the, 268
 Professional prizes, 240
 Professors, classes and, in London and provincial medical schools, sessional synopsis of, 342
 Professors of the Royal College of Surgeons, the "Medical Directory" and the, 439
 Professorship, the Lettsomian, 445
 Progress of epidemic disease, 267
 in man, animals, and plants, 294, 320, 369, 422, 447, 550, 576, 656
 PROGRESS OF MEDICAL SCIENCE:—
 18, 75, 105, 159, 212, 265, 414, 468, 493, 592
 Prolonged nutitas, 105
 Promotions, naval, 629
 Propagation of cholera, on the mode of, 610
 By J. Snow, M.D., 559
 Propelling power, chloroform a, 27
 Properties, therapeutic, of creosote, 441
 Prophylaxis of variola, affinities and, 442
 Prostate, abscess of the, bursting into the urethra, 258
 gland, the anatomy and diseases of the, 316
 Protracted pregnancy, increase of the size of the child in, 265
 Providence on the part of medical men, 650
 Provincial Association, the, 128
 PROVINCIAL CORRESPONDENCE:—
 49, 76, 494, 514, 539, 649
 Provincial, London, and sessional synopsis of classes and professors in medical schools, 342
 Medical and Surgical Association, annual meeting of, 156, 176, 315
 and the homœopaths, 175, 315
 practice of medicine and surgery, 14, 173, 233, 259, 433, 563, 643
 Provisions against unprofessional practices and conduct, 540
 educational, Ireland, 539
 Prussian despotism, 268
 Pseudo-sciences: I. Homœopathy. By J. J. Robertson, Esq., 224, 277
 Psoas muscle, psoriasis from rupture of the, 415
 Psoriasis, from rupture of the psoas muscle, 415
 Psoriasis, carbonate of ammonia in chronic, 161
 Psycheism and somnolism. By J. W. Haddock, M.D., 211
 Public baths and washhouses, 576
 Health Act, the, 536
 lectures on, 32, 87, 243, 295, 397, 553, 633
 the, 83, 138, 474, 616
 the, and the insane, 161
 Puerperal dropsy, with adherent and partially retained placenta, 595
 hæmorrhage, cases of, 562
 Pulmonalis, case of phthisis, 456
 Pulmonary consumption, chloroform in, 375
 Pulse, voluntary arrest of the, 469
 Pulvermacher's chain battery, cases of rheumatic and local paralysis treated by, 509
 patent portable hydro-electric chain batteries, 268
 Pustule, kreosote in malignant, 213
 Putrefaction, question of pregnancy in bodies far gone in, 470
 Pylecott, J. H., Esq., hospital reports, 434
- Q
- Quack medicines, 54
 manslaughter by, 138
 Quackery protected by law, 234
 Quain, Dr., and Dr. M. Hall, 161
 R., Esq., F.R.S., Clinical Lectures, 116, 141, 659
 on the places of election for amputations of the lower limb, 659
 Qualification of druggists, 27
 pharmaceutical chemists, the Bill for regulating the, 69
 Quality of the water supplied to the Metropolis, 137
 Quarantine, 165
 and cholera, 515
 congress, the, 72
 laws, the, 82
 yellow fever, 411
 "Quarterly Review," the, v. the microscope, 462
 reviewer, Mr. Quekett and the, 517
 Queen's College, Birmingham, 368, 421, 447
 rules and regulations of, 354
 Hospital, Birmingham, 110
 rules and regulations of, 354
 the practice of medicine and surgery at, 259, 643
 King and, College of Physicians, 495
 University, Ireland, 54, 394, 423
 rules and regulations of, 364
 Quekett, Mr., 446, 475
 and the "Quarterly" reviewer, 517
 J. T., Esq., lectures on histology, 6, 85, 139, 451, 551
 Quekett's, Mr., lectures, 617
 Question of pregnancy in bodies far gone in putrefaction, 470
 Quinine in continued fever, 346
 fever, 472
- R.
- Radcliffe, C. B., M.B., commentaries on convulsive diseases, 124
 Radclyffe Infirmary, 604
 Radical cure of obstinate stricture of the urethra, description of an operation for the, 80
 Ranking, Dr., Dr. Holland and, 620
 Ransford, Chas., M.D., reasons for embracing homœopathy, 466
 Rate of mortality among persons of intemperate habits. By F. G. P. Neison, Esq., 51
 Reasons for embracing homœopathy. By Chas. Ransford, M.D., 466
 Rectum, hydatids of the liver, voided per, 586
 inflammation and ulceration of the, 547
 ulcer in the, 255
 Recurrence to inoculation, 161
 Reduction of a dislocated femur, 547
 Referees, fees to medical, 440, 497
 Reform, sanitary, British Guiana and, 286
 the principles of medical, 385
 Regurgitant and obstructive disease of the aortic orifice, 520
 Relations with the homœopaths, our, 352, 383, 435
 Relief of widows and orphans of medical men, Society for the, 421
 Remarkable cyst in the omentum, 500
 Remedies, secret, 208, 239
 Removal of a large tumour from the neck, 624
 the os calcis for necrosis, 67
 placenta, partial, 496
 Report from the National Vaccine Establishment, 259, 266

- Report of two cases of poisoning by cyanide of potassium and cyanide of silver. By H. Letheby, M.B., 41
- on the lunatic asylums of Ireland, 491
- tuberculous (?) deposit in the uterus and Fallopian tubes, 600
-, statistical, on cases of diseases of the heart, 543
- disease of the heart, 109
- Reports, Guy's Hospital, Vol. VII., 592
- of practice illustrative of the diagnosis, treatment, and pathology of ovarian tumours. By Frederick Bird, M.D., 60, 120
- REPORTS OF SOCIETIES:—
- 51, 79, 107, 163, 176, 417, 441, 472, 499, 519, 543, 572, 596, 621, 651
- Representatives, medical, necessity of, in Parliament, 513, 596
- Researches on acute phthisis in the adult. By T. E. Leudet, M.D., 538
- Resolutions against homœopathy, 417
- Respiration, lectures on digestion, secretion, and, 1, 57, 113, 167, 219, 269, 371, 425, 477, 607
- Respirator, Mr. Jeffrey's, 537
-, Roof's, 476
- Retained placenta, 542, 571, 595, 596, 620
- Retrospect of medicine, 292
- Revaccination in syphilis, 213
- Review, the Quarterly, *versus* the microscope, 462
- Reviewer, the Quarterly, Mr. Quekett and, 517
- REVIEWS:—
- On Diseases of the Urinary and Generative Organs. By W. Acton, Esq., 17
- On Articulate Sounds, and on the Causes and Cure of Impediments of Speech. By J. Bishop, F.R.S., F.R.C.S., 47
- Pharmacopœia Collegii Regalis Medicorum Londinensis, 72
- Translation of the Pharmacopœia of the Royal College of Physicians. By A. Physician, 72
- The New London Pharmacopœia, Translated and Arranged in a Tabular Form with the Edinburgh and Dublin Pharmacopœias, 72
- A Practical Compendium of the Recent Statutes, Cases, and Decisions affecting the Office of Coroner, &c. By William Baker, Esq., 103
- The Laws of Health in Relation to Mind and Body. By Lionel John Beale, 104
- The Philosophy of Living. By H. Mayo, M.D., 104
- Familiar Letters on Chemistry. By Justus Von Liebig, 131
- The Wisdom and Beneficence of the Almighty, as Displayed in the Sense of Vision. By T. Wharton Jones, F.R.S., 158
- Highley's Catalogue of Medical and Scientific Works, 176
- On the Preservation of the Health of Women at the Critical Periods of Life. By E. J. Tilt, M.D., 176
- Somnolism and Psycheism. By Joseph W. Haddock, M.D., 211
- Surgical Anatomy. Fasciculus IX. By Joseph MacLise, F.R.C.S., 212
- The Therapeutic Application of Electro-Magnetism in the Treatment of Rheumatic and Paralytic Affections. Translated from the German of Froriep. By R. Moore Lawrence, M.D., 212
- A Compendium of Materia Medica and Pharmacy, &c. By J. Hunter Lane, M.D., 212
- A Letter to Professor J. Y. Simpson. By William Macleod, M.D., 236
- John Hunter's Works. By Palmer. With Notes by Professors Owen, Bell, &c., 238
- Des Maladies du Sinus Maxillaire. Par Dr. Giraudeau, 261
- On Diseases of the Mucous Membrane of the Throat, and their Treatment by Topical Medication. By William Wagstaff, A.M., M.D., 265
- The First Step in Chemistry. By Robert Galloway, F.C.S., 265
- Principles of Physiology, General and Comparative. By William Carpenter, M.D., F.R.S., 291
- Lectures on the Eruptive Fevers. By George Gregory, M.D., 292
- Braithwaite's Retrospect of Medicine. Vol. XXIII., 292
- Half-Yearly Abstract of the Medical Sciences. By Dr. Ranking. Vol. XIII., 292
- On the Causes, Symptoms, and Treatment of Spermatorrhœa. Translated and edited by Henry J. M'Dougall, from the French of Lallemand, 293
- A Practical Treatise on the Diseases of the Lungs and Heart, including the Principles of Physical Diagnosis. By Walter Hayle Walshe, M.D., 315
- The Anatomy and Diseases of the Prostate Gland. By John Adams, F.R.C.S., 316
- Clinical Observations on Diseases of the Genito-Urinary Organs. By Henry James Johnson, 332
- On Bubo. By John L. Milton, M.R.C.S., 353
- Guide du Médecin Praticien; ou, Résumé Générale de Pathologie Interne et de Thérapeutique Appliquée. Par F. L. J. Valleix. Vol. V., 390
- A Defence of Ignorance. By the Author of "How to Make Home Unhealthy," 392
- The Spine. By Charles Verral, M.R.C.S., 413
- On the Prevention and Cure of Spinal Curvatures. By Mrs. Godfrey, 413
- Suggestions for the Extension and Perfection of Vaccination. By J. R. Bed'ord, 413
- Lectures on the Principles and Practice of Surgery. By Bransby B. Cooper, F.R.S., 438
- A Manual of Physiology, &c. By William B. Carpenter, M.D., F.R.S., 438
- On Nervous Affections connected with Dyspepsia. By Wm. Bayes, M.D., 439
- Reasons for Embracing Homœopathy. By Charles Ransford, M.D. Edin., 466
- A History of Epidemic Pestilences, from the Earliest Ages to 1818, with Researches into their Nature, Causes, and Prophylaxis. By Edward Bascome, M.D., 492
- Memorials of James Mackness, M.D. By the Author of "Brampton Rectory," 492
- Recherches sur la Phthisie Aigue chez l'Adulte: Thèse pour le Doctorat en Médecine. Par T. Emile Leudet, M.D., &c., 538
- On the Transmission from Parent to Offspring of some Forms of Disease, and of Morbid Taints and Tendencies. By James Whitehead, M.D., F.R.C.S., 567
- Thoughts for the Medical Student. An Introductory Address delivered at King's College, London. By Wm. Bowman, F.R.S., 568
- Inaugural Address delivered at the Opening of Sydenham College, Birmingham. By John Boon Hayes, 568
- The Prevention and Cure of many Chronic Diseases by Movements. By M. Roth, M.D., 568
- Sunning-hill Wells; or, a Practical Inquiry into the Action of Iron as a Constituent of the Blood, in Health and Disease, in Connexion with that Chalybeate Spring. By Henry Holmes, M.D., 569
- Guy's Hospital Reports. Vol. VII. Part II., 592
- God in Disease. By James F. Duncan, M.D., 592
- An Epitome of the London, Edinburgh, and Dublin Pharmacopœias, &c. By W. Culverwell, L.S.A., 592
- The Pocket-Formulary and Synopsis of the British and Foreign Pharmacopœias, &c. By Henry Beasley, 592
- Lectures on the German Mineral Waters, and on their Rational Employment for the Cure of Certain Chronic Diseases. By Sigismundo Sutro, M.D., 593
- Bradshaw's Companion to the Continent, &c. By Edwin Lee, 593
- Lizars on Stricture of the Urethra, 618
- Supplement to the Principles of Surgery. By James Syme, 618
- Smith's Physicians', Surgeons', and General Practitioners' Visiting List, Diary, Almanack, and Book of Engagements, for 1852, 619
- A Practical Treatise on the Management of Diseases of the Heart and of Aortic Aneurism, with especial Reference to the Treatment of those Diseases in India. By N. Chevers, M.D., 648
- Familiar Letters on the Physics of the Earth, &c. By Professor Buff. Edited by A. W. Hoffman, Ph. D., F.R.S., 649
- Rhamnus frangula as a mild aperient, on the employment of the, 469
- Rheumatic and local paralysis, cases of, treated by Pulvermacher's chain battery, 509
- and paralytic affections, therapeutic application of electro-magnetism in the treatment of, 212
- pericarditis, 654
-, treatment of, 624
- symptoms, abscess of the middle and posterior lobes of the left hemisphere of the brain, associated with, 545
- Rheumatism and albuminuria, 543
- Rigby, Ed., M.D., on amenorrhœa, 8, 374
- dysmenorrhœa, 431, 582
- Right lateral sinus, laceration of the, 500
- Robertson, James, M.D., examination of a distorted knee, 12
-, J. J., Esq., on the pseudo-sciences: 1. Homœopathy, 224, 277
- Robertson's Dr., evidence at the inquest at Hardingstone, 495
- Roe, Ed. T., M.D., on the cholera in Plymouth and its neighbourhood in 1849, 194
- Romans and Greeks, influence of the literature of the, on science and medicine, 285
- Rooff's respirator, 476
- Rooke, H. L. T., M.D., hospital reports, 98, 258, 535
- Rooms, the London Dissecting—no subjects, 513, 537
- Rosenberger, Dr., on the effects of temperature on the communicability of syphilitic poison, 105
- Roth, M., M.D., on the prevention and cure of many chronic diseases by movements, 568
- Routh, Dr., in reply to Dr. Dudgeon, 540
-, on homœopathy, 439, 470, 495
-, C. H. F., M.D., on the fallacies of the modern practice of medicine, more especially in relation to homœopathy, 400
- Royal Academy of Sciences, Stockholm, 216
- College of Chemistry, rules and regulations of, 353
- Royal College of Physicians, 25, 81, 136, 368, 665
-, rules and regulations of, 321
-, Translation of the pharmacopœia of, 72
-, Surgeons, Edinburgh, rules and regulations of, 358
-, Ireland, rules and regulations of, 364
-, 53, 81, 109, 136, 164, 190, 394, 420, 421, 475, 527, 549, 629, 656, 666
-, Council election, 78
-, Examination for the Fellowship, 574, 628
-, homœopathy and the, 588, 619
-, new charter of the, 587, 590
-, rules and regulations of, 329
-, the "Medical Directory and the professors of the, 439
-, and the Manchester memorial, 164
-, President of the, and the Coffinites, 213
- Dispensary for Diseases of the Ear, 320
- Free Hospital, 550
-, the practice of medicine and surgery at, 232
- marines, 575
- Medical and Chirurgical Society, 79, 575, 629
- and the homœopaths, 571, 595
- homœopathy, 518, 396
-, reports of meetings, 79, 107, 163, 543, 596, 621, 651
- Society of Edinburgh, 604
- Naval Benevolent Society, 447
- Orthopædic Hospital, 527
- Polytechnic Institution, 630
- Society, 603
-, the Council of the, 527
- RULES AND REGULATIONS OF EXAMINING MEDICAL BODIES IN ENGLAND, SCOTLAND, AND IRELAND:—
- England:—
- University of Oxford, 324
- Cambridge, 325
- London, 326
- Royal College of Physicians of England, 328
- Surgeons of England, 329
- Apothecaries' Hall, 330
- Hospitals and Medical Schools:—
- St. Bartholomew's Hospital and Medical College, 331
- St. Thomas's Hospital Medical and Surgical School, 333
- Guy's Hospital, 334
- Westminster Hospital School of Medicine, 334
- St. George's Hospital Medical School, 335
- London Hospital Medical and Surgical School, 336
- Middlesex Hospital School of Medicine, 336
- University College, London, faculty of medicine, 337
- Hospital, 337
- King's College, 338
- Hospital, 338
- Charing-cross Hospital Medical School, 338
- Theatre of Anatomy and Medicine, 339
- Hunterian School of Medicine, 339
- Chatham-street School of Medicine, Manchester, 340
- Newcastle-upon-Tyne College of Medicine and Practical Science, 340
- Sheffield Medical Institution, 341
- General Infirmary, 341
- Sydenham College, Birmingham, 341
- Sessional synopsis of medical schools, 342
- Royal College of Chemistry, 353
- Hospital for Consumption and Diseases of the Chest, 354
- Queen's College, Birmingham, 354
- Hospital, Birmingham, 354
- Scotland:—
- Edinburgh Medical School, 356
- University of Edinburgh, 357
- College of Surgeons, Edinburgh, 358
- Medical School, Surgeons' Hall, Edinburgh, 359
- Marischal College and University of Aberdeen, 360
- Faculty of Physicians and Surgeons, Glasgow, 360
- University of St. Andrew's, 362
- Ireland:—
- Army Medical Department, 354
- Navy Medical Department, 355
- East India Company's service, 356
- King and Queen's College of Physicians, 363
- Apothecaries' Hall, 363
- Queen's University, 364

- Royal College of Surgeons, 364
Trinity College School of Medicine, 364
Hospitals, 364
County of Limerick Infirmary, 364
- France:*—
Faculty of Medicine, Paris, 366
School of Medicine, Paris, 367
Hospitals of Paris, 367
- Rules, the, of English composition, 621
Rupture of the colon, 68
..... liver, 234
..... perinæum, and its treatment, 625
..... psoas muscle, psoitis from, 415
..... urethra, 255
..... perineal section, 643
..... uterus, complicated with a hand presentation, 500
- S**
- Sac, cases of hernia with double, 307
....., oblique inguinal hernia with double, 307
Salaries under the Irish Medical Charities Act, 649
Sale of Arsenic Act, 268, 422
Salivary fistula, 563
Sanitary condition of Oxford, 409
..... reform, British Guiana and, 286
Sarcina ventricula, on the use of the neutral sulphites in the treatment of diseases attended by the development of parasitic plants, especially the, 191
Sarcinæ from the stomach of a boy, 623
Saunders, G., Esq., on diseases of the eyes: A sketch of the medical history of the 47th regiment, 227
Savigny, death of M. de, 422, 594
Scaphoid bone, dislocation of the right, 233
Scarlet fever, statistics of death from, 274
Scheme of medical reform, a, 162
Scherer, Professor, analysis of the liquor amnii, 159
Schonbein, Professor C. F., on some secondary physiological effects produced by electricity, 79
School, Charing-cross Hospital Medical, 165
....., rules and regulations of, 338
....., Edinburgh, Medical, rules and regulations of, 356
....., extra-academical, Edinburgh, 516
....., London Hospital Medical and Surgical, rules and regulations of, 336
....., Medical, Surgeons' Hall, Edinburgh, rules and regulations of, 359
..... of Medicine, Hunterian, rules and regulations of, 339
....., Manchester, Chatham-street, rules and regulations of, 340
....., Middlesex Hospital, rules and regulations of, 336
....., Paris, rules and regulations of, 367
....., Westminster Hospital, rules and regulations of, 334
....., St. George's Hospital Medical, rules and regulations of, 335
....., Thomas' Hospital and Medical and Surgical, rules and regulations of, 333
Schools, Hospitals and Medical, rules and regulations of, 331
....., sessional synopsis of classes and professors in London and provincial medical, 342
Science and medicine, influence of the literature of the Greeks and Romans on, 285
..... in balloons, 515
....., Newcastle-upon-Tyne College of Medicine and Practical, rules and regulations of, 340
....., progress of medical, 18, 75, 105, 159, 212, 265, 414, 468, 493
Sciences, medicine and its kindred, 396
....., Royal Academy of, Stockholm, 216
....., the half-yearly abstract of the medical, 292
Scientific Congress of France, 369
..... meetings, list of, 351, 383, 409, 435, 460, 490, 511, 536, 564, 587, 615
..... works, Highley's catalogue of medical and, 176
Scotch diplomas, 519
Scriven, John Barclay, Esq., Indian correspondence, 392, 514
Scrofula, decoction of fucus vesiculosus in, 318
Scrotal hernia, incarcerated, 258
Sea-bathing infirmary, Margate, 111
Seamen's Hospital Society, 83
....., the practice of medicine and surgery at, 98, 258, 535
Secondary physiological effects produced by atmospheric electricity, 79
Secret remedies, 208, 239
Secretion, lectures on digestion, respiration, and, 1, 57, 113, 167, 219, 269, 371, 425, 477, 607
Section, Cæsarian, 111, 423
....., perineal, 133, 434
....., rupture of the urethra, 643
....., the occurrence and cause of hæmorrhage from the, 170
Sections of two large masses of hair and string, 520
Selections from Journals, 18, 75, 105, 159, 212, 265, 414, 468, 493
Self-supporting Dispensaries and medical clubs, 214
- Semi-lunar valves, malformations of the, 521
Senilis, hypochondriasis tremulans, on, 105
Sense of vision, wisdom and beneficence of the Almighty as displayed in the, 158
Sense, the Pickwickian, 83
Sentin, M., 369
Separation of the placenta preceding labour, two cases of partial, 403
Septum, ventricular, small aneurism in the, 519
Serous cysts in the kidney, 572
....., two kidneys containing, 622
Service, East India Company's, rules and regulations of, 356
Services, naval medical, 666
Sessional synopsis of the classes and professors in London and provincial medical schools, 342
Severe laceration of the leg, amputation, 282
Sewers, Metropolitan Commission of, 447
....., the Metropolitan, 241
Sheffield General Infirmary, rules and regulations of, 341
..... Medical Institution, rules and regulations of, 341
Shoulder-joint, spontaneous dislocation of the, 433
Sibley, W., Esq., Hospital Reports, 283
Sickness, the sweating, 47, 161
Silver, cyanide of, cases of poisoning by, 41
Simple fracture of the left leg, 258
Simpson, Dr., Dr. Lightfoot in reply to, 497
....., letter to Professor J. Y., by Wm. Macleod, M.D., 236
Singh, the Maharajah Gholaub, 449
Singular case of fetal non-development, 434
Sinus, laceration of the right lateral, 500
....., maxillaire, des maladies du, 464
Skin, collodium in diseases of the, 75
....., the, as diagnostic of the general health, 473
Skull, compound fracture of the, 232
Small aneurism in the ventricular septum, 519
..... pox, 422
..... and vaccination, on, 523
..... in Hindostan, 99
..... patient, novel isolation of a, 241
Smith, Edward, M.D., LL.B., B.A., remarks on the etiology of phthisis, 37, 638
....., G. H., Esq., extensive injury of the lower extremity, recovery, 230
....., Henry, Esq., F.R.C.S., cases in surgery, 255
....., hospital reports, 172, 282, 432, 510
..... Mr. B., table of births, deaths, and meteorology for the first half-year of 1851, 52
....., T. H., Esq., on koussou in tænia, 12
Smith's visiting list for 1852, 619
Snow, John, M.D., on the mode of propagation of cholera, 610
..... propagation of cholera, 559
Société de Biologie de Paris, 516
Society, Botanical, of London, 603
....., Council of the Royal, 527
....., Edinburgh Medico-Chirurgical, reports of meetings, 627
....., Epidemiological, 55, 475, 630
....., and vaccination, 368, 589, 594
....., reports of meetings, 500, 522
..... for the Relief of Widows and Orphans of Medical Men, 21
....., Gresham Life Assurance, Hooper & Co., 82
....., Harveian, reports of meetings, 473, 574
....., Islington Medical Conversational, 564
....., Medical, of London, 409, 501, 629, 666
....., reports of meetings, 417, 441, 472, 522, 545, 573, 601, 624, 654
....., resolutions against homœopathy, 417
....., Pathological, of London, reports of meetings, 499, 519, 544, 572, 599, 662, 653
....., Royal, 603
....., Medical and Chirurgical, 79, 575, 629
....., and homœopathy, 396, 518
..... the homœopaths, 571, 595
....., reports of meetings, 79, 107, 163, 543, 596, 621, 651
....., of Edinburgh, 604
....., Naval Benevolent, 447
....., Seamen's Hospital, 83
....., Statistical, of London, reports of meetings, 51, 572
....., Vegetarian, 165
Societies, reports of, 51, 79, 107, 163, 176, 417, 441, 472, 499, 519, 543, 572, 596, 621, 651
Soirée of the Royal College of Physicians, 25
Soirees at the College of Surgeons, 25
Solomon, J. V., Esq., observations on nitrate of silver stains of the conjunctiva, 350
Solution of gutta percha in chloroform, 213
Sombre, Mr. Dyce, 26
Somerset County Asylum, 395
Somnambulist, a female, 422
Somnolism and Psychism. By J. W. Haddock, M.D., 211
- Sounds, on articulate, 47
Spasmodic action of the uterus; obeism. By A. Stobo, Esq., 306
Specimen of calcareous matter in the cavity of the vestibule, 600
Speech, on the causes and cure of impediments of, 47
Spermatorrhœa, on the causes, symptoms, and treatment of, 293
Spinal curvatures, the prevention and cure of, 413
Spine, the, its curvatures and other diseases. By Ch. Verral, Esq., M.R.C.S., 413
....., three cases of fracture of the, 653
Spiral bougies, 48
..... evolution of the epidemic power, on the, 570
Splint, a new, 78
Spontaneous dislocation of the shoulder-joint, 433
Sporules of variola, 472
Spread of epidemics, 241
Spring, chalybeate, Sunning-hill Wells, 569
Squadron, the China, 446
Staff of the Hotel Dieu, 161
Staffordshire Infirmary, North, the practice of medicine and surgery at, 434
St. Andrew's, University of, 447, 629, 656
....., rules and regulations of, 362
Stanley, Ed., Esq., F.R.S., on a case where the inhalation of chloroform was nearly fatal, 529
....., clinical lecture by, 529
....., on the inhalation of chloroform, 529
State of the public health, 138, 474
Statistical report on cases of diseases of the heart, 543
..... report on disease of the heart. By Dr. Barclay, 109
..... Society of London, reports of meetings, 51, 572
Statistics of amputation at the General Hospital, Birmingham, 570
..... death from measles
..... death from old age, 145
..... death from scarlet fever, 274
Statue to Dr. Jenner, 369
St. Bartholomew's Hospital, 527
....., and Medical College, rules and regulations of, 331
....., the practice of medicine and surgery at, 381, 408
St. George's Hospital medical school, rules and regulations of, 335
....., the practice of medicine and surgery at, 256, 367, 408, 563
..... Giles', march of death in, 145, 274
..... Mary's Hospital, 82, 83
....., the practice of medicine and surgery at, 459
Stobo, A., Esq., on spasmodic action of the uterus: obeism, 306
Stockholm, Royal Academy of Sciences, 216
Stomach and transverse colon, communication between the, 651
..... of a boy, sarcinæ from the, 623
Stone in the bladder and lithotomy, 635
..... left kidney, 499
Strange advertisement, a, 657
Strangulated femoral hernia, 307, 563
..... hernia, cases of, 457
Strangulation of intestine by omentum, 213
Street cleaning, 16, 310
..... orderlies, 106
Stricture, 255, 434
Stricture of the urethra, 259
....., case of, 514
....., description of an operation for the radical cure of obstinate, 80
....., Lizars on, 618
String, sections of two large masses of hair and, 520
Strychnine, sulphate of, 75
St. Thomas' Hospital Medical and Surgical School, rules and regulations of, 333
Student life in Germany. By H. J. Whitling, Esq., 404
....., medical, thoughts for the, 568
Students, prizes to medical, 351
Studentship, the College, 136
Styptic, on turpentine as a, 534
Subjects, no,—the London Dissecting Rooms, 513, 537
Successful case of parturition in a patient who had previously undergone ovariectomy, 597
"..... cases," Mr. Syme's, 597
Suggestions for the extension and perfection of vaccination. By J. R. Bedford, Esq., 413
Sulphate of strychnine, 75
Sulphates and phosphates, variations of the excreted in disease, 108
Sulphites, on the use of the neutral, in the treatment of diseases attended by the development of parasitic plants, especially the sarcinæ ventriculi, 191
Sulphuric acid, poisoning by, 213
Sumbul in epilepsy, 268
Sunning-hill wells; or a practical inquiry into the action of iron as a constituent of the blood, in

- health and disease, in connexion with that chalybeate spring. By Henry Holmes, M.D., 569
- Superintendents, asylum, 491
- Supplement to the principles of surgery. By James Syme, 618
- Supply, water, for the Metropolis, 70, 260
- Suppuration and caries of the proximal extremity of the tibia, 615
- Surgeon, a mock, 605
- to the Indian, Government treatment of the, 174
- Surgeons, charter of the College of, 25
-, Faculty of Physicians and, of Glasgow, rules and regulations of, 360
- of Glasgow, Faculty of Physicians and, 447
- Hall, Edinburgh, medical school, rules and regulations of, 359
-, military, 499
-, parochial, 604
-, soirées at the College of, 25
-, the "Medical Directory" and the Professors of the Royal College of, 439
- President of the Royal College of, and the Coffinites, 213
- Royal College of, 53, 81, 109, 136, 164, 190, 394, 420, 421, 475, 527, 549, 629, 656, 666
-, and homœopathy, 588, 619
-, and the Manchester, memorial, 164
-, council election, 78
-, Edinburgh, rules and regulations of, 358
-, examination for the fellowship of, 574, 628
-, Ireland, rules and regulations of, 364
-, rules and regulations of, 329
-, the new charter of the, 587, 590
- Surgery, cases in, 255
-, clinical lectures on, 4, 480, 503, 579, 635
-, lectures on the principles and practice of, 438
-, supplement to the principles of, 618
-, the London practice of medicine and, 13, 67, 98, 126, 154, 172, 232, 258, 282, 307, 381, 408, 432, 457, 488, 510, 535, 563, 585, 614
-, provincial practice of medicine and, 14, 173, 233, 259, 433, 563, 643
- Surgical anatomy. By J. MacLise, Esq., 212
- Association, annual meeting of the Provincial Medical and, 156
-, Gloucestershire Medical and, 447
- diploma of the University of Dublin, 564
- school, London Hospital medical and, rules and regulations of, 336
-, St Thomas's Hospital and Medical and, rules and regulations of, 333
- Sussex County Hospital, 216
- Sutro, Sigismund, M.D., lectures on the German mineral waters, and on their rational employment for the cure of certain chronic diseases, 593
- Swallowing a cherry stone, death from, 293
- Sweating sickness, the, 49, 161
- Sydenham College, Birmingham, inaugural address at the opening of, 568
-, rules and regulations of, 341
- Syme, James, Esq., supplement to the principles of surgery, 618
-, Mr., again, 664
-, the Edinburgh Monthly Journal' and, 285
- Syme's amputation at the ankle joint, case of, 534
-, Mr., originality, 664
-, successful cases, 597
- Symptoms, causes, and treatment of spermatorrhœa, 293
-, rheumatic, abscess of the middle and posterior lobes of the left hemisphere of the brain, associated with, 545
- Synopsis of the British and Foreign Pharmacopœias, the Pocket Formulary and, 592
-, sessional, of the classes and professors in London and provincial medical schools, 342
- Syphilis, congenital, 75
-, revaccination in, 213
- Syphilitic poisons, on the effects of temperature on the communicability of, 105
-, vegetations and condylomata, bichromate of potass in, 160
- Syphilization, 593
- T**
- Table, mortality, 27, 55, 84, 111, 165, 217, 241, 268, 294, 369, 396, 423, 449, 476, 502, 528, 577, 606, 631, 657, 666
- of births, deaths, and meteorology, for first half-year of 1851. By Mr. B. Smith, 52
- Tania, efficacy of the male fern in. By W. Cowen, Esq., 282
-, koussou in, 12, 153
- Taints and tendencies, on the transmission from parent to offspring of some forms of disease, and of morbid, 567
- Tambac, the Persian, and its preparations, 546
- Tannate of alumina, the, 522
- Tanner, Thos. Hawkes, M.D., two cases of partial separation of the placenta preceding labour, 403
- Tape-worm, koussou unsuccessful in the treatment of, 408
- Taste of medicines, disguising the, 160
- Taylor, John, M.D., on the frequency of pericarditis, 482
- Teeth in old age, 423
- Temperature, effects of on the communicability of syphilitic poison, 105
- Tendon, long, of the biceps, displacement of the, 614
- Tendons, hamstring, case of deformity of the lower extremities remedied by division of the, 505
- Testicle, non-descended, 438
- Testimonial to Dr Lever, 527
- Testis, disease of the, excision, 232
- Theatre of anatomy and medicine, rules and regulations of, 339
- Therapeutic agent, on posture as a, 407
- application of electro-magnetism, on the, in the treatment of rheumatic and paralytic affections. By Robert Froriep. Translated by R. M. Lawrence, M.D., 212
- properties of creosote, 441
- Thomson's, Dr., invalid lifter, 501, 519
- Thompson, Theo., M.D., F.R.S., remarks on a peculiar appearance observed in the gums of consumptive patients, 163
- Thoracic aorta, aneurism of the descending, 206
- Thorax, lateral depression of the, 624
-, malignant growth within the, 256
- Thoughts for the medical student. By Wm. Bowman, F.R.S., 568
- Throat, on diseases of the mucous membrane of the, and on their treatment, 265
- Thumb, trismus following a wound of the, 231
- Thunder, homœopathic, 571
- Thyroidal or obturator hernia, case of, 80
- Tibia, abscess of, 535
-, amputation of the, 615
-, necrosis of the, 459
-, suppuration and caries of the proximal extremity of the, 615
- Tilt, Dr., on menstruation, 440
- E. J., M.D., on the preservation of the health of women at the critical periods of life, 176
- Times, the Medical, and Gazette, 615
- Tinctura Warburgii, 410
- Toe, compound dislocation of the great, 68
-, gangrene after amputation of the, 510
- Toynbee, Joseph, Esq., on the pathology of those affections of the ear which produce disease in the brain, 80
- Tooth, epilepsy occasioned by irritation in the socket of a, 468
- Topography, medical, of London, 64
- Torbay, 395
- Trachea, diseased larynx and, 599
- Tracheotomy, a diseased larynx and trachea seven days after the operation of, 599
-, case of epilepsy treated by, 163
-, in croup, 161
- Tractors, Perkins's metallic, 472
- Transfusion of blood, 161
-, Dr Eve's case of, 239
- Translation of the pharmacopœia of the Royal College of Physicians, 72
- Transmission from parent to offspring of some forms of disease, and of morbid taints and tendencies. By J. Whitehead, M.D., F.R.S., 567
- Transparency of hydrocele, 213
- Transverse colon, communication between the stomach and, 651
- Treating diseased joints, Mr. Gay's method of, 571
- Treatment, diagnosis, and pathology of ovarian tumours, 60, 120
- of aneurism, 536
- bronchocele, 105
- croup, pathological modifications and, 574
- diseases of the mucous membrane of the throat, 265
- Government, of the surgeon to the "Indian," 174
- hæmorrhage with abortion, on the. By S. Gibbons, Esq., 199
- influenza, 83
- rheumatic pericarditis, 624
- spermatorrhœa, on the causes, symptoms, and, 293
- tapeworm, koussou unsuccessful in the, 408
-, on the diagnosis and, of ovarian disease, 597
-, rupture of the perinæum and its, 625
- Trinity College, Dublin, 26, 564, 604, 656
- Trismus, following a wound of the thumb. By R. Neale, Esq., 231
- Tubercle in the peritonæum, deposits of, 572
- Tuberculous (?) deposit, report on, in the uterus and Fallopian tubes, 600
- disease in the lungs of a monkey, 624
- Tumour, enchondromatous, 172
-, removal of a large, from the neck, 624
- Tumours, Mr. Lebert on the local and general nature of, 75
-, ovarian, diagnosis, treatment, and pathology of, 60, 120
- Turning with one or two feet, 213
- Turpentine as a styptic, on. By T. W. Bradley, Esq., 534
-, case of poisoning by oil of, 380
- U**
- Ulcer in the rectum, 255
- Ulceration of the rectum, inflammation and, 547
- uterus into the colon, 12
- Union, West Derby, 268
- Unity of the laws which govern the exciting agents of epidemic, endemic, and infectious diseases. By John Grove, Esq., M.R.C.S., 640
- Universities, the, and the House of Commons, 81
- University, Aberdeen, Marischal College and, rules and regulations of, 360
- and King's College, Aberdeen, 216
- College, 54, 501, 629
- Hospital, rules and regulations of, 337
-, London, rules and regulations of, 326
- of Cambridge, 26, 421, 446, 475, 501, 549, 628, 656, 665
-, rules and regulations of, 325
- Dublin, 575, 629
-, surgical diploma of the, 564
- Edinburgh, 79, 267, 516, 628
-, rules and regulations of, 357
- Glasgow, 549
- London, 215, 216, 235, 239, 527, 602
- Oxford, 54, 445, 475, 501, 656
-, rules and regulations of, 324
- St. Andrews, 447, 629, 656
-, rules and regulations of, 362
-, Queen's, Ireland, 54, 394, 423
-, rules and regulations of, 364
- Unlicensed homœopaths, 565
- Unprofessional practices and conduct, provisions against, 540
- Urethra, abscess of the prostate bursting into the, 258
-, case of stricture of the, 514
-, obstinate stricture of, 80
-, rupture of, 255
-, rupture of the, perineal section, 643
-, stricture of, 259
- the, Lizarson, 618
- Urinary and generative organs, diseases of the, 17
- organs, diseases of the, 499
- Urine, extravasation of, 255
-, on alkaliescence of the, 651
- Use of arsenic, the external, 576
- aurifer preparations, 25
- Uterine hæmorrhage and compression of the aorta, 415
- Uterus, ulceration of, into the colon, 12
- Uterus and Fallopian tubes, report on tuberculous (?) deposit in the, 60
-, cases of inversion of, 36, 136
-, enlargements of the, which remain after parturition or abortion, 601
-, its anatomy and physiology, 9, 144, 204, 250, 273, 377, 453, 583
-, on the nerves of the, 448
-, on the pathology of, 9, 144, 204, 250, 273, 377, 453, 583
-, rupture of the, complicated with a hand presentation, 500
-, spasmodic action of the : obsism, 306
- V**
- Vacancies, medical appointments and, 26, 54, 81, 110, 164, 191, 216, 267, 293, 319, 368, 395, 447, 501, 549, 575, 604, 629, 656
- Vaccination and small-pox, on, 523
-, suggestions for the extension and perfection of, 413
-, the Epidemiological Society and, 368, 589, 594
- Vaccine Establishment, National, 110
-, report from the, 259, 266
- Vallance, T. J., jun., Esq., cases of rheumatic and local paralysis treated by Pulvermacher's chain battery, 509
- Valleix, F. L. J., the Medical Practitioners' Guide, 390
- Valve, the ileo-cæcal, case of intussusception through, 651
- Valves, diseased and malformed aortic, 520
-, the semi-lunar, malformations of the, 521
- Vandoni, Dr. Alexander, 26
- Variations of the sulphates and phosphates excreted in acute chorea, delirium tremens, and inflammation of the brain, 103
- Variola, affinities and prophylaxis of, 442
-, epidemic, 472

- | | | |
|---|--|---|
| <p> <i>Variola</i>, sporules of, 472
 Vegetables, gas from, 650
 Vegetarian Society, the, 165
 Ventilation and heating of buildings, on the, 43
 Ventricular septum, small aneurism in the, 519
 Verral, Chas., Esq., M.R.C.S., the spine; its curvatures and other diseases, 413
 Vesicæ, extroversio, operation in, 381, 408
 Vestibule, a specimen of calcareous matter in the cavity of the, 600 </p> | <p> Victoria Fund, the, 656
 Views, Dr. Jenner's fever, 394
 Vision, sense of, wisdom and beneficence of the Almighty as displayed in the, 158
 Visiting list for 1852, Smith's, 619
 Volkmann's hæmadynamics, 18
 Voluntary arrest of the pulse, 469 </p> <p style="text-align: center;">Y</p> <p> Yellow fever, quarantine, 411 </p> | <p> Yellow fever, the, 216
 wax for the preparation of ointments, 213
 Yeovil and Crewkerne District Medical Association, 320
 York, Dr. Laycock of, 54
 Young, the late Dr. Thomas, memorial to, 475 </p> <p style="text-align: center;">Z</p> <p> Zinc, poisoning by chloride of, 382, 497 </p> |
|---|--|---|

LIST OF ENGRAVINGS.

- | | |
|---|---|
| <p> Illustrating Mr. Quekett's Lectures on Histology, pp. 6, 7, 8, 85, 86, 139, 140, 141, 451, 452, 453, 551, 552, 553
 a new splint, designed by F. G. Mullar, M.D., L.R.C.S.E. of Edinburgh, p. 78
 the fluid of an encysted tumour of the cheek, p. 127
 a circular 'thigh' compressor, suggested by Dr. Carte, p. 134
 the penis, in its healthy state, to show that there is no septum in the corpus spongiosum, like the septum pectiniforme between the corpora cavernosa, p. 171
 the locality of cholera in Plymouth and its neighbourhood in 1849. <i>Two Diagrams</i>, pp. 194, 195
 the aneuralgicon invented by Dr. Downing, for the relief of neuralgia, as shown in the Great Exhibition, p. 236
 a spinal chair, designed by Mr. Druitt, as shown in the Great Exhibition, p. 288
 Velpeau's pessary and uterine sound, pp. 300, 301 </p> | <p> Illustrating the variations in the acidity of the urine, in connexion with Dr. Bence Jones's Lectures. <i>Two Diagrams</i>, pp. 426, 427
 the lithotrite, catheter, and stilette, as used by Mr. Hilton, pp. 488, 489
 a case of deformity of the lower extremities, remedied by division of the hamstring tendons. By John Wiblin, Esq., F.R.C.S., pp. 505, 506
 certain malformations of the semi-lunar valves. <i>Four Engravings</i>, p. 521
 Dr. King's statistics of death from old age in St. Giles's. <i>Two Diagrams</i>, p. 149
 Dr. King's statistics of death from scarlet fever in St. Giles's. <i>Two Diagrams</i>, p. 277
 Dr. King's statistics of death from scarlet fever in St. Giles's. <i>Two Diagrams</i>. p. 663. </p> |
|---|---|

END OF VOLUME XXIV.

LONDON:
PRINTED BY WILLIAM TYLER,
BOLT-COURT.



